

Skills and competences in health and social work sector in Slovakia

by

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Foreword based on Cedefop's survey terms of reference

Why a survey on competences?

The Europe 2020 strategy underlines the necessity to ensure that Europeans have the right skills to adapt to new conditions and potential career shifts, manage change, take initiative, innovate and engage in further learning. Key European policy documents pinpoint that, besides job-specific skills, people need occupational skills that are generic and can be applied in several jobs, as well as key competences to equip them for active citizenship and lifelong learning. People should have the opportunity to develop such skills and competences throughout their lives and through different learning pathways (including VET and adult learning). Within the 2009-2011 cycle of the European education and training 2020 framework, countries have agreed to take better account of key competences and generic skills in curricula, assessment and qualifications. To encourage implementation, indicators for creativity, innovation, entrepreneurship and language learning are envisaged.

Within this policy framework, the 2011 competence survey will provide information on progress made in European countries and on which key competences and other generic skills are included and assessed in VET programmes. This will contribute to addressing information gaps as identified in the Joint Progress Report of the Council and the Commission on the implementation of the Education & Training 2010 work programme.

The following two occupations based on ISCO 88 have been pre-selected for analysis by Cedefop:

- Aid dental within INSTITUTION-BASED PERSONAL CARE WORKERS (5132) who perform simple tasks to assist medical, nursing, and dental professionals or associate professionals;
- Social worker associate professional within SOCIAL WORK ASSOCIATE PROFESSIONALS (3640) who provide guidance to clients in social and related matters enabling them to find and use resources to overcome difficulties and achieve particular goals.

It was however suggested that in case (one of) these occupations do not exist in the country or are part of a different educational level rather than initial VET, similar occupations perhaps named differently in the country in initial VET are to be taken into account.

The findings of the survey will feed into the ongoing work of Cedefop in this field, inform the work of specific Thematic Working Groups set up by DG EAC of the European Commission and form the basis for drafting a comparative working paper to be published in 2012 by Cedefop.

Table of contents

Foreword based on Cedefop's survey terms of reference.....	3
1. VET in health and social work sector.....	5
1.1 National policy framework.....	5
1.2 Socio-economic characteristics of health and social work sector	5
1.3 VET pathways in health and social work sector.....	8
1.4 Main policy trends in initial VET since 2002	12
1.5 Background of changes	14
1.6 Curriculum development process.....	15
2. Analysis of two selected occupations	17
2.1 Dental aid.....	17
2.2 Social work associate professional.....	22
Bibliography	31
Abbreviations	33
Annex.....	34

1. VET in health and social work sector

1.1 National policy framework

Since the introduction of the curricular reform in the 2008/2009 school year initial secondary VET curricula have been developed by respective schools based on state requirements. Responsibility of schools to develop school educational programmes (SchEPs, curriculum itself) is stipulated by § 7 of Education Act No. 245/2008 Coll. School educational programme must be discussed with pedagogical staff, a School Board, and employers or employers' organisations with the responsibility to the respective field (identified and set by the Decree of the Ministry of Education of the SR No. 282/2009 Coll. on secondary schools) before issuing by school director. There is no obligation to discuss school education programme with the school establisher (self-governing region in case of public schools), but establishers are entitled to ask directors to submit school educational programmes for approval, if they wish to do so.

A school educational programme must comply with principles of education stipulated in § 3 and goals of education stipulated in § 4, and according to § 6, with a so-called state educational programme (StEP, in fact a "national curriculum") "setting obligatory content of education in schools... to acquire competences". In contrast to principles of education speaking predominantly about general rights, acquiring competences is explicitly addressed within § 4(b) as follows: "to gain competences, particularly in communication skills, verbal skills and written skills, by exploiting information and communication technologies, communication in the official language, mother tongue and foreign language, numeracy, and technical competence in the field of science and technology, competences for lifelong learning, social competences and civic competences, entrepreneurship and cultural competences".

In § 4(e), competences corresponding to labour market needs are stressed in a following way: "develop manual skills, creative, artistic psychomotor skills, up-to-date knowledge, and to work with them in practical work in areas related to education or follow-up with current requirements on labour market". The rest of this article (§ 4(c),(d),(f)-(k)) addresses diverse generic skills, e.g. respecting human rights and human dignity, different cultures, nationalities, ethnic groups and religions, and also understanding rights of children and ability to enforce them.

First signals of a shift from content based to competence based curriculum development appeared immediately after the political change in 1989, but reflection in official policies has been visible since the late 1990s (see Part 1.4 for further details).

In all currently valid StEPs (including also a quite autonomous health sector) the same definitions are applied (see Part 1.6 below).

1.2 Socio-economic characteristics of health and social work sector

Health and social work sector contribution to GDP was 8.2 % in 2010 and a share of public expenditure on health and social work sector in all public expenditures was 20.34 % in 2010, according to the Ministry of Finance answer to the direct authors' request. The freshest official national data with some relevance are as follows: In 2006, health and social work activities sector gross output was EUR 2,050.9 million, representing 1.6 % of total gross output EUR 127,690.2 million (both data at current prices calculated from supply and use tables, ESA 95 methodology), indicating a decrease in comparison to previous years (with 2.1% in 2003 to 2005). Trend in sector's gross value added is presented in the table below. A strong decrease is visible compared to the early 2000s contrasting with this sector increase in EU27 and also with national total gross value added.

Table 1: Gross value added in health and social work sector compared to EU27 and all sectors in Slovakia (at basic prices) since 2000

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU27 H&SW*	100	102.6	106.6	108.2	109.5	111.7	113.0	114.3	116.8	118.1
Slovakia H&SW	100	105.0	98.3	94.0	74.9	84.8	75.0	88.5	85.4	90.9
Slovakia all sectors	100	105.4	109.8	113.9	118.9	125.8	138.4	153.0	162.7	154.9

Source: Eurostat, Table: [nama_nace60_k], Date of extraction: 25-07-2011, Last update: 14-07-2011. Index 2000=100.

Note: * H&SW – Health and social work sector.

Females dominate in employment in this sector similarly to EU27, while the share of employees is substantially lower in comparison to EU27, as visible from the table below.

Table 2: Employment and employees 15-64 aged in health and social work sector in 2010 (in 1000s)

	Slovakia					European Union 27				
	Employment		Employees		Share	Employment		Employees		Share
	Abs	%	Abs	%	%	Abs	%	Abs	%	%
Total	156	100	139.8	100	89.6	20176.4	100	20093.4	100	99.6
Males	24.5	15.7	20	14.3	81.6	4383.8	21.7	4036.2	20.1	92.1
Females	131.5	84.3	119.8	85.7	91.1	15792.6	78.3	16057.1	79.9	101.7*

Source: Eurostat, LFS, Tables: [lfsa_egan2], [lfsa_eegan2], Date of extraction: 26-07-2011.

Note: * Index over 100 resulted from the confirmed Eurostat data, explanation should be related to LFS statistical error.

Employment in the sector suffered shortly from the financial and economic crisis, but it improved in 2010 to reach a similar increase in comparison to 2008 as in EU27. The table below also compares employment in the sector with all sectors employment. National and European trends are similar, while the trends in the sector and all sectors in total are opposite. Employment in all sectors in total has not returned to the pre-crisis level yet.

Table 3: Trend in employment of 15-64 aged in human health and social work sector in 2008 to 2010 (in 1000s) compared to all sectors in Slovakia and to EU27 (in 1000s)

	2008	2009	2010	09/09 IoC	09/08 IoC	10/09 IoC	10/08 IoC
SK H&SW	149.9	148.2	156	100	98.9	105.3	104.1
EU27 H&SW	20922.9	21483.9	21874.6	100	102.7	101.8	104.5
SK All	217754	213875	212440	100	98.2	99.3	97.6
EU27All	2423.4	2356.6	2307.2	100	97.2	97.9	95.2

Source: Eurostat, LFS, Table: [lfsa_egan2], Date of extraction: 26-07-2011.

Notes: * H&SW – Health and social work activities sector (NACE rev.2); IoC - Index of Change.

In contrast to employment in 2008 - 2010, no similar influence of crisis can be observed in numbers of legal units as well as enterprises active in the sector and the national economy as a whole. The following table documents an increase, with an extremely strong increase in the number of enterprises.

Table 4: Legal units and enterprises in 2008 - 2010

	2008	2009	2010	10/08 IoC
Legal units in health and social work sector	12702	12855	13106	103.2
Legal units total (all sectors)	588181	593219	607397	103.3
Enterprises in health and social work sector	3621	4085	4568	126.2
Enterprises total (all sectors)	119933	127409	143001	119.2

Source: Statistical Office of the SR.

Note: IoC - Index of Change (2008=100).

Distribution of legal units by ownership in 2010 is offered in the following table separately for two sub-sectors.

Table 5: Legal units by ownership, as of 31 December 2010

	Public sector	Private sector	Enterprises under foreign control	All
Human health services (QA)*	106	10646	25	10777
Residential care and social work activities (QB)*	431	1895	3	2329
Total	537	12541	28	13106

Source: Statistical Office of the SR.

Notes: * QA, QB, classification NACE rev.2.

Distribution of legal units by legal forms and size in 2010 is offered in the following table separately for two sub-sectors.

Table 6: Economic subjects by legal forms and size class category by number of employees, as of 31 December 2010

Human health services (QA)*	Enterprises	Non-profit institutions	Self-employed persons	Freelance employees
Total**	4487	113	510	5667
0 - 9	4160	43	418	5535
10 - 19	52	2	2	1
20 - 49	55	5	-	-
50 - 249	88	8	-	-
250 - 499	27	5	-	-
500 - 999	25	5	-	-
1000 and more	14	1	-	-
Residential care and social work activities (QB)*	Enterprises	Non-profit institutions	Self-employed persons	Freelance employees
Total**	81	1918	296	34
0 - 9	72	957	77	30
10 - 19	1	113	-	-
20 - 49	2	205	-	-
50 - 249	2	170	-	-
250 - 499	-	-	-	-
500 - 999	-	-	-	-
1000 and more	-	-	-	-

Source: Statistical Office of the SR, Business Register of the SR.

