

# VET TEACHER TRAINING SYSTEM IN SERBIA

## I. BACKGROUND

Until 1991 the Republic of Serbia used to be a part of the Socialist Federative Republic of Yugoslavia. In legal and political terms SFR Yugoslavia enjoyed a safe and important position in the international community. During the 1980s a disagreement between the federal units of Yugoslavia started to be expressed concerning the basic frames of the shared destiny. This ended up in a war. Due to the war in Croatia and in Bosnia and Herzegovina, the EU followed by the UN in May 1992 put Yugoslavia, first of all Serbia, into total political, economic and cultural isolation. These sanctions of the international community lasted until October 1996. In 1999 the political crisis in Kosovo and Metohia culminated in NATO bombings from 24<sup>th</sup> March to 9<sup>th</sup> June 1999, which caused considerable harm to the national resources of Serbia. Having in mind all the socio-economic consequences of the isolation and damages caused by the war, some sociologists treat this period of the 1990s as a state of *fundamental dilapidation*<sup>1</sup>. In October 2000 the oppositional political parties took the power in Serbia. They are trying to transform Serbia politically, legally and economically and include it into the international community.

After a decade of isolation and economic devastation, Serbia is undergoing sweeping reforms. The main objectives are quick transition and inclusion of Serbia's economy into international economic flows. To attain these objectives means to carry out the restructuring of the economy and thus reach long-term sustainable economic growth and development. Economic system and institutions are also undergoing changes. New system-related laws have been adopted and many old ones revised. The privatisation process is gaining momentum. The institutional basis is being established, as well as a stimulating climate for the development of SMEs and entrepreneurship. There is

<sup>1</sup> Bolcic, S, Milic A., *Srbija krajem milenijuma* (Serbia at the end of the Millenium), Institute of Sociological Research, Faculty of Philosophy in Belgrade, Belgrade, 2002.

a permanent growth of the number of small- and medium-sized enterprises. According to data for 2000, in Serbia there were registered 60 552 active enterprises and 94.1% (56 993) out of them are in the category of SMEs.<sup>2</sup> At the same time a huge number of the Serbian population lives in the zone of poverty or at its very edge. According to data for 2000, 1/3 of the population of Serbia lived in poverty, i.e. with monthly incomes below 30\$. Under conditions of absolute poverty, i.e. with monthly incomes less than 20\$, lived 18% of the population.<sup>3</sup>

According to the 2002 Census, Serbia has 7 498 001 residents. The most numerous categories are the one between age 45-49 and the one between age 50-54. Given that the population growth rate is diminishing while the average life expectancy is expanding in Serbia, as in the majority of European countries, the number of persons above the age of 60 is on a constant increase.

In spite of the fact that Serbia has got an extensive system and network of elementary and secondary education schools, the educational structure of the population is rather poor. According to the data for 2002, nearly 22% of the population above the age of 15 has not completed elementary education. Nearly 24% of the population has elementary school as their educational maximum, which means that nearly 46% of the populations are at the elementary educational level or below it<sup>4</sup>.

After long-term isolation and war damages, the current social economic trends are moderately positive.

The Serbian economy is characterized by an obviously slow growth in the period between 2000 and 2005.

**Table 1 - Key Economic Indicators<sup>5</sup>**

	2000	2001	2002	2003	2004	I-V 2005
Gross domestic product %	5.2	5.1	4.5	2.4	8.6	6.13
GDP per cap in USD	1071.0	1256.3	1459.5	2001.4		
Net earnings %	6	16	30	14	10.1	4.97
Direct investment (net) USD m	50	165	475	1360	966	8102

<sup>2</sup> Data of the Republic Agency for SMEs and Entrepreneurship, [www.sme.sr.gov.yu](http://www.sme.sr.gov.yu)

<sup>3</sup> Strategy for Reducing Poverty in Serbia, Ministry of Social Welfare, Belgrade, 2002.

<sup>4</sup> Population - School level and literacy, Statistical Bureau of Serbia, Belgrade, 2003. pp. 13-22.

