

EDUCATION & BUSINESS SERBIA



EDUCATION AND BUSINESS STUDY

Serbia

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List of acronyms

ADSMEE	Agency for Development of Small and Medium Enterprises and Entrepreneurship
CARDS	EU assistance programme for South-east Europe 2000 - 2007
ETF	European Training Foundation
ESPI	Economic and Social Policy Institute
EUROSTAT	Statistical Office of the European Union
GTZ	Gesellschaft für Technische Zusammenarbeit (Agency for Technical Cooperation)
HRD	Human Resource Development
ICT	Information and communication technology
IPA	Instrument for Pre-accession Assistance
LLL	Lifelong learning
MoE	Ministry of Education
MERD	Ministry of Economy and Regional Development
MLSP	Ministry of Labour and Social Policy
MoYS	Ministry of Youth and Sports
NES	National Employment Service
NGO	Non-governmental Organization
NQF	National Qualification Framework
OECD	Organization for Economic Cooperation and Development
PISA	Programme for International Student Assessment
RTC	Regional Training Centre
SCTM	Standing Conference of Towns and Municipalities
SME	Small and Medium-size Enterprises
SORS	Statistical Office of the Republic of Serbia
USAID	United States Agency for International Development
VET	Vocational Education and Training
WB	World Bank
WEF	World Economic Forum

Foreword

Many countries worldwide are reinforcing 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 competencies for work. However, 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.

DG EAC has entrusted the ETF to carry out a study on education and business co-operation in the EU neighbouring countries and territories involved in the Enlargement process according to the Instrument for Pre-accession Assistance, 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 neighbours;
- 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 the legal status. This can include multinationals, public and private large companies and SMEs, micro-business and actors in the informal economy, social partners (employers' and employee's 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.

This report is the country specific contribution for Serbia. It was 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 June 2010 and a validation workshop conducted in September 2010. During this 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.

The report will serve as an input for a regional ETF study, relevant for the context of the Instrument for Pre-accession Assistance region and for a cross-country ETF study of education and business cooperation (reflecting on the findings of all countries with which 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 the meetings.

A. Executive summary

Investment in skills through education and training is seen as the key to competitive business in a globalised market. In Serbia too education policy is becoming more closely linked to economic policy. National strategies and laws include the right principles and rationale of education and business cooperation, but their implementation is only just starting. There are examples of good practice, however they are still more ad-hoc than systemic.

The supply of skills does not match demand, and key competences such as communication, team work, learning to learn and entrepreneurship are not properly covered. The education system is still not open enough to learning opportunities which would meet the needs of economy. On the other hand, the business sector is not motivated to invest in human resource development or to articulate more effectively their own needs. There are also some legal barriers to education and business partnership. More effort is needed to develop awareness of the links between education and the economy.

To address these challenges recommendations are finally outlined on how the cooperation could be improved. At the policy level they focus on the legal framework, mechanisms and incentives for

cooperation. At the implementation level they suggest the promotion of cooperation agreements, more short work-related programmes in schools, placements of learners in companies and business people in education, and better awareness of / visibility of education and business cooperation. At both levels capacities need to be developed, in particular among the social partners, and partnerships need to be strengthened among schools, companies, municipalities and local communities.

B. Context / Policy

Economy and education in Serbia

The strategic national goal for Serbia is accession to the European Union. In April 2008 Serbia signed the Stabilisation and Association Agreement and the Interim Agreement on trade related measures. In December 2009 Serbia submitted its application for EU membership and is now preparing itself for candidate country status. According to the 2009 EC Annual Progress Report, implementation of existing laws and impact assessment have to be improved and greater cooperation between ministries needs to be ensured.