Notes: * QA, QB, classification by NACE rev. 2;

** "Total" includes enterprises with unascertained number of employees too.

A more detailed classification by legal norms in the sector and its comparison with total data for all sectors is offered in the following table.

Table 7: Legal units* in human health and social work sector in all sectors, as of 31 December 2010

	Total	JSC	LLC	OTP	Co	SE	SO	BO	NP	Other
Total	607397	5547	112778	1013	1580	21	717	6662	410308	53771
Share (%)	97.5**	0.9	18.6	0.2	0.3	0.0	0.1	1.1	67.6	8.9
Health and social work (Q)	13106	76	4387	5	3	2	22	389	6507	1715
Share (%)	100	0.6	33.5	0.0	0.0	0.0	0.2	3.0	49.6	13.1

Source: Statistical Office of the SR.

Notes: * Natural persons-entrepreneurs, Enterprises, Non-profit oriented institutions;

** Rest to 100% are self-employed farmers;

JSC - joint stock companies; LLC- limited liability companies; OTP- other trading partnerships; Co – cooperatives; SE - State enterprises, SO- subsidized (contributory) organisations; BO - budgetary organisations, NP - Natural persons.

1.3 VET pathways in health and social work sector

Health sector

There is no sector in education with so deep changes after the collapse of communism. The main drivers were changes required in training of nurses by the Chamber of Secondary Health Care Workers (with a dominant voice of nurses) in the early 1990s and an increasing demand in social workers most visible with regard to the establishment of (non-existing before 1989) job centres and the need to provide for employment services.

Secondary training provided within this sector is mainly school based, as the secondary VET is in essence school based in Slovakia. Nevertheless, there are significant parts of training provided in the work place in human health sector secondary programmes. For instance the state educational programme (StEP) Health Assistant includes 48.5 % hours of general education and 51.5 % vocational education. The work based (clinical) practice represents about 24.2 % of total hours and 47.1 % of vocational hours.

The following two tables offer an overview of current programmes preparing for human health sector professions (in full time and part time studies) at secondary health schools.

Table 8: VET pathways to health sector professions and number of students in secondary health schools (public and church-affiliated*) in 2010 – full time studies, as of 15 September 2010

	Length of study	Students total		New entrants		Graduates 2009/2010	
		Total	Female	Total	Female	Total	Female
Public schools							
<i>ISCED 5B Higher professional study total</i>							
		404	328	179	148	95	72
5317700 Diploma Physiotherapist	3	161	111	67	48	35	25
5325700 Diploma General Care Nurse	3	224	206	112	100	47	41
5333700 Diploma Radiology Assistant	3	19	11	0	0	13	6
<i>ISCED 4A Post-“maturita” qualifying study total</i>							
		170	73	119	45	48	33
5310600 Dental Technician	2	68	35	47	22	28	18
5312600 Optician	2	20	10	20	10	13	10
5315600 Health Rescue Worker	2	82	28	52	13	7	5
<i>ISCED 3A Upper secondary vocational education total</i>							
		5625	4709	1484	1238	1353	1130
5304600 Nutrition Assistant	4	148	133	31	29	17	15
5308600 Medical Laboratory Technician	4	366	316	95	81	69	62

5311600 Pharmaceutical Laboratory Technician	4	749	673	201	176	204	179
5312600 Optician	4	36	32	6	4	0	0
5314600 Orthopaedic Technician	4	55	29	13	5	0	0
5356600 Health Assistant	4	3020	2659	823	722	765	670
5356600 Health Assistant (H)**	4	216	183	60	54	48	42
5358600 Dental Assistant (E)***	4	94	79	29	26	29	25
5370600 Masseur	4	941	605	226	141	221	137
Church-affiliated schools							
<i>ISCED 5B Higher professional study total</i>		54	50	24	22	0	0
5325700 Diploma General Care Nurse	3	54	50	24	22	0	0
<i>ISCED 3A Upper secondary vocational education total</i>		945	797	269	228	223	186
5356600 Health Assistant	4	796	696	229	197	207	176
5370600 Masseur	4	149	101	40	31	16	10

Source: Institute of Information and Prognoses of Education.

Notes: * There are no relevant programmes offered by private secondary VET schools;

** Hungarian language of instruction;

*** Experimental, not yet approved.

Table 9: VET pathways to health sector professions and number of students in secondary VET schools (public and church-affiliated*) in 2010 – part time study, as of 15 September 2010

	Length of study	Students total		New entrants		Graduates 2009/2010	
		Total	Female	Total	Female	Total	Female
Public schools							
<i>ISCED 5B Higher professional study total</i>							
		105	94	57	56	46	46
5328700 Diploma Dental Hygienist	2	78	77	57	56	46	46
5335700 Diploma Optometrist	2	27	17	0	0	0	0
<i>ISCED 4A Post-“maturita” qualifying study total</i>							
		1120	624	785	495	402	210
5312600 Optician	3	30	20	29	20	0	0
5312600 Optician	2	0	0	0	0	26	21
5314600 Orthopaedic Technician	2	45	24	24	16	21	10
5315600 Health Rescue Worker	2	427	47	241	29	157	12
5356600 Health Assistant	2	501	440	374	337	117	105
5356600 Health Assistant	1	117	93	117	93	81	62
<i>ISCED 3A Follow-up study total</i>							
		494	410	248	214	92	73
5356600 Health Assistant	3	440	368	194	172	54	37
5356600 Health Assistant	1	39	33	39	33	38	36
5370600 Masseur	2	15	9	15	9	0	0
<i>ISCED 3C Upper secondary vocational education total</i>							
		924	693	860	642	681	534
5371300 Sanitarian	2	160	124	96	73	44	38
5371300 Sanitarian	1	764	569	764	569	637	496
Church-affiliated schools							
<i>ISCED 4A Post-“maturita” qualifying study total</i>							
		244	204	203	168	44	43
5356600 Health Assistant	2	116	100	75	64	11	11

5356600 Health Assistant	1	128	104	128	104	33	32
<i>ISCED 3A Follow-up study total</i>		113	85	36	27	13	13
5356600 Health Assistant	3	95	74	18	16	13	13
5370600 Masseur	2	18	11	18	11	0	0
<i>ISCED 3C Upper secondary vocational education total</i>		371	325	349	308	305	258
5371300 Sanitarian	2	22	17	0	0	0	0
5371300 Sanitarian	1	349	308	349	308	305	258

Source: Institute of Information and Prognoses of Education.

Notes: * There are no relevant programmes offered by private secondary VET schools.

Three programmes offering post secondary not tertiary studies and higher professional level diploma (Diploma Dental Technician, Diploma Health Rescue Worker, Diploma Medical-Technical Laboratory Technician) were recently offered, however they were deregistered from the network of programmes offered by secondary schools of health. Similar studies are only offered by university bachelor studies.

Although nursing programmes were originally offered exclusively by secondary health schools followed by exhaustive continuing vocational education and training at work places and courses offered within in-service training managed under the umbrella of the Ministry of Health, nurses are currently almost exclusively graduates from higher education. According to Directive No. 2005/36/EC on the recognition of professional qualifications only graduates from ISCED 5B higher professional programme at secondary VET schools (offering title DiS. - Diploma specialist) and graduates from higher education programmes with titles Bc. - Bachelor and Mgr. - Master are recognised as qualified general care nurses. There were however only 47 graduates – DiS. nurses, as visible from Table 8, in contrast to 387 graduates in full time and 1202 in part time bachelor studies in 2010, as can be seen from Table 10. This table offers data about bachelor studies designed for training of mainstream staff to serve as regular nurses in positions originally served by staff graduated from secondary schools. About a 4-time higher number of bachelor part time studies reflects the attractiveness of bachelor studies for staff interested in better remuneration, in particular of nurses who graduated in old pattern secondary nursing studies. Second cycle nursing studies are attractive for people in service, as visible from the contrast in data about part time and full time studies and in particular for those looking for promotion at work. For the sake of completeness we have also added data about nursing PhD studies. However, PhD graduates similarly to those graduating from master studies are overqualified for dental aid and do not look for positions at dentist ambulances. In fact, nurses graduating from bachelor studies do not prefer this position either.

Table 10: Graduates from nursing programmes at higher education institutions, as of 15 September 2010

	Cycle*	Full-time		Part-time		All	
		Total	Females	Total	Females	Total	Females
5602700 Nursing	I	387	376	1202	1172	1589	1548
5602800 Nursing	II	2	2	834	809	836	811
5602900 Nursing	III	8	7	50	45	58	52
All cycles total	I,II,III	397	385	2086	2026	2483	2411

Source: Institute of Information and Prognoses of Education.

Notes: * I - First cycle (Bachelor- Bc) with 3 years lasting studies; II - Second cycle (Master – Mgr) with additional 2 years lasting studies; III - PhD studies.

In addition to nursing universities also offer other non-doctor programmes, among which bachelor programmes 5626 7 00 Dental Hygiene and 5628 7 00 Dental Laboratory Technology are linked to dentistry.

Table 11: Graduates from bachelor programmes relevant to dentistry in 2010

	Full-time		Part-time		All	
	Total	Females	Total	Females	Total	Females
5626700 Dental Hygiene	17	16	34	33	50	49
5628700 Dental Laboratory Technology	0	0	13	10	13	10

Source: Institute of Information and Prognoses of Education.

More details about programmes and numbers of graduates from whom dentist can recruit collaborates as well as explanation of changes in provision of respective health programmes are in Part 2.1.