<sup>5</sup> Republic Development Bureau, <http://www.razvoj.sr.gov.yu/index.htm>

In the past few decades there is a continuous long-term trend of reduction in employment in Serbia. However, during the past few years there has been a positive increase of employed people in the country. According to the data of the Republic Bureau of Statistic and Informatics, 1 848 531 people were employed during 2002. The number of employed persons in July 2005 was 2 045 463. In the same time, the number of unemployed persons has increased. In December 2002 there were 904 494 unemployed people, where in July 2005 that number increased to 995 592<sup>6</sup>. The rate of unemployment in 2004 was 18.4% (male 15.2%, female 22.3%)<sup>7</sup>. In the structure of unemployment the unskilled and semi-skilled workers dominate.

## **II. CURRENT SITUATION IN VET VET TT**

### **1. VET IN THE GENERAL EDUCATION SYSTEM**

Serbia has a rather inefficient system of formal education both from the standpoint of general aims (an increase in the level of general education and general culture of the population) and specific objectives (the employment of qualified and educated individuals).

Vocational secondary education is under the jurisdiction of the Ministry of Education and Sport of the Republic of Serbia. The role of enterprises (or other institutions demanding workers of certain skills and qualifications) in VET in terms of defining skills and qualifications needed by them, offering training for students and seeking influence on the training programs has been marginalized. Therefore, the system of vocational secondary school education does not correspond to the needs of the economy and labour market. The current restructuring in the economy, the process of privatization of large state-owned enterprises and the development of the private sector ask for a reconsideration of the relationship between educational institutions (Ministry of Education) and enterprises, trade unions, chambers of commerce, employment bureaus, etc. Secondary vocational schools provide qualifications on a two-, three- or four-year educational level and an offer of one-year further specialization after the completion of the secondary

<sup>6</sup> Monthly Statistical Bulletin - 2002, No.4, Unemployment and employment in the Republic of Serbia, Belgrade, 2002. pp.4. and Monthly Statistical Bulletin, July 2005, No.35, Unemployment and employment in the Republic of Serbia, Belgrade, 2005. pp.3

<sup>7</sup> <http://webzrzs.statserb.sr.gov.yu/axd/index1.php?SifraV=45&Link=>

school. The three-year and four-year vocational education prepares students for a broad list of jobs within the vocation making the professional profiles. A specialized training provides a deepening of knowledge and skills needed for the jobs in which special technologies are used – depending on the job within the frame of the professional profile.

In 2005 there is a rather wide network of secondary schools in Serbia:

- 127 gymnasiums
- 337 vocational schools
- 34 special vocational schools
- 33 art schools.

Vocational profiles are the basis for defining curricula in secondary vocational education. Professional profiles consist of general and vocational contents, based on the achievements in science, technology, culture and arts that are needed for performing the tasks within the field of work or for ensuring further education and training. Within the frames of secondary vocational education there are 543 educational profiles:

- 31 profiles of a two-year vocational education;
- 133 profiles of three-year vocational education;
- 148 profiles of four-year vocational education, and
- 231 specialized profiles – an option to take these courses after 1 or 2 years experience at work.

All professional profiles are grouped into *15 fields of work*: forestry and wood processing; agriculture and food processing; geology; mining and metallurgy; mechanical engineering and metal processing; electric engineering; chemistry, non-metals and printing; textile and leather processing; geodesy and civil engineering; transportation; trade, catering and tourism; economics, law and administration; health care and social welfare; personal service rendering; culture, art and communication; hydrometeorology.

There is a large difference in the number of students in vocational secondary schools. Secondary vocational schools in economics, trade, catering and other educational profiles in these fields have got classes with a large number of students. In some other fields, however, the small number of classes – and in classes - leads to problems with recruiting and retaining teaching staff. It is very difficult to find teachers for vocational subjects who would work with low number students. On the other hand, the quality of vocational secondary education differs in various parts of the country. In big cities there

are better chances for a vocational secondary school education and training of good quality. This quality depends also on the level and existence of workshops, laboratories, teaching material and the quality of the teaching staff. The equipment for work in theory and practice lessons is rather old (there is hardly any computers in the schools) and in some schools there is a lack of material for practical training. Large investments will be necessary in order to equalize the level of quality of the schools concerning infrastructure, equipment and training material.