Economic reforms launched in 2000 in Serbia have led to changes in the economic structure from socialist planning to a liberal market economy. The share of private sector is growing and it is estimated to be 60% of the total economy. Privatisation has led to an economic structure dominated by small firms with relatively few medium and larger companies. Between 2000 and 2008 GDP grew by an annual average of 5.4%; however, the remarkable growth rates did not translate into net job creation but to a “jobless growth”, similar to other countries in the Western Balkans. The main obstacles for job creation were: slow development in productive sectors of economy, lack of labour market flexibility, limited outreach of active labour market measures, non-engagement of local communities, and inadequate level of skills of many employees. There is also high informal employment in Serbia; estimated at around 35% and mainly absorbing unqualified and unskilled labour.

As in most transition countries, the service sector in Serbia is gaining ground, but the share of the service sector in employment has stagnated at around 50% since 2004. Agriculture, with 24% of employment, is still an important sector for the labour market. The industrial sector, which was not affected very much by the restructuring process in the first years in terms of its relative share of employment and the economy, has been in decline since the onset of the economic crisis as the export and domestic demand have gone down. The link between the labour market and education was weakened during the transition years as the former ties between state or socially owned enterprises and vocational schools and colleges were broken due to economic restructuring.

Serbia's economy was severely hit by the current global economic crisis and GDP in 2009 decreased by an estimated 3.0% compared with 2008. As a result, macro-economic stability deteriorated, domestic demand decreased sharply and FDI and export revenues declined. The IMF and EU have provided financial assistance to Serbia. The response of the Serbian authorities to the global crisis helped to limit its negative effects. Serbia needs to strengthen its productive private sector but there are still insufficient incentives to developing labour intensive production. Talents are attracted by the public sector where salaries are higher than in the private sector. Another challenge is brain drain; people who migrate in recent years are mostly young and highly educated.

In order to further its economic and social development, Serbia needs well-educated citizens. The current educational structure of the Serbian population is very unfavourable from this point of view. For almost half of the population over 15, primary education represents the highest educational attainment. Qualifications of many adults are no longer needed on the labour market and there is a need to retrain numbers of people who lost their jobs or are at risk of becoming unemployed. Education and training do not connect well with the world of work. There is a gap between the supply and demand of knowledge, skills and competences. It is widely believed that public education is too theoretical and does not provide the skills that the labour market needs.

The relationship between education on one side and the economy / business / labour market on the other has been a matter of debate in the reform process in Serbia, and is receiving increased attention now due to the economic and financial crisis. Investment in skills through education and training is seen as the key to competitiveness in a globalised market. Schools and teachers from secondary to higher education are increasingly pressured by the need to ensure that outputs are functional to the

economy, which raises key questions about the curriculum, the organisation of teaching and learning and the assessment of learning outcomes.

Key national policies and strategies

Cooperation between education and business is addressed to varying degrees within several strategic documents on education, employment, regional development and development of small and medium enterprises, as outlined below.

The **National Programme for Integration with the European Union** (Government of Serbia, 2008) includes the following priorities related to the quality of education:

- Introduction of evaluation, self evaluation and development planning for schools
- Creation of national final examinations in primary and secondary education
- Mainstreaming the CARDS pilot VET profiles
- Development of quality standards for pre-school and primary education
- Definition of National Qualifications Framework
- Establishment of a certification and accreditation system in VET
- Development of education standards in secondary education
- Definition of standards for teachers.

The new **Law on Fundamentals of the Education System** (National Assembly of the Republic of Serbia, 2009) defines key innovations relevant for education and business cooperation:

- Principles of lifelong learning, quality and efficiency of education
- Educational goals of investing in human capital, developing key skills, matching competences to the requirements of jobs, economy, science and technology
- Establishing the Council for VET and Adult Education
- Increased autonomy of schools and more flexible learning programmes.

Planned bylaws specifying the different provisions of the Law will tackle among others recognition of prior learning, national qualifications framework for vocational education, and new secondary education profiles and curricula. The timeframe foreseen for all these developments is no later than by September 2011.

The National Education Council prepared the initial concept of an overall education reform as proposed in the **Directions of the development of the education system in Serbia**, currently submitted for discussion to the education committee of the Parliament of Serbia. The document is based on a lifelong learning perspective and aims at an integral approach to education reform, emphasising key competences and the role of teachers. It is planned to be built on broad partnership in and outside the education sector and consensus across the political parties.