As already indicated above secondary social care education is dominantly school based as respective schools traditionally belong to the stream of secondary specialised schools (SSS) focusing on ISCED 3A programmes. In mainstream social care programmes are offered by so-called pedagogical and social academies, which also offer pedagogical studies (e.g. kindergarten teachers). Two genuine secondary VET streams - SSS dominantly offering ISCED 3A and SVS dominantly offering ISCED 3C with sectoral profile, gradually accommodated to the regional demand. Their programme provision became multi-sectoral with the tendency to offer, as much as possible, attractive ISCED 3A studies. Since 2008, all VET schools are named SSS and in contrast to strictly regulated health sector education and health schools any SSS meeting law requirements in equipment and staff can include respective programme into its portfolio. Thus, e.g. SSS in Hnúšťa, originally focusing on training in chemistry, gradually developed into a school offering programmes in commerce and entrepreneurship, wood processing, mechanical engineering in addition to social sector education. Furthermore, ISCED 3C training (e.g. for carpenters) is offered together with diverse ISCED 3A education or even ISCED 4A education, including ISCED 3A Social and Educative Services Worker, which is of our main interest.

Social work sector

The following two tables offer an overview of current programmes preparing for social sector professions (in full time and part time studies) at secondary specialised schools.

Table 12: VET pathways to social sector professions* and number of students in secondary VET schools (public, private and church-affiliated) in 2010 – full time study, as of 15 September 2010

	Length of study	Students total		New entrants		Graduates 2009/2010	
		Total	Female	Total	Female	Total	Female
Public schools							
<i>ISCED 5B Higher professional study</i>							
6851700 Social and Legal Care Worker	3	37	27	22	13	12	11
<i>ISCED 4A Post-“maturita” qualifying study</i>							
6851600 Social and Legal Care Worker	2	182	134	114	82	30	24
<i>ISCED 3A Follow-up study</i>							
6358600 Social Services	2	10	10	10	10	7	7
<i>ISCED 3A Full secondary vocational education</i>							
7646600 Educational and Care Services	4	57	51	18	15	39	38
7661600 Social and Educative Services Worker	4	787	697	227	200	172	150
Church-affiliated schools							
<i>ISCED 3A Upper secondary vocational education</i>							

7646600 Educational and Care Services	4	140	132	22	20	68	66
7661600 Social and Educative Services Worker	4	413	384	80	71	64	60
Private schools							
<i>ISCED 3A Upper secondary vocational education</i>							
7646600 Educational and Care Services	4	51	48	13	12	16	16
7661600 Social and Educative Services Worker	4	391	315	126	98	51	40

Source: Institute of Information and Prognoses of Education.

Note: * Social sector professions were identified by authors from diverse programmes of groups of study programmes 68, 63 and 76.

Table 13: VET pathways to social sector professions* and number of students in secondary VET schools (private and church-affiliated) in 2010 - part-time study, as of 15 September 2010**

	Length of study	Students total		New entrants		Graduates 2009/2010	
		Total	Female	Total	Female	Total	Female
Church-affiliated schools							
<i>ISCED 4A Post-“maturita” qualifying study</i>							
6851600 Social and Legal Care Worker	2	18	16	18	16	0	0
<i>ISCED 3A Upper secondary vocational education</i>							
7646600 Educational and Care Services	4	6	3	4	1	31	29
7661600 Social and Educative Services Worker	4	1	1	0	0	0	0
Private schools							
<i>ISCED 5B Higher professional study</i>							
6851700 Social and Legal Care Worker	3	12	12	0	0	0	0
6851700 Social and Legal Care Worker	2	15	11	15	11	24	24
<i>ISCED 4A Post-“maturita” qualifying study</i>							
6851600 Social and Legal Care Worker	2	44	37	36	29	25	25
<i>ISCED 3A Upper secondary vocational education</i>							
7661600 Social and Educative Services Worker	4	301	210	91	58	44	33

Source: Institute of Information and Prognoses of Education.

Notes: * Social sector professions were identified by authors from diverse programmes of groups of study programmes 68, 63 and 76;

** There are no relevant programmes offered by public secondary VET schools.

It must be however stressed that graduates of these programmes as a rule look for higher education, predominantly in social work programmes at universities. It is also a consequence of the law requiring higher education as an obligatory precondition for entitlement to offer counselling. Secondary trained professionals serve as auxiliary staff with any kind of social care advices and assistance not considered as counselling.

1.4 Main policy trends in initial VET since 2002

A shift from content based to competence based curriculum in secondary VET development goes back to the late 1990s with first official policy papers approved in the 2000s. A “Standard of Secondary VET” was approved by the Ministry of Education (current title the Ministry of Education, Science, Research and Sport) on 10 July 2002, followed by the

manual for the development of curricula prepared by the State Institute of Vocational Education in 2003. From then on new curricular documents had to explicitly reflect key competences, general competences and vocational competences. The following key competences were explicitly listed in the manual:

- Communicative and social-interactive;
- Intra- and interpersonal (including learning to learn);
- Creative problem solving;
- Entrepreneurial;
- Digital (ICT);
- Civic (“to be a democratic citizen”).

In 2007 the government approved a policy document the “Concept of Two-Level Model of Educational Programmes in VET in the Slovak Republic“

- declaring curriculum development decentralisation by means of aforementioned state educational programmes (StEPs) and subsequently elaborated school educational programmes (SchEPs);
- confirming a shift in curriculum development towards acquiring key competences, general competences and vocational competences. These three components were agreed as inevitable part of all future StEPs and SchEPs.

Issuing StEPs is under the responsibility of national authorities. StEPs for schools preparing medical staff are issued by the Ministry of Health, while StEPs for other schools are issued by the Ministry of Education.

Elaboration of SchEPs is supported by the “Manual for Creation of School Educational Programmes”. All SchEPs have to address the aforementioned 6 key competences explicitly listed in this manual (and those that were also initially listed in the 2003 manual). A term generic skills is not used in the manual and consequently not used in curricular documents either, however generic skills are contained there incorporated in diverse subchapters of Part 5 of SchEP (usually in subchapter “Overall Characteristics” and subchapter on general competences). Part 5 of all SchEPs titled “Graduate Profile” has to explicitly address:

- Overall characteristics;
- Key competences (the aforementioned 6 competences);
- General competences (elaborated by the National Institute for Education);
- Vocational competences (a/ knowledge, b/ skills, c/ personal abilities).

There is no similar regulation concerning tertiary programmes. Although there is a framework set for applications – accreditation documents evaluated by the Accreditation Commission, an advisory body of the government, but there is no strict focus on declaring ways how to achieve relevant competences visible in accreditation documents. Supply of quality of teaching staff with a history of research and publications is more important for receiving the accreditation than a detailed explanation of competences to be achieved by graduates.

Similarly concerning learning assessment, secondary curricula documents are more specific than tertiary documents. All state educational programmes contain the so-called performance standards in addition to the so-called content standards.

All information above is fully relevant to all sectors except the medical sector. There is an extensive autonomy allowing the Ministry of Health and health sector professionals to influence both programming and provision of health education.

Of course, the curricular reform introduced by the Education Act No. 245/2008 Coll. is also valid for the health sector and two-level model of curriculum development with the aforementioned StEPs and subsequently elaborated SchEPs is also applied.

The Ministry of Health is responsible for issuing StEPs (within which the vocational components are fully created by their experts, while general education component is prepared in cooperation with education sector experts from the National Institute for

Education). The Institute of Secondary Health Care Education and Continuous Education of Specialised Teachers established in February 2010 at the Faculty of Nursing and Professional Health Studies of Slovak Medical University can be seen as a sectoral counterpart of State Institute of Vocational Education, as its tasks comprise i.a. elaboration of StEPs, provision of teaching materials, setting equipment requirements for respective studies, all in cooperation with experts from the field. It also offers training for pedagogical staff of secondary health schools, the so-called complementary pedagogical study (see later) and in service training in accordance with the education sector legislation (Act No. 317/2009 Coll. and subsequent bylaws.)

In contrast to the State Institute of Vocational Education it executes inspection at secondary health schools based on the inspection plan approved by the Ministry of Health, cooperating with the State School Inspection in general education and general legislation related issues.

Eight StEPs have been elaborated for respective professions to set the framework to be used by health schools in the development of their own SchEPs. Similarly to the methodology introduced by the State Institute of Vocational Education developing key competences, general competences and vocational competences is explicitly stressed in the programme. Comprehensiveness and focus on practice in knowledge in skills is highlighted. Supporting personal development of students in order to prepare graduates to act autonomously with high self-esteem, but also a sense for cooperation is explicitly stressed.

In contrast to the methodology used by the State Institute of Vocational Education StEPs in the health sector are elaborated for all relevant professions separately. This allows for a more targeted approach in curriculum programming that is also supported by health sector legislation describing in detail the tasks and responsibilities of respective professions.

Act No. 578/2004 Coll. on healthcare providers, healthcare professionals, professional health care organizations, as amended, sets in its § 27 the list of recognised health professions.

The Decree of the Ministry of Health No. 321/2005 Coll. on a scope of practice in some health professions, in latter wording, stipulates the tasks and responsibilities of respective professions, e.g. 36 tasks and responsibilities of health assistant in the § 4b or 25 items related to dental technician in § 4c. These descriptions can be seen as occupational standards. There is no respective paragraph set for dental aid (or dental assistant, the future profession and programme that are discussed in detail in Part 2.1), as a profession similar to dental aid has not yet been recognised by law and a respective study programme is still in process of elaboration. (It is however in a final phase as explained later.)

1.5 Background of changes

Curricular changes were induced by the Ministry of Education led curricular reform as stipulated by Education Act No. 245/2008 Coll. At the same time there was a need of change of training professionals in both the health and social work sector. In the health sector a strong influence from EU practice and in the social care sector transition to market economy accelerated the needs for change. In the health sector a lack of professionals available at the labour market is also caused by the common European market, within which richer countries offer better remuneration for medical staff.