## 2. TEACHERS WORK

According to data of the Ministry of Education and Sport there is a wide network of 337 vocational secondary schools in Serbia and 15 020 teachers working there<sup>8</sup>. One of the basic characteristic of the teaching staff in secondary education schools is its diversity – experts of various educational levels, academic titles and profiles (engineers, physician-specialists, dentists, nurses, master-craftsman, instructors, technicians, etc.), teach most of the vocational subjects. Over 50% of teaching in all fields of works is realized by experts of various profiles who have not received any initial teacher training. The present situation in teacher training in VET provides a poor support to modernization with a:

- lack of permanent teacher training and professional improvement system for teachers;
- lack of legislation for teachers in general, that would include ways for initial and professional preparation and mechanisms for social and professional promotion,
- lack of defined standards of knowledge and pedagogical skills;
- lack of adequate university programs for the initial psychological and pedagogical preparation of teachers in vocational schools;
- neglect of information technologies as a possible efficient basis for the professional teacher's development.

Working conditions in VET schools are generally not good. Equipment, buildings and conditions of vocational secondary schools are very diverse. In most of schools the infrastructure is at a rather poor level. The main characteristics of this school system are the following:

- about one quarter of school buildings are more than 60 years,
- over 25% of school buildings do not have sewerage system,

<sup>8</sup> Non-published data from the Ministry of Education and Sport of the Republic of Serbia.

- over 50% of them do not have sufficient water supply,
- 56% do not have telephone lines and nearly 25% of them have constant difficulties with the heating system.<sup>9</sup>

### 3. INITIAL TEACHER TRAINING

A large number of teachers have no initial pedagogical or didactic preparation for the jobs they are working in (vocational subject teachers and teachers for practice), nor managerial skills (school principals, associates, administrators). The education of teachers for certain subjects in vocational schools is organized at various faculties (Faculty of Agriculture, Faculty of Veterinary Medicine, Faculty of Forestry, Faculty of Technology, Faculty of Electronics, Faculty of Mechanical Engineering, Faculty of Chemistry, Faculty of Construction Engineering, etc). During their studies, the candidates are not being prepared for the specific job function as a ‘Teacher’, and they do not study pedagogy or subject-didactics connected with psychology. However, if they decide to work in a school, they are obliged by law to pass the so-called “state expert exams” which usually include General Pedagogy, General Psychology and Educational Legislation.

Teachers start with work as interns in a school and their work is mentored and estimated by a teaching expert supervisor (the mentor is a senior teacher). When they get a positive assessment by the mentor and after having passed a state expert examination and a license examination, they have the possibility for a permanent and independent job as teacher in a school.

An innovative reform of initial vocational teacher training is now underway. The new “**Policy and Strategy Development for VET in Serbia**”<sup>10</sup> is directed towards:

- Renewal and modernization of the teaching and training system for teacher trainees;
- Support to the actual reform of VET;
- Functional literacy and
- Establishing the foundations for continuing VET.

According to this policy proposal, a modernisation of teacher training should be initiated by improving the pedagogical capacities and skills of teach-

<sup>9</sup> Reforms in secondary vocational education, Ministry of Education and Sport of the Republic of Serbia, Belgrade, 2002, pp. 30

<sup>10</sup> Policy and Strategy Development for VET in Serbia, Ministry of Education and Sport Republic of Serbia – Vocational education Reform Programme, Belgrade, 2005.

ers and associates in order to prepare them adequately for the implementation of new programmes, and simultaneously help creating a new system which will link initial and permanent education. The goal of the new concept is to “equip” teachers with functional knowledge and skills which will enable them not only to implement successfully new reformed programmes but also enable them to actively and creatively participate in further individual professional development and to contribute to the improvement of VET. As opposed to the traditional model, the new concept is promoting a culture of permanent change and a systematic approach in determining the needs and possibilities for professional development.

Regarding the current approach and the projected development of vocational education, the expected teacher training outcomes should be:

- Good vocational and pedagogic knowledge and skills applicable for modern teaching and learning tools and methods;
- Openness towards change and understanding of the rationale and implications of reform;
- Communication and guidance skills to lead students through the learning process;
- Knowledge of planning and developing innovative approaches and curricula;
- Cooperation skills, team work capacities, and identification of the economy and students needs;
- Ability to take over the responsibility and initiative for own professional career and development of VET;
- Knowledge about planning, evaluation and self-evaluation

#### **4. IN-SERVICE TEACHER TRAINING**

The system of in-service teacher training in terms of provision structure consists of: The Institute for Improvement of Education - Center for Professional Development of Employees, Schools, Faculties, Research institutions, Professional institution and non-Governmental organizations. The programs and ways of organizing in-service training for teachers are regulated by law. Teachers have to received 100 hours of in-service training during a five-year period<sup>11</sup>. In-service training may lead to one of the four teacher grades: 1. pedagogical counsellor, 2. mentor, 3. instructor and 4. advanced pedagogical counsellor.