The **National Employment Strategy 2005-10** has been drafted in line with the employment guidelines of the European Employment Strategy and has three objectives: full employment, quality and productivity of labour, social cohesion and labour market inclusion. It also foresees the creation of national, regional and local bodies for employment and competitiveness.

The **Strategy for Regional Development of the Republic of Serbia 2007-12** has set the objective of reducing regional disproportions. In collaboration with local governments, the Government of Serbia plans to develop programmes for developing four key clusters: auto-motive industry, electronics, information technology and telecommunications.

The **Strategy for the Development of Competitive and Innovative SMEs 2008-13** includes human resources for a competitive SME sector as one of the five pillars, alongside entrepreneurship, financing, export and business environment.

The recent **Strategy for Career Guidance and Counselling in the Republic of Serbia 2010-14** seeks to establish and develop the system of career guidance and counselling through the partnership of the MoE, MoYS, MERD, NES, universities, schools, social partners and NGOs.

Another important step was the establishment of the tripartite **Council for VET and Adult Education** in March 2010. The Council is chaired by the Vice-president of the Serbian Chamber of Economy and involves representatives of business and trade unions. According to the Law on Foundations of the Education System, one of the Council's tasks is to monitor, support and guide activities which represent a link between education and employment, and their impact on economic development.

An overarching **National Qualifications Framework**, with the European Qualifications Framework as the main reference, has been discussed in Serbia for several years now. The task of developing a NQF to skill level V has now been formally assigned to the Centre for VET and Adult Education. The framework will have to integrate with the framework for higher education qualifications that has been under development since 2008 within the Bologna process and approved by the National Council for Higher Education in April 2010. Involvement of sectors and employers has been weak so far, but the establishment of the Council for VET and Adult Education may change that.

Donor interventions in support of national policies has focused over the last decade mainly on vocational education, such as the EU CARDS and IPA, or German GTZ projects, on higher education (Tempus projects), and on support to SMEs. Recently the donor programmes are increasingly targeting the regions in Serbia which have a less developed business environments and lack qualified workers.

In summary, it is evident that in Serbia education policy is becoming more closely linked to economic policy, with the strategic development of human capital seen as central to ensuring competitiveness in a global economy. The key factors in the Serbian context are the requirements for human capital development as a pre-condition for economic recovery, and the need to improve the outcomes of education to ensure the higher educational attainment of the population. There is an emerging policy framework in Serbia which could improve education and business cooperation if it is elaborated further.

Most of the above laws and strategies are at an initial stage and there is little information on their impact. The policy framework includes the right principles and rationale of education and business cooperation, but how this should work in practice is not so clear. It appears that the laws and strategies will need to be better linked to each other and their implementation more effectively coordinated and complemented by concrete measures for encouraging partnerships between schools/universities and companies. Also, the policy debate so far has been driven by the Ministries of Education, Economy and Labour, and less so by the business sector itself.

C. Structures / Methodologies / Approaches

Governance, support and implementation structures

The governance, support and implementation structures for education and business cooperation encompass the following institutions:

- **Government of the Republic of Serbia**, namely the Ministry of Education, the Ministry of Economy and Regional Development, and the Ministry of Labour and Social Policy;
- **Executive agencies**, such as the National Employment Service, Agency for Development of Small and Medium Enterprises and Entrepreneurship, Regional Development Agencies;
- **Social partners**, such as the Serbian Association of Employers and Trade Union Confederations (Confederation of Autonomous Trade Unions of Serbia and the Trade Union Confederation Nezavisnost are the two largest employee organisations);
- **Chambers**, such as the Serbian Chamber of Economy;
- **Multi-stakeholder bodies**, such as the Economic and Social Council, National Education Council, Council for VET and Adult Education, National Council for Higher Education;
- **Research institutes and NGOs**, such as the Institute for the Improvement of Education (comprising the Centre for VET and Adult Education, Centre for Developing Programmes and Textbooks, and Centre for Professional Development of Employees in Education), Institute for Education Quality and Evaluation, Institute for Educational Research, Institute for Psychology, Adult Education Society, Belgrade Open School, Centre for Education Policy, Centre for Liberal-