The National Qualification Framework has not been prepared yet and a referencing process is on its very start. Nevertheless, the Ministry of Health is ready to indicate respective EQF levels to all health sector professions. There is however a problem to be addressed in all sectors. The discussion about higher professional education (still seen as post-secondary non-tertiary education by national legislation) offered by secondary specialised schools is open. This affects one of three professions discussed in this study – Social and Legal Care Worker.

The European Recommendation on Key Competences adopted by the European Parliament and the Council in 2006 deeply influenced a curricular reform in Slovakia and 8 key competences identified there were reflected and subsequently translated into curricular documents in Slovakia. Nevertheless, as already mentioned, instruments for assessing the adoption of respective key competences by students have not yet been developed and a

burden is left on schools to make use of their own procedures and instruments. The only national guidelines and tools refer to school-leaving exams.

Following the 2008 curricular reform teacher training and training of school managers have started supported by the 2009 - 2012 ESF project "Teacher Training with Regard to Developing School Educational Programmes" aimed at improving skills of curricula designers at schools. Even before 2008 another ESF project was carried out by the State Institute of Vocational Education targeting all sectors pedagogical staff. The 2005 – 2008 ESF project "In Service Training of VET Teachers Regarding Completing the Study in Secondary Schools" was aimed at training of pedagogical staff for developing themes for school-leaving exams already compatible with the envisaged 2008 curricular reform.

In the health sector, the Institute of Secondary Health Care Education and Continuous Education of Specialised Teachers elaborated six courses for pedagogical staff at secondary health schools, accredited by the Accreditation Commission of the Ministry of Education, in order to allow for the accumulation of credits for participants in accordance with professional development schemes set by Act No. 317/ 2009 Coll.

The courses comprise own complementary pedagogical study introduced since 2009 tailored to health education methodology training (4 semesters, 200 hours), specialised education of heads of subject commissions and heads of study branches at schools introduced in 2010 (120 hours within max 18 months), refresher education aimed at issues related to completion of studies and development of themes for "maturita" school-leaving exams in health care programmes (30 hours within max. 10 months), innovative training focused on the development and assessment of didactical tests in health care programmes (60 hours within max. 12 months), and two preparatory courses before 1st and 2nd attestation exams. Furthermore, this institute organises examination of secondary school teaching staff as a result of dissatisfaction of training in pedagogy conducted by universities within complementary pedagogical studies. This examination is based on a Decree of Ministry of Education No. 437/2009, Part 8, point 55, within which the Ministry of Health enforced the entitlement to conduct this kind of examination related to pedagogy of vocational education (and related subjects and practice).

All legislative documents and curricular documents were elaborated and adjusted to the competence based approach, with the exception of the experimental Dental Assistant programme. Its development started before 2008 and therefore did not explicitly mention "competences", as discussed later.

Nevertheless, two barriers of successful implementation of competence based approach induced by the 2008 reform must be mentioned. The reform has been introduced without a preparatory phase and piloting at schools and therefore suffered from a lack of teaching materials (in some programmes still pending) and by a lack of time to discuss a shift from content based to competence based approach in substantial depth. As a consequence, there is a lack of instruments to assess achievement of respective competences.

1.6 Curriculum development process

In all sectors but the health sector curriculum development is supervised by the Ministry of Education and curricular organisations - the State Institute of Vocational Education (responsible for vocational competences) and the National Institute for Education (responsible for general education and related competences). Within the 2008 reform the State Institute of Vocational Education was also responsible for introducing of key competences into curricula. Within the health sector the Institute of Secondary Health Care Education and Continuous Education of Specialised Teachers replaces the State Institute of Vocational Education. The Ministry of Health instead of the Ministry of Education approves and issues state educational programmes (StEPs) developed under the supervision of this institute. Similarly to other sectors a small group of experts including also pedagogical staff and practitioners from respective fields prepares a draft of StEPs later submitted to a

professional debate. Subsequently, school educational programmes (SchEPs) are autonomously developed by schools sticking to StEPs. SchEPs are either developed under the direct involvement of professional association(s) or employment representatives or they must be submitted for commenting to relevant employer representatives. A practical example of curriculum development process is visible from the case of Dental Assistant although this curricula document does not have a format of SchEP in its form, as the experiment started before the 2008 reform.

The following definitions of competences are used and explicitly stated in all state educational programmes (StEPs). E.g. also in the StEP valid for social workers discussed later and also StEP valid for health assistants (graduates of which currently enter a position of assistant at a dentist ambulance in addition to graduates from experimental Dental Assistant programme or any other health workers who are in fact overqualified for this position):

Competence is a demonstrated ability to use knowledge, skills, attitudes, values and other capabilities for presentation and execution of functions according to set standards in work, study, personal and professional development of an individual and in his/her active involvement in the society, future implementation in the working life as well as outside the working life and for his/her continuing education. The following are competence categories:

1. Key competences are understood as a significant and important category of generally integrating, applicable and transferable files of knowledge, skills, attitudes, values and other personality features, that are necessary for each individual regarding his/her personal fulfilment and development, active citizenship and social inclusion so that he/she is able to act adequately in various situations of life and work, he/she is able to develop them further, maintain and update them in terms of lifelong learning. They are arising out of the European Reference Framework of key competences for lifelong learning.
2. General competences are basic cognitive competences that are required for related groups of professions (e.g. mathematics, reading, writing, problem solving, social, communication and interpersonal competences). They are determining a wide cognitive basis necessary for participation in the society and in outside-work life. These competences are creating a prerequisite for lifelong learning as well as enhancing professionalisation and flexibility of each individual.
3. Vocational competences are derived from work profiles (occupational standards), both of traditional and new professions. These are social and communication competences, strategic abilities related to problem solving, providing for completing tasks, organisation, initiative and leadership. These competences are influencing strategically the abilities of a graduate to participate on the labour market, to adapt to changes on the labour market, to decide autonomously on his/her professional career and to become engaged in one's own work and in cooperation with others.

The same definition will also be included in the final version of the StEP for Dental Assistant. The StEP is expected to be elaborated soon and applied for the 2012/2013 school year. The experimental version of a curriculum for the Dental Assistant programme was elaborated before the 2008 reform and therefore differs in format of new curricular documents developed after 2008.

2. Analysis of two selected occupations

2.1 Dental aid

The following table offers an overview of programmes and numbers of graduates representing the cohort of graduates in 2010 who can be expected to apply for the position at dentist ambulances to serve as dentist aids.

Table 14: Graduates from selected health programmes* in 2009/2010 school/ academic year

	Graduates Full-time		Graduates Part-time		Graduates All	
	All	Females	All	Females	All	Females
Dental Assistant (experimental)	29	29	-	-	29	29
Health Assistant**	1020	888	360	309	1380	1197
Diploma Nurse***	47	47	-	-	47	47
Bachelor in Nursing****	387	376	1202	1172	1589	1548

Source: Institute of Information and Prognoses of Education.

Notes: * With full or some relevance to dental aid profession;

** ISCED 3C Secondary VET schools graduates;

*** ISCED 5B Secondary VET schools graduates (higher professional education);

**** ISCED 5A Higher Education graduates (First cycle).

A programme best corresponding to the needs of ISCO-88 5132 Dental Aid assisting dentists in their ambulances is the secondary VET programme Dental Assistant (“zubný asistent”). Dominant tasks of profession this programme is preparing for are as follows:

- preparing and taking care of dental instruments and equipment;
- preparing dental materials (fillings); and
- performing auxiliary tasks on dentist’s requirement.

Thus, this occupation is different from ISCO-88 3225 Dental Assistant, whose tasks are more demanding, despite equivalence in job titles wording. Compared to the latter, a Slovak Dental Assistant is a graduate from ISCED 3A programme and not from ISCED 5B programmes and is not entitled to carry out dental examinations and curing, e.g. to place fillings.

Graduates from this programme have not yet been placed into the KZAM 2010 (the newest national version of ISCO), as the programme has not yet been finally approved by authorities. It can be expected that they will be classified among 3229 Health Associate Professionals “not elsewhere classified”, as the programme is a derivate of profession and respective study programme aimed at training of health assistants, currently the dominant stream of secondary health school graduates.

A little bit confusingly, the KZAM 2010 also contains the occupation with code 322504 named “zubný asistent” (Dental Assistant), however this kind of profession has not yet been recognized and even not required in the labour market. Thus, there is no training offered aimed at adoption of the qualification corresponding to ISCO-88 classification 3225.

As visible from the table above, there are many other graduates who are not explicitly trained for assisting dentists but who can finally work in dentist ambulances, as there is a lack of graduates from tailored training. This situation is partly a residuum of tradition, where vacancies at dentists were as a rule occupied by nurses (at that time graduating from ISCED 3A courses for nurses at secondary health schools). Currently, graduates from a nursing programme (now offered within higher education) are overqualified for this occupation and at the same time not seen as prepared accordingly for assisting dentists. As visible from opinions expressed by their professional association, the Slovak Chamber of Dentists, dentists are not fully satisfied either with general care nurses trained within tertiary

and higher professional studies or with health assistants graduating from secondary health schools, considering training of all of them not addressing specific needs of this profession accordingly. This is why they considered specialised training inevitable. There are two options envisaged for the future: ISCED 3A Dental Assistant programme (already developed and piloted - see Part 2.1 for further explanation) and post secondary specialised education for interested health staff (to be developed, partly building on the experience from Dental Assistance programme).

Main reasons for change

A shortage of appropriately trained staff was visible within last 10 years, according to professional association and experts in the field. The shortage was caused by retirement of experienced staff and a lack of graduates with tailored training.

This programme also resulted as a consequence of changes in provision of secondary health programmes originating back in the 1990s.

It must be noted that originally nurses graduating from secondary schools were also entitled to serve as dentist aids and that there was a specialised training provided within in-service training for secondary health staff by the Institute for Continuing Education of Health Care Workers. (This institute later expanded and was transformed into the Slovak Medical University.) The profession of dental nurse was however never recognised by legislation and the aforementioned training was gradually abolished. Similar specialised training has not been offered for over 20 years. This also contributed to calls for specialised training of dental staff.