<sup>11</sup> Statutes about continuing in-service training of teachers, Official Bulletin, No.14/2004 and No.56/2005.

Programmes for education of teachers in the course of service are made for each year by the Ministry of Education and Sports, different NGOs and foreign donor organisations. The Ministry of Education and Sport each year publishes a catalogue with training programs that are offered by various non-governmental associations and vocational associations.

### III. CHALLENGES, DEVELOPMENTS AND TRENDS

Substantial initiatives are underway to reform vocational teacher training as an integral part of overall VET reform, however mostly in the form of proposals still on paper. The Ministry of Education and Sports with support of the CARDS program has made a number of important policy and strategy papers: “The Concept for Vocational Education, Policy and Strategy Development for VET in Serbia”, “Methodology for curricula development”, “Policy and Strategy of Adult Education”.

These documents have established a general framework and as well as a concrete starting point for the overall modernization of vocational education and training, including teacher training for VET. These documents call for making of a coherent system for initial and in service teacher training. A system defined by these documents relies on the following pillars:

- Development and training at school level;
- Modern teaching and learning methods;
- New information technologies;
- Development of professional cooperation and partnerships

To ensure that this concept for training of teachers and other resources is transformed into programmes and concrete activities it is necessary to:

- Adopt special legislation (or regulations) reforming the entire area of vocational education and professional development of teachers and associates in vocational schools;
- Define the standards for knowledge and skills required from teachers, related to the importance of the work they need to perform in the schools;
- Establish the criteria for the professional and social promotion of teachers, that would later become part of the legislation or regulations;
- Establish the character and the form of training programme offers and the ways of supporting self-development of teachers;



- Prepare the principals, school inspectors, advisors and local partners for support to the implementation of the planned training activities;
- Define the monitoring mechanisms and internal and external evaluations for the efficiency of the applied training programme.<sup>12</sup>

#### **IV. DONOR REFORM ACTIVITIES AND OWN RESOURCES**

The Serbia reform of vocational education was started in 2001 as a massive national 'waking up' campaign which supported curriculum reform of the agricultural schools, after which campaign reached out almost all VET schools and teachers in the country. VET reform was supported by different donor organizations. The most important contributions have come from the CARDS I project started since 2003, to be followed up by CARDS II project from November 2005. Considerable in-service teacher development has been part of this process. Corps of trained curriculum officers, school coordinators, internal and external 'CAT's recruited from teachers and working inside the 55 pilot schools, has created a critical mass of potential disseminators and teacher trainers who, in collaboration with the national VET Centre, could have a valuable systemic impact, if deployed in an efficient way by the Ministry of Education and Sports.

Another important donor is the GTZ, Germany, which also contains a battery of continuing professional development activities, including training courses for VET teachers at the economic schools.

In the development and implementation of an integral VET TT system for VET teachers in the period 2005 to 2010, support is expected from the European Union and its access funds especially from the CARDS Program as well as from the World Bank, GTZ and IIZ DVV, Germany, and other bilateral donors.

#### **V. LIST OF RELEVANT ADDRESSES**

- The Ministry of Education and Sport, Nemanjina 22-26, Beograd - <http://www.mps.sr.gov.yu>
- The Ministry of Labour, Employment and Social Policy, Nemanjina 22-26, Beograd, <http://www.minrzs.sr.gov.yu/>

<sup>12</sup> Policy and Strategy Development For VET in Serbia, Ministry of Education and Sport Republic of Serbia – Vocational education Reform Programme, Belgrade, 2005.

- Institute for Improvement of Education - Center for Professional Development of Employees, Fabrisova, 2, Beograd.
- Institute for Improvement of Education - Center for Vocational and artistic education, Fabrisova, 2, Beograd.
- Statistical office of the Republic of Serbia, Milana Rakica 5, Belgrade, <http://webrzs.statserb.sr.gov.yu/axd/en/index.php>.
- National Office for Employment, Kralja Milutina 8, Belgrade. <http://www.rztr.co.yu>