Democratic Studies, Economic and Social Policy Institute, Economics Institute, Foundation for the Advancement of Economics (FREN), Social Inclusion and Poverty Reduction Unit (SIPRU) within the Office of the Deputy Prime Minister for European Integration, Standing Conference of Towns and Municipalities;

- **Education and training institutions**, such as universities, colleges, schools and their associations; and other training providers in the public, private and civil sectors;
- **Companies**, with their potential of becoming learning and innovative organisations.

The roles of these institutions in education and business cooperation are different and correspond to the mission of each organisation. It would take too much space to describe the exact roles in this brief study, but some concrete examples of their activities are listed below.

Methodologies, approaches and examples of good practice

This section attempts to identify methodologies and systematic approaches, providing an initial list of good examples of education and business cooperation, or initiatives supporting such cooperation, some of which can be further explored and extended:

Involvement of employers in developing curricula

- Good examples of school-enterprise cooperation in the design of new curricula, e.g. under the EU CARDS VET projects (<http://www.vetserbia.edu.rs>);
- The Ministry of Education started to set up pilot regional training centres (RTC) based on existing vocational schools with the support of CARDS. Though only five regional centres are in place with limited total capacity of less than 1000 participants a year, and three new centres are planned, evaluation shows close cooperation between schools and companies for the design and implementation of targeted courses;
- Company Mlekoprodukt working together with RTC/VET school in Zrenjanin in developing and implementing employee courses;
- Company Metalac in Milanovac reports very good cooperation with a local vocational school for training technicians;
- Company Messer Tehnogas signed sponsorship contracts with five technical schools in Serbia that introduced the programme of "Mechanical Repair Technician" and it equipped laboratories in these schools with necessary equipment;
- WUS (World University Service - Austrian Committee) through the development of labour market relevant master, PhD and Chair Programmes supports interested state owned higher education institutions to create tailor-made study programmes for graduates that are most needed in the local labour market (2007-11);
- Postsecondary colleges of vocational studies such as the College of Technical Studies in Novi Sad, College of Business and Technical Studies in Uzice and College of Technical Studies in Nis have excellent cooperation with numbers of companies in developing and delivering courses for workers. These colleges also provide consulting services to companies.

Cooperation in teaching

- Involvement of employers in assessing students' competences during final exams and matura in the new pilot profiles;
- Envisaged internships of vocational teachers in companies, and increased engagement of company staff in teaching and training;
- Idea that trade unions could become co-responsible for the professional development of teachers;
- Messer Tehnogas cooperation with Faculty of Mechanical Engineering in monitoring students with company engineers from Vienna.

Student practice (internship) in enterprises, or simulation of business environment in schools

- Examples of good cooperation between schools and companies in organising student practice, e.g. under the EU CARDS VET projects (<http://www.vetserbia.edu.rs>);
- Career Development Centre of the University of Beograd mediates internships in companies, e.g. the current trainee programme in Belgrade public utilities, and organises enterprise visits of student groups spending a day in a company;
- Career Guidance Centre of the Faculty of Economy, Finance and Administration (FEFA) at the University of Singidunum have developed a model of cooperation with a number of companies regarding summer student internships (Telekom, Siemens, Metalac, Societe Generale Bank, Hypo Ape Adria Bank);
- There are 46 virtual companies in the secondary schools of business administration in Serbia, providing simulated business environments in schools for 3-4 hours a week, but teachers should be trained first in the business sector, and real student practice should follow;
- Students of the Trade and Catering School in Leskovac perform hands-on training classes and exercises in restaurants and hotels and tourist enterprises in the city and surrounding areas;
- Medical School Association reports student practice in hospitals supervised by teachers and head nurses, combined with summer voluntary work;
- Company Gorenje in Valjevo in cooperation with the local secondary vocational school: a class sent to Slovenia for three month practice;
- Experiencing Europe: Serbian Young Professionals in Austria – Zoran Đinđić Internship Programme – Internships are provided for 50 top last-year students and young graduates from Serbia for three months of career relevant vocational experience in Austrian companies and institutions;
- Postsecondary colleges of vocational studies mentioned above also report very good cooperation in organising student placements and project work in companies. For example the College of Technical Studies in Nis provides consultancy services, web-presentations, network maintenance and multimedia projects for local and regional TV and radio services with active involvement of college students;
- The Regional Agency for Economic Development and Entrepreneurship of Pčinjski District has implemented a program of virtual companies in cooperation with the National Employment Service in Vranje.