General care nurses who are now educated at universities and receive a title Bachelor are not interested in assistance at dentists, as they see themselves overqualified and in addition not appropriately prepared, as their practice is focused on service in hospitals or ambulances of medical doctors. On the job training in the length of 6 months is considered inevitable to master assistance at dentists, according to the same source. Thus, no appropriate staff entered the labour market from offered secondary programmes.

Uplifting of the training of general care nurses endangered the existence of secondary health schools, as nursing was their most popular programme. Furthermore, nurses with higher level of education were less interested in traditional positions of nurses in hospitals and together with massive leaving abroad to better paying European countries a lack of staff available to serve in general health care occurred. This led to the creation of lower qualification programmes offered by secondary health schools - a Health Assistant programme for general health care and later also a Dental Assistant programme (experimental) particularly focusing on dental aid training.

Both Health Assistant and experimental Dental Assistant studies (see later) are rated ISCED 3A, similarly to the traditional and already abolished nurse preparing studies of secondary health schools. Of course, health assistants cannot replace nurses at the workplace; they can just assist nurses and doctors providing for specific auxiliary services. Nevertheless, they can also apply for working positions at dentist ambulances, as indirectly indicated by the state educational programme (StEP) Health Assistant issued by the Ministry of Health. Dental Assistant programme can be seen as a product of the same process of looking for new programmes, similarly to Health Assistant programme introduced in the 2001/2002 school year with first graduates in 2004/2005.

A new 4-year ISCED 3A programme Dental Assistant was introduced on experimental basis at only one secondary health school in the 2006/2007 school year, according to the decision and supervision of the Ministry of Health.

The main changes in the curriculum lay in a specific focus on dentistry in contrast to Health Assistant (and also to both former and current nursing studies) addressing health care in general. A new programme has been directly developed in response to labour market needs, supported by the Slovak Chamber of Dentists and experts from universities and practice, and financially supported by the ESF. A specialised ESF project AcuMed funded the development of teaching/learning materials (see Part 2.1 for further details). In contrast to

any other study (e.g. study of general care nurse) this programme is tailor made - focused on dentistry and offering a rich specialised practice needed exactly for this profession.

19 out of first 29 graduates in 2010 currently work as dental assistants at dentist ambulances. Two students continue in post-“maturita” (not tertiary) studies at secondary school of health and eight graduates entered tertiary studies (of which only two students left the field and continue in studies not compatible with their former study within Dental Assistant programme).

Mainstreaming of this programme is in progress. Although there were no classes for Dental Assistant opened in the 2011/2012 school year and the latest graduates are from the 2010/2011 school year, a full legislative basis is expected to be completed, according to the Ministry of Health. Only minor changes in the final wording of StEP Dental Assistant are expected - predominantly the 2008 curricular format introduced by Education Act No. 245/2008 Coll. will be met. Subsequently, school educational programmes (SchEPs) will be prepared by interested schools making use of the already used experimental curriculum.

The evaluation commission evaluated the experimental programme positively and stated that the programme complies with a new Education Act No. 245/2008 Coll. This conclusion is important, as curricula documents were elaborated sticking to the legislation valid before the 2008 reform. Following the letter dated 24 June 2011, addressed to the Ministry of Health it was recommended to enlist the study branch 5358 6 Dental Assistant into the network of programmes offered at secondary health schools and to enlist a new profession dental assistant into the register of health professions, according to the aforementioned Act No. 578/2004 Coll.

Only minor, however interesting changes were recommended

- to keep the number of practice hours (7 hours in the 3rd grade and 14 hours in the 4th grade), however to reorganise the practical training in an ambulance in 7-hour modules in order to allow a full day (of total length of 7 hours) practice at an ambulance;
- to reduce the number of hours of school based practice (Basics of Assistance in Dentistry) in the 3rd grade from 7 to 2 hours;
- to rethink the introduction of a new subject focusing on economy and management of dentist ambulance.

The last suggestion is not related to the dental assistance itself, but welcomed by private dentists in need of administration of private business.

Main characteristics of curricula

The Dental Assistant curricular document is outcome oriented, however with rich input – based details.

The document contains a graduate profile (see translation in Part 2.1) and outcome standards for knowledge, skills and personal features of graduates. Enrolment preconditions and organisation of study – a proposed teaching plan with weekly hours allowing for adjustment according to school and its staff experience form the first part of the document. The second part contains a list of obligatory and optional subjects with short syllabi for each subject making this document a mix of content based and competence based programming. The content based component is however substantially thinner compared to traditional approach.

As the document originated before the 2008 reform a director of school is entitled to change 10 % of weekly hours, however, the weekly number of hours must not be lower than 30 and higher than 34 hours. Shortening of practice hours was forbidden.

There are several subjects (general or vocational) within which practical lessons are indicated within curricula. There are however two subjects genuinely job oriented and practice focusing: Basics of Assistance in Dentistry and Assistance in Dentistry - Practice.

The following is the indication of the number of weekly hours and total year hours (for 34 planned weeks in the first, second and third grades and 30 weeks in the 4th grade) allocated to Basics of Assistance in Dentistry:

- 1st grade: 1(0) hours weekly, in total 34 hours, of which 0 hours of practice;
- 2nd grade: 10(5) hours weekly, in total 340 hours, of which 170 hours of practice;
- 3rd grade: 5(3) hours weekly, in total 170 hours, of which 102 hours of practice;
- 4th grade: 1(1) hour weekly, in total 30 hours, of which 30 hours of practice.

The following is the indication of the number of weekly hours and total year hours (for 34 planned weeks in the third grade and 30 weeks in the fourth grade) allocated to the subject Assistance in Dentistry – Practice:

- 3rd grade: 7(7) hours weekly, in total 238 hours, of which all are hours of practice;
- 4th grade: 14(14) hour weekly, in total 420 hours, of which all are hours of practice.

Thus, a genuine job related vocational practice, however school based, is 960 lesson hours in total (302 within the first subject above and 658 within the second subject above). In addition a vocational practice in the work place (clinical practice) comprises 4 weeks in total in the 3rd grade.

An outcome based approach is visible from indicating requirements (they are called standards in the document) to be met by graduates in general education and vocational education.

There are 8 items of knowledge based outcomes related to general education identified, one of which being the following

- the knowledge of the Latin language to successfully use the medical terminology.

There are 17 items of knowledge based outcomes identified in relation to vocational education, one of which being the following

- to know the full palette of dental materials; to identify them, to know the composition and to know the purpose of application.

There are 3 items of skills based outcomes related to general education identified, one of which being the following

- to use the Latin language in professional practice.

There are 11 items of skills based outcomes identified in relation to vocational education, one of which being the following

- to recognise and process materials needed in different types of patients' teeth treatment by dentist;

There were 6 items identified referring to personal qualities one of which being the following

- to act purposefully, judiciously and decisively.

The programme is not modularised and no guidance on teaching methods is included. An ESF project SORO/JPD3 2005/3-043 AcuMed (<http://www.szsba.sk/projektESFacumed.htm>) conducted within SPD NUTS II, Measure 2.1: Stimulating improving the provision for qualifications relevant to employers and businesses (2007-2009) with the Secondary Health School in Bratislava as a project partner, resulted in both provision of learning materials and recommendations concerning pedagogy, as the study branch Dental Assistant was one of target groups within this project (see also Lehocki, Fedor at al.).

Thus, traditional teaching materials (2 textbooks - "Basics of Assistance in Dentistry" and "Basics of Dentistry for Dental Assistants") as well as e-learning materials (with 1/3 of a full programme already completed)) and equipment are available, although not mentioned in the

curricular document. E-learning materials will be fully available in a virtual library for all schools interested in this programme. The development continues in the partnership with the Faculty of Electrical Engineering and Informatics of the Slovak University of Technology, predominantly making use of bachelor thesis.

Competences in curricula and assessment procedures

The current curricular document for Dental Assistant programme does not speak about key and generic competences. It sets standards for knowledge and skills and standards related personal quality of students. Thus, key competences as well as generic competences are implicitly addressed, however without using a respective vocabulary. A state educational programme (StEP) to be developed based on the experimental programme will be elaborated competence based with an explicit identification of key competences, according the information from the Ministry of Health confirmed by the Institute of Secondary Health Care Education and Continuous Education of Specialised Teachers. Currently it is impossible to indicate a balance (in %) between key competences, general skills and occupation specific skills. A share in lessons for Dental Assistant is offered in Part 2.1.

As already explained key competences and generic skills were not explicitly set in Dental Assistant programme. Procedures of learners' assessment will be finalised together with a new state educational programme (StEP) and school educational programme (SchEP) that are to be developed till September 2012. It can be envisaged that both summative and formative assessment will be stressed. Written tests and interviews are traditionally used, while making and assessing projects is in a gradual increase. There is little experience with portfolio assessment. It can be expected that inclusion of projects will gain importance within all health profession programmes, according of the Institute of Secondary Health Care Education and Continuous Education of Specialised Teachers.

Extract of curriculum as an example

The following is the extract from the aforementioned curriculum document from the experimental Dental Assistant programme. It indicates the graduate's profile:

The study branch Dental Assistant prepares health care workers for performing assistant and clerical works. It deals with tasks related to prevention and education (instruction) of dental patients about oral hygiene. Dental assistant can also practice collective prevention activities for citizens.

A graduate of study branch is ready to

- perform tasks in preventive, diagnostic and treatment regime;
- provide for the smooth running of a dentist workplace;
- prepare an ambulance for treatment of patients by doctor;
- contribute to primary and secondary cavity prevention;
- perform clerical work.

A graduate may work in all areas of health care where the work is supervised by dentist.

A new version of state educational programme (StEP) Dental Assistant will explicitly address development of competences. The following is the preamble taken from the StEP Health Assistant that will very likely be also used for StEP Dental Assistant:

Vocational education and training is not based on acquisition of the largest possible volume of facts, but it aims at acquisition of key, general and vocational competences, comprehensive and practically oriented knowledge and skills, which would allow the development and overall success of individuals based on their own activity, self-awareness and cooperation not only in familiar situations, features and problems, but also under new conditions for their solving and application.

2.2 Social work associate professional

There are two programmes at secondary VET schools available for education and training of social work professionals:

1. 7661 6 Social and Educative Services Worker – a programme is available in the ISCED 3A upper-secondary level (the study usually covers a period of four years and is completed by a “maturita” school-leaving exam) and in the ISCED 4A post-secondary level (the study usually covers a period of two years and is completed by a school-leaving exam). In the 2010/2011 school year a total of 1,893 students studied in this programme at twenty Slovak secondary schools, out of which 1,607 were female students, and in the previous school year there had been 331 graduates, out of which 283 were females. Data on the age composition of students is not available.
2. 6851 7 Social and Legal Care Worker – a higher professional education programme (rated ISCED 5B, despite provision at secondary specialised schools). Study usually covers a period of three years and is completed by “absolutorium” school-leaving exam. In the 2010/2011 school year a total of 64 students studied in this programme at three secondary vocational schools, out of which 50 were female students, and in the previous school year there had been 36 graduates, out of which 35 were females. Data on the age composition of students is not available.

All data above are from the national statistics collected by the Institute of Information and Prognoses of Education.

Main reasons for change

Prior to 2008 curricular reform, education was based on curricula backed by detailed educational documentation, which had to be approved by the Ministry of Education. The 7661 6 Social and Educative Services Worker programme alone, for instance, was regulated by a guideline consisting of 145 pages in the A4 format. Since 2008, education has been based on Ministry-approved state educational programmes developed for entire groups of related fields of education, on the basis of which individual schools prepare their own school-specific school educational programmes (SchEPs). For the Field Group No. 76 the StEP (valid for four programmes) contains 156 pages. On the basis of framework specification of educational content within the StEP (unlike prior educational documentation) only two areas of vocational education and training are defined – Theoretical Education and Practical Training. Individual teaching subjects (the titles and content) are specified by individual schools in their own SchEP on the basis of performance and content standards and according to framework teaching plans which define the proportions between general and vocational education (theoretical and practical one) as well as their mandatory minimal scope. These plans are the baseline for elaboration of specific teaching plans in SchEPs, in which the educational areas are processed into syllabi of teaching subjects. Prescribed are only educational areas - specific numbers of lesson hours, which present a required minimum to be respected by the particular school in its SchEP.

The principal changes in the curriculum design cover, in particular, the following:

- less emphasis on the education content and greater emphasis on the required competences and learning outcomes (the key, general and vocational competences have been defined – in the form of performance standards, i.e. the expected learning outcomes). The performance standards are the basic criteria for levels of knowledge, skills and abilities attained. They are defining what the student is supposed to know (cognitive domain), what is he/she supposed to understand (cognitive and affective domain), and what is he/she supposed to do (affective and psychomotor domain). The level and quality of the required performance are described via taxonomy of educational objectives (in the case of the above mentioned study branches Bloom’s Taxonomy was used);

- a list of recommended education sources (specialised literature, educational technical equipment, teaching tools);
- setting the basic material, personal and organisational conditions;
- conditions for completion of the study (evaluation of the learning outcome based on performance criteria, target requirements for a “maturita” school-leaving/”absolutorium” exam, criteria for assessment of learning outcome);
- incorporation of requirements for education of students with special needs, students from socially disadvantaged backgrounds, gifted students.

Principal changes in the school status relate especially to:

- enhancement of autonomy and responsibility of schools, and creation of a competitive environment among schools;
- supporting the increase in quality and efficiency of education with regard to respecting the educational needs, study predispositions, educational conditions and specific requirements of the labour market in the schools’ regions;
- enhancing the professional and educational responsibility and autonomy of teachers.

1. When creating their curricula for the upper secondary form of study in the 7661 6 Social and Educative Services Worker programme, schools follow the StEP for the Field Group No. 76 - Teaching Studies (ISCED 3A), approved by the Ministry of Education on 15 June 2010, number 2010-9903/21287:2-913, effective as of 1 September 2010, starting with the first grade. As for the post-secondary form of study, schools follow the StEP for the Group No. 76 - Teaching Studies (ISCED 4A), approved by the Ministry of Education on 15 June 2010, number 2010-9903/21288:3-913, effective as of 1 September 2010, starting with the first grade. Updates of the given StEPs came as a response to changes and amendments to generally binding legislation (see Bibliography below). Learning outcome requirements for the particular programmes are set in the performance standards, for instance: the graduate is able to

- differentiate the characteristics of social environment, to identify the social roles and social groups in human life;
- describe, explain and analyse the conditions, principles, content, methods, forms and means of education of adults and elderly people;
- describe the social policy of the state, its system and instruments;
- define and explain the system of social and legal protection to the selected groups of citizens;
- handle information in a responsible manner, to work with specialised literature and other sources of information;
- get actively involved in the process of integration of individuals with special needs or socially disadvantaged individuals;
- cooperate with professionals from educational, training, counselling, healthcare and social facilities;
- create programmes for leisure activities in individual animation areas for clients of various age groups.

2. When creating their curricula in the 6851 7 Social and Legal Care Worker programme, schools follow the StEP for the Group No. 68 – Legal Sciences (ISCED 5B), approved by the Ministry of Education on 15 June 2010, number 2010-9886/21247:2-913, effective as of 1 September 2010, starting with the first grade. Updates of the given StEP came as a response to changes and amendments to generally binding legislation. Learning outcome

requirements for the particular study course are set in the performance standards, for instance: The graduate is able to

- describe the system of social and welfare bodies in the Slovak Republic, as well as international socio-legal organisations;
- describe and explain the methods of social work with various groups of clients, taking into account the location of the assistance provided (in-field aid, institutions, family, offices, etc.);
- explain the relationship of health-related issues and the social situation of the client;
- provide an explanation of human rights and of the basic legal rules;
- identify the relevant field-related documents and give examples of their use;
- plan, organise, perform and evaluate specific procedures of the social assistance process;
- observe and interpret the client's behaviour;
- apply ethical principles in behaviour and actions.

Main characteristics of curricula

1. In the 7661 6 Social and Educative Services Worker study branch the objective is upper secondary vocational education and training of future qualified social work professionals. The broad profiling of graduates with a focus on key competences facilitates the training of students in complex solutions of specialised issues as well as their swift adaptability and readiness to accommodate to working in new conditions (depending on the labour market), to adopt new concepts, methods, forms, procedures and activities. The state educational programme (StEP) lays down the basic body of theoretical knowledge and its application in the practical activities related to social work. These are the basic specialised activities aimed at the planning, preparation, organisation, performance and evaluation of the work and assistance in the social area, execution of social services by local public administration and self-government authorities, labour offices, social service and welfare institutions and facilities, family crisis centres, counselling institutions and non-state providers of social services. Such activities include gathering and processing of background materials necessary for the analysis of the client's situation, presenting alternative solution methods, ensuring the contact of the client with institutions and offices, keeping of records on the case, preparation of background material to be used in reports for courts and other institutions, prevention of social-pathological phenomena, social, leisure and educational activities in youth clubs, community centres or centres providing care to citizens of all age groups, cooperation with specialists from various fields of profession, and with employees of social service facilities, youth care or elderly care authorities and organisations for disabled persons. The activities, based on the knowledge of the client's personality, the identification of legal, institutional or other possibilities for improvement of the client's situation, as well as on the preventive work and social education, are targeted on social assistance and care of clients from various age groups. The baseline requirement is knowledge of basic forms and methods of social work and their application to improve the clients' situations, and, simultaneously, the attainment of competences for solving the crisis situations of clients or communities. First aid is also included among the basic vocational activities. Emphasis is put on the ethical aspects of the work performed and on the formation of personal qualities necessary for successful performance of the selected profession. The vocational practice creates, develops and strengthens the basic professional skills in professional work under direct guidance by teachers or professional specialists. The vocational practice may be undertaken in specialised classrooms, in social institutions, or in public institutions and at public administration authorities. The Academy of Education and Social Work in Levice,

for instance, carries out the vocational practice at the local organisations and institutions, such as the Office of Labour, Social Affairs and Family, the Slovak Red Cross, the Youth Information Centre, or the *Ostrov* (Island) civic association. The vocational training quality is enhanced by in-field visits to specialised departments, facilities, workplaces and institutions. For example, the aforementioned Levice Academy of Education and Social Work organises field visits to social services centres (Klasov, Krškany), the Levice Elderly Home, the Low-threshold resocialisation facility in Kláštor pod Znievom, the Youth Re-education and Rehabilitation Centre in Zlaté Moravce, the Specialised Psychiatric Therapy Institute in Predná Hora, the Veľký Dvor Penitentiary in Želiezovce, and the Hronovce Psychiatric Hospital. The practical training also includes participation of the school's students in charity collecting and fundraising performed by organisations and institutions such as UNICEF (the Blue Button project), the *Úsmev ako dar* - Smile as a Gift NGO (A Day of Smiling fundraising project), the League for Mental Health (the Forget-me-nots Day project), *Slniečko* – the Little Sun NGO (a fundraising initiative to aid maltreated children), the League against Cancer (the Daffodil Day), the Slovak Blind and Partially Sighted Union (the White Crayon fundraising), the Slovak Red Cross (the Ladybird collection).

The relevant StEPs are oriented towards the expected results – they contain the defined performance standards (learning outcomes) which students are supposed to attain during the study and to demonstrate when completing the study. The learning outcomes are split into three categories (in the StEP for ISCED 3A) – the key competences, general competences and vocational competences (the required body of knowledge, the required skills, the required personal predispositions, characteristics and abilities). The learning outcomes in the StEP for ISCED 4A are divided into two categories – the key competences and the vocational competences (the required body of knowledge, the required skills, the required personal predispositions, characteristics and abilities). The given StEPs are not designed in a modular way. The modular pattern can be applied by schools within their own SchEPs. Similarly, the StEPs do not define the educational methods to be used; instead, these are specified by schools in their respective SchEPs. They lay down the methods of evaluation, education sources (specialised literature, educational technical equipment, teaching tools).