Business education

- Serbian Chamber of Economy training provision (komorski system);
- Analysis of training needs in clusters supported by MERD;
- Corporate courses at universities and schools, e.g. at the University of Belgrade, Faculty of Economy, for Naftagas Novi Sad, Delta Holding and International Red Cross Federation.

Training supported by the National Employment Service

- Training and education programmes for the unemployed (or at the request of employers) subsidised by the National Employment Service (NES Further education and training programme 2010);
- Second chance education with a vocational training component agreed with employers and providing basic qualification to adults without completed primary education.

Better matching skills supply and demand through vocational counselling and career guidance

- Career Development Centre established in the University of Beograd provides information and guidance to students, works with employers and delivers courses in soft skills;

- Career guidance centres have been established at the University of Novi Sad, University of Kragujevac, University of Nis, University of Singidunum, and at the Mechanical Engineering School in Belgrade;
- Career guidance centre for talented youth (as part of the Fund for Talented Students) set up by the Ministry of Youth and Sport and supported by the Belgrade Open School.

Company based training (Petkovic, 2004)

- Innovation courses in support of organisational change, such as the trainings in Velefarm Holding Belgrade, Delta Holding, Beopetrol, Naftagas Promet;
- Corporate courses on company organisation, technologies, product range, e.g. at Pekabetine train the trainer school;
- Training centres attached to companies, for example the company C Market training butchers in selected butcheries by most experienced craftsmen;
- Corporate schools or universities, e.g. the Sintelon modular programme cascaded by managers to staff.

Networking for better education and business cooperation

- Council for education and employment at Valjevo in 2002;
- ESPI+MERD+NES prognoses of development of the Labour market in Serbia (three pilot territories);
- Feasibility study of opportunities for the development of higher education in the territory of the Presevo and Bujanovac municipalities in the south of Serbia;
- Serbian Clusters (<http://klasteri.merr.gov.rs/en>) - 25 clusters of companies and associated other institutions (educational and scientific research institutions, agencies, etc.), supported by MERD in different stages of development. One of the objectives is training and education – training needs analysis related to specific cluster requirements, organizing trainings and study tours, etc;
- Network of career development centres attached to the Universities of Beograd, Niš, Novi Sad and Kragujevac.

Entrepreneurship learning

- Education for Entrepreneurship - a draft entrepreneurial learning strategy including reflections on how entrepreneurship as a key competence can be brought forward at all levels of education;
- At the end of 2008 MERD, MoYS and ADSMEE announced a public invitation for the implementation of a youth entrepreneurship programme in secondary vocational schools in 2009. This invitation aims to raise entrepreneurial awareness of secondary school students and stimulate employment, self-employment and development of youth entrepreneurship.

Projects supporting education and business cooperation

- Tempus projects aimed at matching competences in higher education and economy (see the addendum);
- Other EU funded projects:
 - CARDS 2003 – 2006 VET reform programmes (2003-09)
 - IPA 2007 Modernisation of the VET system in Serbia (2009-11)
 - IPA 2008 Systemic Development of Elementary, Practice Based Adult Education in Serbia (Second Chance) (2010-2012)
 - IPA 2008 Support for quality assurance within the national primary and secondary education examination system (2010-2012);

- German GTZ assists VET in the area of economics, KulturKontakt Austria in developing skills in tourism and virtual companies;
- USAID regional competitiveness initiative and its approach to identifying workforce development gaps, challenges and capacities in Serbia (USAID, 2009);
- Functional Education of Adults (In Vranje, Zander textile company cooperated on the module and employed Roma women; company Termo-Elektro provided an informal trainer for training welders).