2. In the 6851 7 Social and Legal Care Worker study branch the objective is the vocational education and training of future qualified social work professionals. The broad profiling of graduates with a focus on key competences facilitates the training of students in complex solutions as well as their swift adaptability and readiness to accommodate to working in new conditions (depending on the labour market), to adopt new concepts, methods, forms, procedures and activities. The StEP presents the basic framework of competences required for practical activities within social work. These are the competences aimed at the planning, preparation, organisation, performance and evaluation of the work in the social area. Higher vocational education enables the students to operate in the field of social services in diverse types of state organisations (in the social affairs departments, in the state health and social insurance offices), organisations run by self-governments, and non-government organisations (third-sector organisations) in the positions of qualified social workers, in the employments requiring independent working competence and a higher level of theoretical knowledge, activities associated with independent expertise and higher level of social maturity, such as performance of socio-legal activities, social prevention, socio-legal protection, screening, social assistance, social analysis, concept-oriented activities (social planning) and team leading. The content is aimed at the most up-to-date knowledge in the area of social studies, efficient methods of social work and ability to apply the knowledge and skills attained in specific conditions. Direct practical training in the social domain makes a substantial part of the study. Education is delivered in a theoretical form, with a significant proportion of self-study, as preparation for practical lessons which make a great share of the total number of teaching lessons. Advanced learning methods are used, such as experience-based learning, group work, modular scheduling, problem-oriented learning,

training, and project-based education. Emphasis is put on the ethical aspects of the work performed and on the formation of personal qualities necessary for successful performance of the selected profession. First aid is also included among the basic vocational activities. The knowledge acquired in the theoretical learning is supposed, in particular, to provide baseline for practical activities and procedures. The vocational practice creates, develops and strengthens the basic professional skills in professional work under direct guidance of teachers or professional specialists. The vocational practice may be undertaken in specialised classrooms and, according to specific study courses, in social services facilities, institutions and organisations of public administration, or in the third-sector organisations. Business Academy in Dolný Kubín, for instance, carries out a vocational practice in organizations and institutions within the town and the region as well as in other regions of the country – the Office of Labour, Social Affairs and Family in Dolný Kubín, *SpCH* – the *Charitas* Home of St Francis of Assisi in Trstená, the Social Care and Welfare Centre for Children and Adults, the Single Parents' Asylum and Crisis Centre in Dolný Kubín, the District Court of Dolný Kubín, the insurance company Union poisťovňa, a.s. Dolný Kubín, the Social Insurance Office in Dolný Kubín, the Elderly Home and Social Services Centre in Dolný Kubín, the Children's Home in Istebné, the civic association *Cesty* (Pathways) in Dolný Kubín, the Orava local association of the Slovak Red Cross in Dolný Kubín, the civic association *Návrat* (Return), the St Vincent's Charity Home in Žilina, the Migration Office of the Ministry of Interior of the Slovak Republic, the Refugee Residential Centre in Rohovce. The vocational training quality is enhanced by in-field visits to specialised departments, facilities, workplaces and institutions. The Academy organises in-field visits to all residential welfare facilities in Dolný Kubín and in the close vicinity (Istebné, Ružomberok). The visits are intended to make students familiar with the facilities in the school's neighbourhood, with their structure, organisation, and the targeted domain of social or welfare services. The practical training comprises 30 % of the total time of education. The vocational practice is held under guidance of supervisors in the school and cooperating reliable workplaces where the students also prepare a variety of theses in individual grades of study as well as a final graduation thesis.

The relevant StEP is oriented towards the expected results – it contains the defined performance standards (learning outcomes) which students are supposed to attain during the study and to demonstrate when completing the study. The learning outcomes are split into two categories – the key competences and vocational competences (the required knowledge, the required skills, the required personal predispositions, characteristics and abilities). The StEP is not designed in a modular way. The modular pattern can be applied by schools within their own SchEPs. Similarly, the StEPs do not define the educational methods to be used; instead, these are specified by schools in their respective SchEPs. They lay down the methods of evaluation, education sources (specialised literature, educational technical equipment, teaching aids).

Competences in curricula and assessment procedures

The national terminology does not make use the triad “key competences, generic skills and occupation specific skills”, Instead of this, the triad “key competences, general competences (both containing also generic skills, without stressing this explicitly) and vocational competences” is used.

- a) The state educational programme (StEP) at the ISCED 3A level includes, as indicated above, the key, general and vocational competences. The key competences are cross-sectional, and can be developed in both general and vocational teaching subjects. Therefore, it is not possible to provide a quantification of their proportion in relation to the general and vocational competences. The key competences are divided into six categories, with performance standards defined in each of them:

- I) Communication and social-interaction competences (with a total of 18 performance standards defined), for instance:
- processing of written text information (synopsis, excerpt, diary) and materials according to the notification purposes and with regard to the user's needs;
 - understanding and mastery of ICT methods including the on-line learning possibilities;
 - learning about motivational education programmes aimed at problem solving and facilitating opportunities for access to lifelong learning, which creates a possibility of virtual communication among local communities.
- II) Intrapersonal and interpersonal competences (with a total of 18 performance standards defined), for instance:
- enhancing the learner's own activity, independence, self-knowledge, self-reliance and reproductive thinking;
 - presenting the learner's own suggestions for execution of the work that the person is in charge of;
 - handling individual and team work, managing less demanding work in small teams, readiness to take up responsibility for the work of the others;
 - setting of own targets and priorities according to the learner's abilities, interests, occupational orientation and life conditions.
- III) Ability to solve problems creatively (with a total of 8 performance standards defined), for instance:
- obtaining, through self-learning, all the new information related directly to clarification of all unfamiliar areas of the problem;
 - delivery of information to citizens (notification, summarising, narration, teaching);
 - cooperation with other people in problem solving.
- IV) Entrepreneurial competences with a total of 27 performance standards defined), for instance:
- respecting the law and responsibility;
 - self-monitoring and self-evaluating the own success in learning, acceptance of assessment of the learner's study results from other people;
 - having insight in the employment opportunities available on the labour market in the particular field, making purposeful and responsible decisions on one's own profession and path of learning.
- V) IT competence (with a total of 10 performance standards defined), for instance:
- selecting quantitative mathematic methods (common, occupation-specific and special) suitable in solving a particular task or situation;
 - communicating through e-mail, utilising the on-line and off-line means of communications;
 - recording, sorting and storing information to keep it available for work;
 - protecting information against corruption, mishandling or tampering.
- VI) Ability to be a democratic citizen (with a total of 21 performance standards defined), for instance:
- acting responsibly, independently and in an initiative way, not only in the own interest but also in public interest;
 - taking active interest in both domestic and worldwide political and social developments;

- respecting the traditions and values of the nation, understanding its past and present in the European and global context;
- supporting the values of the local, national, European and global culture and maintain a positive attitude towards them.

On the basis of the proportion of the general and vocational education hours it may be observed that the share of the general competences is about 48.48%, whereas the vocational competence makes approximately 51.52%.

- b) The StEPs for the ISCED 4A and ISCED 5B levels cover only the key and vocational competences, as it is supposed that the general competences have already been attained in previous schooling. Here too the key competences are of a cross-sectional nature and their proportion in relation to the vocational teaching subjects cannot be calculated. The following performance standards are defined in the individual key competence categories:
- I) Communication and social-interaction competences (with a total of 18 performance standards defined), for instance:
 - presenting and reasoning of one's own opinion;
 - ability to make independent decisions on modification of information materials with regard to the type of communication and a wider range of users;
 - proposing activity instructions, writing specialised materials and documents in the native and foreign languages;
 - having knowledge and skills in obtaining, understanding and application of various information and assessing its benefits in personal and professional life.
 - II) Intrapersonal and interpersonal competences (with a total of 18 performance standards defined), for instance:
 - presenting adequate suggestions for distribution of individual competences to other team members, and assessing, together with the teacher and the others, whether they are able to handle the competences assigned;
 - checking the knowledge attained, critical judgement of opinions, attitudes and behaviour of others;
 - contributing to building sound human relationships, preventing personal conflicts, eradicating prejudice and stereotypes in attitudes towards others.
 - III) Ability to solve problems creatively (with a total of 8 performance standards defined), for instance:
 - assessing the value of various information, independent gathering and sorting of information, and ability to select only the most fundamental issue-related information;
 - ability to select and follow a suitable procedure for putting a selected solution into practice;
 - ability to influence people (persuading, convincing).
 - IV) Entrepreneurial competences with a total of 27 performance standards defined), for instance:
 - identifying and cultivating the qualities of managerial staff with regard to communication skills, assertiveness, creativity and stress resistance;
 - influencing others and coordinate their efforts;
 - maintaining a responsible attitude towards own future career and further education, being aware of lifelong learning importance and being ready to adapt to changed working conditions;

- being up-to-date with occupational and other conditions in the field and with the employers' demands for working activities, and being able to compare these with one's own intentions and real conditions.
- V) IT competence (with a total of 10 performance standards defined), for instance:
- ability to use a software application necessary for the occupation;
 - researching suitable information sources and gathering required information;
 - ability to create graphic representation of real situations and tasks, where such illustrations assist in quantitative solution of the task;
 - assessing credibility of various information sources, critical approach to the information obtained and media literacy.
- VI) Ability to be a democratic citizen (with a total of 21 performance standards defined), for instance:
- abiding by law, respecting other people's rights, personalities and specific cultural characteristics, combating intolerance, xenophobia and discrimination;
 - acting in accord with moral principles and principles of social etiquette, contributing to implementation of democratic values;
 - maintaining awareness of one's own cultural, national and personal identity, having a tolerating attitude towards the identity of others.