Use of European reference tools for lifelong learning

- Emerging focus on key competences, quality assurance in VET and higher education, mobility, validation of non-formal and informal learning, lifelong guidance, and European Qualifications Framework;
- Europass Diploma Supplement issued to graduates of higher education institutions along with their degree or diploma, helping to ensure that higher education qualifications are better understood.

The above examples show a variety of approaches to education and business cooperation, and there are probably many more cases not recorded in this report. However, most of the examples appear to be ad-hoc rather than systemic. They result from local initiatives when businesses and schools find mutual benefits in cooperation, or from companies that value learning and invest in developing their human resources, or they are triggered by self-standing projects of limited duration. The promising nation-wide approaches foreseen in the policy framework, such as the involvement of employers in developing curricula and implementing / assessing learning, vocational guidance and labour market training, entrepreneurship learning, are often based on these grass-roots initiatives and pilot projects. In order to become systemic they require a sustained support and incentives for their mainstreaming.

D. Challenges

There is a mismatch between supply and demand of the labour force: skills and competencies are often outdated, both among the employed and the unemployed. Education is dominated by a lot of facts and theory, but key competences such as communication, team work, learning to learn and entrepreneurship are not properly covered. Serbia's results in PISA point out that the performance of 15 year old students in mathematical, scientific and reading literacy is low. Higher education graduates are not prepared in the new technologies and do not have competences required by enterprises (Government of Serbia, 2008). Each year, the government decides on the numbers of students who can enrol in state-owned universities and post-secondary vocational schools. These numbers are not based upon estimated needs but mostly reflect the capacity of the existing institutions. The education system is still not open enough to all kinds and forms of education and learning opportunities which would meet the needs of economy and help the business sector become more competitive. The goal should not be the acquisition of formal degrees as it is now, but competitiveness of knowledge and skills in the labour market.

On the other side, the business sector, still under transformation and weakened by the financial and economic crisis, is neither motivated to increase investment in human resource development, nor fully aware of the need to be more proactive vis-à-vis education in its own interest of achieving higher productivity and competitiveness. The lack of finance and cost sharing mechanisms between the state and businesses and the absence of incentives for companies and individuals hamper the development of adult education and training.

The renewal of vocational, technical and higher professional education programmes suffer from insufficient mediation by social partners. Matching new skills with new jobs is not easy in Serbia, as growth sectors are not emerging as yet. There is a huge need for a national investment in adult education and training in Serbia, but the tendency prevails to perceive lifelong learning as a coherent "system" instead of focusing primarily on access to learning for all. Still there are too many vocational schools and colleges, often with outdated equipment, which are not seeking links with local economy and lack the capacity and flexibility to serve adult learners as well. They are also not attractive enough for young pupils who often enter VET as their "third choice".

The extensive pilot experience from EU funded VET projects in the last decade brought a lot of good practice in education and business cooperation at the level of schools and companies working together on new curricula and professional development of teachers. However, for a long time the good practice of pilot school experience remained isolated and only now has system-wide implementation started. The challenge will be how to use the existing good practice for mobilizing cooperation between schools and businesses across the country. A solution could be to create networks based on the many already trained civil servants, experts, vocational school principals and teachers, and business people which could disseminate existing good practice in education and business cooperation.

There is still a lot to overcome in the current practice as the recent ETF moderated discussion among the members of the new Council for VET and Adult Education revealed:

- Complicated and slow procedures for introducing new profiles and programmes;
- Practical training takes place only in schools, very seldom in companies, with the result that school leavers are not prepared for jobs;
- VET and higher education curricula are so outdated and procedures so rigid that they even prohibit contact with practice, e.g. for teachers going to companies to supervise student practice the time is not counted as working hours;
- Insufficient duration (sometimes only 10 days in total over four years) and varying quality of enterprise practice (monitoring practice in companies by vocational schools);
- Few employers are motivated to cooperate with schools, SMEs mostly not – they do not have time, resources, specific knowledge;
- Legal problems of cooperation, including safety at work during student practice;
- Sustainability is a challenge; when projects finish the partnerships disappear.

These observations show some legal barriers to enabling environment for education and business partnership which need to be overcome by e.g. promoting cooperation contracts or agreements between schools and companies, students' insurance during practical training, secondment of teachers in companies, etc.

The social partners highlight the lack of consultations by the government during the law-making process and the lack of capacity to implement and enforce legislation fully (EC Delegation, 2009). They are not satisfied with the level of social dialogue in the area of human resources development. They are also not strong enough as yet to have to be taken as fully equal partners of the government. However, the education councils (National Council for Higher Education, National Education Council, and Council for VET and Adult Education) are becoming important multi-stakeholder governing and advisory bodies. The newly set up Council for VET and Adult Education is responsible for a huge agenda: among other things for monitoring and analysing VET and adult education, for proposing educational profiles, qualifications framework, standards and curricula, and for securing better links between education, employment and economic development. The challenge will be to develop the capacity of and provide sufficient support to the Council for these demanding tasks.

A lot of effort is needed in developing public awareness at all levels of the importance the links between education and economy bear. At the policy level the notion of human capital development as a means of competitive advantage will need to be promoted against the narrow purely educational logic. At the implementation level, according to an analysis of education at the local level (SCTM, 2008) there is no awareness of the relationship of education and prosperity of the community.

E. Recommendations

With a view to the current policy framework, the emerging approaches and the existing challenges of education and business cooperation, the following three categories of recommendations are proposed:

Support for education and business at policy level

- Improve the policy and legal framework by defining mechanisms and incentives for education and business cooperation, for instance:

- economic sector councils involving employers and educators,
- employers represented on school examination boards,
- acknowledgment of good school and enterprise cooperation practice;
- Engage the corporate and education sectors in research based skill needs assessment and anticipation mechanisms, as well as in tracer studies on the graduates of VET and higher education;
- Change policy directives and help nurture a culture where schools orient themselves horizontally towards their local labour markets as regards their supply of demand-led training for adults;
- Explore co-funding mechanisms of adult learning in public-private partnership and empower learners to take responsibility for investing in their education and training.

Support for education and business at implementation level

- Promote cooperation agreements between schools, companies and other local partners;
- Increase the share of short work-related programmes in vocational schools, colleges and universities;
- Make the benefits of education and business cooperation more visible in the media and develop a catalogue of good practice;
- Facilitate training, teaching and lecturing by business people at schools. Where necessary, provide methodological and didactic support;
- Create an environment for and ensure quality of practical training in schools and enterprises;
- Introduce incentives for work-based training with a particular focus on SMEs and entrepreneurs.

Capacity development at both levels

- Support the social partners in building their capacity for education and business cooperation;
- Increase the capacity of and technical support to the Council for VET and Adult Education;
- Provide support to partnership and networking between education and business at national, regional and local level;
- Facilitate involvement of municipalities / local community in education and business cooperation.

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ADDENDUM: Tempus programme support to higher education - enterprise cooperation in Serbia

In the Tempus IV phase, 30 out of 42 projects have been designed to improve education-business cooperation. The following projects have made a considerable impact on cooperation between higher education institutions and enterprises:

Conversion courses for unemployed university graduates in Serbia

Relevant national authorities in Serbia, such as the four biggest universities, the Ministry of Education and the National Council for Higher Education, but also National Employment Service and Serbian Chamber of Commerce, decided to take on the challenge of developing eight new graduate conversion programmes that will provide additional skills, highly desired in the labour market and provide for faster employment of those who attend. The main objective of the project is to increase the employability of the university graduates in Serbia by offering them the possibility to acquire additional integrated skills, complementary to their basic vocational skills gained through their basic education.