The assessment covers the key competences as well as general skills. In the key competences assessment formative assessment is dominant. It is focused on the learner's individual progress and on comparison of his/her performance with the pre-set criteria. Recommended is the use of assessment records, laboratory protocols, portfolios, essays, self-assessment of the learners, tasks or works requiring creative approach, analysis, synthesis, application of the curriculum content, etc.

The general skills assessment is aimed at the educational areas of Language and Communication, Human, Values and Society, Human and Nature, Mathematics and Use of Information, Health and Fitness. Assessed is, in particular, the integrity, accuracy and durability of the required body of knowledge studied; the quality and scope of the competences attained; the ability to apply the attained knowledge and skills in tasks solving. Assessment methods are specified by individual schools in their SchEPs. Besides the mark-based grading it is also recommended to use commenting, point-based or percentage evaluation as well as other assessment methods, portfolio, plus oral and written self-assessment of the learner.

Extract of curriculum as an example

The following is an example of the curriculum wording describing overall characterisation of the graduate:

1. The graduates of the study branch 7661 6 Social and Educative Services Worker are qualified professionals with a broad specialisation profile, capable of independent execution of specialised work in social facilities. The demanding profession calls for a broad scope of general knowledge, extensive occupation-specific knowledge and competences, and puts high demands also on the personal development. The graduates are familiar with the basic educational and psychological principles of their domain, and are able to put them into practice in solution of specialised issues. They respect human rights and freedom of individuals or groups, and use the information obtained in a responsible manner. They are able to apply the attained knowledge and skills in practice, to prepare projects, to organise and execute activities, and to evaluate their own work as well as the work of their colleagues. A significant part of the graduates' profile are their knowledge and competences in the area of hygiene and occupational safety, health care

and health protection, landscaping and nature protection, including the care for an occupational culture and working environment. The dominant features of the graduates' behaviour are tolerance, empathy, assertiveness and pro-social approach. The graduates are ready to work creatively either alone or in teams in handling practical and theoretical tasks, they possess communication skills in establishment and mediation of contacts, they have good manners in behaviour. They show a high degree of self-regulation, self-control and cooperation capabilities. They have predispositions for further vocational, professional and personal development, work innovation and improvement of knowledge and skills. They are open-minded and willing to accept new trends and methods in the given profession. The programme graduates are capable of acting purposefully, prudently, decisively and in accordance with the legal regulations of the society, the principles of patriotism, humanism and democracy. They are expected to be capable of further individual development and improvement of their expertise on the basis of the knowledge acquired in both the general and specialised subjects. The upper secondary vocational training is oriented to allow the graduates to take up further studies at the first and second cycle of tertiary education.

2. The graduates of the study branch 6851 7 Social and Legal Care Worker are qualified professionals with a broad specialisation profile, capable of independent execution of specialised work in social service facilities, in public administration, and in third-sector organisations, where completed higher professional education is required. Social work is a specialised occupation requiring high-level vocational training, attaining a certain age and personal maturity, experience and adhering to ethical attitudes required for the aiding-type profession. The demanding professions in the social work domain call for a broad scope of general knowledge, extensive occupation-specific knowledge and competences, and puts high demands also on the personal development. The graduates are able to define the basic educational and psychological principles and to apply them in solution of practical specialised issues. They respect human rights and freedom of individuals or groups, and use the information obtained in a responsible manner. They are able to apply the attained knowledge and skills in practice, to prepare projects, to organise and execute activities, and to evaluate their own work as well as the work of their colleagues. A significant part of the graduates' profile are their knowledge and competences in the area of hygiene and occupational safety, health care and health protection, landscaping and nature protection, including the care for an occupational culture and working environment. The graduates are trained to perform socio-legal activities, social prevention, socio-legal protection, screening, social assistance, social analysis, and team leadership. In the learners' training emphasis is put on the practical learning elements with aim of making the graduate ready to adapt to the changing conditions in the social and economic development. Significant parts of the graduates' profile are their convictions and attitudes, commitments and awareness related to an individual and his or her social situations, and adhering to the ethical code of a social worker. The dominant features of the graduates' behaviour are tolerance, empathy, assertiveness and pro-social approach. The graduates are ready to work creatively either alone or in teams in handling practical and theoretical tasks, they possess communication skills in establishment and mediation of contacts, they have good manners in behaviour. They show a high degree of self-regulation, self-control and cooperation capabilities. They have predispositions for further vocational, professional and personal development, work innovation and improvement of knowledge and skills. They are open-minded and willing to accept new trends and methods in the given profession. The course graduates are capable of acting purposefully, prudently, decisively and in accordance with the legal regulations of the society, the principles of patriotism, humanism and democracy. They are expected to be capable of further individual development and studies.

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Abbreviations

ESA	European System of Accounts
ESF	European Social Fund
EU	European Union
GDP	Gross domestic product
ICT	Information communication technology
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
KZAM	Klasifikácia zamestnaní (Classification of Occupations)
NACE	Nomenclature générale des activités économiques (General Classification of Economic Activities of the European Community)
NUTS	Nomenclature des Unités Territoriales Statistiques (Nomenclature of Units for Territorial Statistics)
SchEP	School educational programme
SPD	Single programming document
SR	Slovak Republic
SSS	Secondary specialised school (stredná odborná škola)
StEP	State educational programme
VET	Vocational education and training

Annex

QUESTIONS TEMPLATE

Your country.....

Your name:

Your e-mail:

Your telephone:

Selected sector: Health and social care Renewable energy

You selected this sector because (you may select more than one option):

- It is more important /relevant to your country
- It presents interesting developments in terms of related reforms
- It was easier for you to access information in this sector
- Other reasons (please specify).....

What kind of difficulties (if any) have you encountered for carrying out this survey? (you may select more than one option):

- Difficulties in reaching stakeholders and key informants
- Updated information and data not available
- The proposed occupations do not exist at all in your country
- None
- Other difficulties (please specify).....

1. Please briefly report on the national policy framework establishing the context for the introduction of key competences and generic skills in initial VET provision.
2. Please present the main socio-economic characteristics of the selected sector in your country (incl. data on Contribution to GDP; Number of employees; Value added of the sector/production; Employment trend in the last 3 years; Number of enterprises-distinguishing between micro and bigger enterprises).

3. Please describe the different VET pathways preparing professionals to work in this sector by explaining whether training provided within this sector is mainly school-based, work-based or alternance training combining periods in an educational institutional or training centre and in the workplace; whether it takes place mainly within Initial VET and/or Continuous VET (incl. data on number of students, age groups and gender representation).
4. Please present the main policy trends, initiatives and reforms of initial VET provision within this sector undertaken since 2002, to promote the introduction of key competences and generic skills in VET curricula and learners' assessment.
5.
 - a. Please explain the motivation behind these reforms (e.g. specific sectoral needs, increase relevance and quality of initial VET provision, changes in the labour market, changing needs of learners, development of National Qualifications Framework, etc.); whether these reflect the European policy initiatives and developments within the Education and Training 2010 Work Programme and the Europe 2020 (e.g. The European Recommendation on Key competences, The Recommendation on the European Qualifications Framework, etc.);
 - b. Have they been accompanied by supporting reforms (e.g. teacher training, new learning materials, new assessment tools and methods, etc.)?
 - c. What is the stage of implementation currently?
6. How does the curriculum development process take place? Which actors are involved? What is their role in curriculum development (decision making, consultative, etc.)? Which are the main methods used for identifying, agreeing and defining key competences and generic skills in curricula?
7. Please explain how key competences and generic skills are defined and understood in this sector. Do definitions vary from the national approach?

1st occupation

8a. Analysis of the occupation.....(insert name here).....

Please describe the different VET pathways and qualifications preparing professionals to work in this specific occupation (incl. data on number of students, age groups, gender representation, etc.).

- 9a. Please explain since when the curriculum is in use; Which were the main reasons for changing the curriculum? What are the main changes that have been made?
- 10a. Please describe the main characteristics of curricula preparing for this occupation. Would you consider these curricula outcome-oriented (focusing on expected learning outcomes that usually combine knowledge and skills with personal and socio-cultural competences) or rather input-based (sticking to the educational context and the body of knowledge to be transmitted)? How are they structured? Are they modularised? Do they define or guide on the teaching methods and the learning materials to be used?
- 11a. Which key competences and other generic skills are introduced and emphasised in curricula? What is the balance (%) between key competences, generic skills and occupation specific skills?
- 12a. Which of the key competences and generic skills are included in learners' assessment and how are they assessed? (e.g. summative/formative assessment, written test, portfolios, interviews, projects, etc.).
- 13a. If possible, please copy here an extract of this curriculum as an example.

2nd occupation

8b. Analysis of the occupation.....(insert name here).....

Please describe the different VET pathways and qualifications preparing professionals to work in this occupation (incl. data on number of students, age groups and gender representation).

9b. Since when the curriculum is in use? Which were the main reasons for changing the curriculum? What are the main changes made?

10b. Please describe the main characteristics of curricula preparing for this occupation. Would you consider these curricula outcome-oriented (focusing on expected learning outcomes that usually combine knowledge and skills with personal and socio-cultural competences) or rather input-based (sticking to the educational context and the body of knowledge to be transmitted)? How are they structured? Are they modularised? Do they define or guide on the teaching methods and the learning materials to be used?

11b. Which key competences and other generic skills are introduced and emphasised in curricula? What is the balance (%) between key competences, generic skills and occupation specific skills?

12b. Which of the key competences and generic skills are included in learners' assessment and how are they assessed? (e.g. summative/formative assessment, written test, portfolios, interviews, projects, etc.).

13b. If possible, please copy here an extract of this curriculum as an example.

14. Please list the bibliographical sources you have used for answering this survey including also list of names and/or institutions contacted.