Development of a lifelong learning framework in Serbia

Introducing lifelong learning in the context of reform of higher education in Serbia is addressed by provision of different types of training, development of partnerships with enterprises and employers, courses to reduce the unemployment and initiating measures for the recognition of previous learning. All the key stakeholders (government, universities, employers, commercial sector, municipality, etc.) have agreed to support these project goals since they are in line with the needs of ongoing social and economic reform in Serbia and the current European trends in the development of knowledge-based economy and greater social cohesion.

National platform for knowledge triangle in Serbia

The main objectives of this national project would be gathering all relevant stakeholders in research, education and innovation in Serbia, establishing national platform for knowledge triangle and developing links between policy-making bodies, higher education, research institutions and companies.

Improvement of student internships in Serbia

The general objective of this project is better interaction between universities and enterprises for timely preparation of the university graduates for the labour market. The project will work on definition of models for student internships in selected fields based on experiences of EU partners. Student internships will be organized based on these models, carefully monitored and evaluated in order to provide feedback for further improvement.

COMPETENCE – Matching competences in higher education and economy: From competence catalogue to strategy and curriculum development

COMPETENCE is aimed at developing and/or advancing procedures and tools for assessing and improving the match between competences developed by institutions of higher education and those required by the labour market in four Western Balkan partner countries and will create a tool for an up-to-date alignment strategy based on the European Qualifications Framework.

Creation of university-enterprise cooperation networks for education on sustainable technologies

The main aim of this project is to enhance university-enterprise cooperation in Bosnia and Herzegovina, Serbia and the former Yugoslav Republic of Macedonia by offering retraining courses to staff members from industry on sustainable technology.

Western Balkan Countries Virtual Manufacturing Network – Fostering an Integration of the Knowledge Triangle

The project establishes mechanisms and structures of collaboration between key actors for the knowledge triangle throughout the region – higher education institutions, enterprises (especially SMEs), research and innovation centres, local and regional authorities. The project will contribute to the modernisation of higher education capacity in the area of virtual manufacturing technologies.

Production and profitability improvement in Serbian enterprises by adopting a lean thinking philosophy and strengthening enterprise – academia connections

The goal of this project is to help enterprises to become more competent in order to prepare themselves for a real, free market. The specific objectives are: capacity building for cooperation between universities and enterprises, specifically to work together on the resolving lean implementation practical problems and educating their employees, training university staff and students in lean thinking, and improving existing curricula with lean thinking philosophy. Improved curricula will enable students to get more practical knowledge (they will get the opportunity to undergo practical placements in enterprises - members of the consortium) and better prepare them for their employment.

Higher Education Learning Partnerships

The project aims to establish learning partnerships (HELPS) in South Eastern Europe between higher education and enterprises, to identify and prioritise main learning and training needs, to promote local enterprise development and evaluate existing learning and training opportunities at local level. It also looks at the ways these could be improved in terms of the access, structure and content of learning and training programmes.

Academia - Industry Links in Food Safety and Quality

The project aims at the creation of interface centres - the FOOD LINKS Centres – in seven universities in the former Yugoslav Republic of Macedonia, Croatia and Serbia to support the establishment and promotion of long-term partnerships between academia and industry, in the area of food safety and quality management systems. This would be achieved making technical and scientific services available to the food sector that can contribute to the development of the industry and strengthen its competitiveness for future integration in the EU particularly in the area of food safety and quality.

INTERFACE - Developing and setting up measures for initiating, enhancing and sustaining Higher Education - Society Cooperation

INTERFACE aims at achieving the following specific objectives: (1) enhancing the employability of university graduates; (2) ensuring lifelong learning and on the job training for academics; (3) fostering transfer and multiplication of academic knowledge to society; (4) combating brain drain; and (5) setting up a continuous learning and quality improvement system for universities.

All of the above mentioned projects are in the phase of implementation. The first outcomes of these projects are expected in 2011 and 2012. More information is available on the project websites and through a data base of Tempus projects implemented in Serbia: <http://www.tempus.ac.rs/en/tempus-serbia/projects-in-serbia/browse-projects/>.