

# Sweden

## **Overview of the Vocational Education and Training System**

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**Title:** Sweden: overview of the Vocational Education and Training System in 2006

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**Abstract:**

This is an overview of the VET system in Sweden. Information is presented according to the following themes:

1. General policy context - framework for the knowledge society;
2. Policy development - objectives, frameworks, mechanisms, priorities;
3. Institutional framework - provision of learning opportunities;
4. Initial education and training - pathways and transition;
5. Continuing vocational education and training for adults;
6. Training VET teachers and trainers;
7. Skills and competence development and innovative pedagogy;
8. Validation of learning - recognition and mobility;
9. Guidance and counselling for learning, career and employment;
10. Financing: investment in human resources;
11. European and international dimensions: towards an open area of lifelong learning.

This overview is part of a series produced for each EU Member State (plus Norway and Iceland). Each report is prepared by Cedefop's national network member (ReferNet) and is updated on an annual basis: this one is valid for 2006. Later editions can be viewed from August 2007 onwards at:

[http://www.trainingvillage.gr/etv/Information\\_resources/NationalVet/](http://www.trainingvillage.gr/etv/Information_resources/NationalVet/) where more detailed thematic information on the VET systems of the EU can be found.

**Keywords:**

training system; training policy, initial training, continuing vocational training, training of trainers, skill development, vocational guidance, recognition of competences, validation of non formal learning; financing of training

**Geographic term:**

Sweden

## THEMATIC OVERVIEWS



Sweden

### 01 - GENERAL POLICY CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY

#### 0101 - POLITICAL AND SOCIO-CULTURAL/ECONOMIC CONTEXT

Sweden is a constitutional monarchy with a parliamentary democracy. Since the constitutional reform of 1974, the monarchy has had purely ceremonial functions as Head of State while the formal power of decision rests with the Government.

Parliament (Riksdagen) is the country's highest decision-making body. Since 1971 it has had a single chamber with 349 members chosen by direct election every four years. Seats are distributed proportionally between those parties that poll at least four per cent of the national vote or at least 12 per cent in any (multiple member) constituency. The Social Democratic Party has been in power in Sweden for much of the post-war period except for 1976-82 and 1991-94 when the country was ruled by a 'non-socialist' (centre-right) government. After the 2002 election, the Social Democrats formed a minority government with support from the the Left Party and the Green Party.

Following a national referendum, Sweden joined the European Union (EU) in January 1995. When European Monetary Union (EMU) entered into force on 1 January 1999, Sweden chose to remain outside but kept the door open for accession at a later date. A referendum on entering the EMU was held in 2003 but a majority of Swedes rejected the proposal. Sweden therefore remains outside the monetary union and has retained the Swedish Crown as the official currency, but continues to cooperate closely with the EU on a range of economic issues.

Sweden is divided into 290 municipalities (kommuner), and 21 county councils (landsting), including the municipality of Gotland, which does not have its own county council.

In recent years it has become increasingly clear that unemployment among certain groups (e.g. youth and recent immigrants) presents new challenges for the education and training system. There is a need for a better match between education and training outputs and labour market needs. It has also become increasingly clear that there has been too little emphasis on vocational education and training (VET). To this end, the Government has introduced a new form of advanced vocational education ([www.ky.se](http://www.ky.se)) and will improve the quality of VET at the upper secondary level in association with the new upper secondary system from the autumn of 2007. There is also agreement that language training for immigrants needs to be improved.

#### 0102 - POPULATION AND DEMOGRAPHICS

Sweden is the fourth largest country in Western Europe with an area of 450 000 square kilometres (km<sup>2</sup>) and stretching over 1500 kilometres from north to south.

In 2004 Sweden's population was just over nine million (9 067 049 as of March 31, 2006) but population density varies greatly from region to region with the most densely populated areas in and around the major urban areas in the southern third of the country. The country is sparsely populated in the North with, for example, only three inhabitants per km<sup>2</sup> in northern counties such as of Jämtland and Norrbotten. Over 90 per cent of the population lives in the southern half of the country, many of whom live in or near

the three major urban centres: Stockholm (population of 1,8 million including suburbs), Gothenburg on the west coast (800,000) and Malmö in the south (500,000).

Sweden's population by age and sex on December 31, 2004

<b>Table 1: Demographic change</b>		
<b>1991</b>	<b>1996</b>	<b>2004</b>
8 644 119	8 844 499	9 042 568

<b>Table 2: Age specific demographic scenario by 2020</b>	
<b>0-24</b>	2 621 636
<b>25-59</b>	4 287 106
<b>60+</b>	2 596 638

Swedish fertility plummeted after the economic crisis in the early 1990s and fell to 1,5 children per woman at the end of the 1990s -- the lowest birth rate ever in Sweden, though above the EU average. In recent years the birthrate has increased sharply and reached 1,8 children per woman in 2004. The growing proportion of pensioners in the Swedish population is creating economic problems - as it is in most other comparable industrialised countries. Life expectancy has risen to 78,4 years for men and 82,7 for women. It is estimated that the number of persons aged 65 or over will have risen from 1,5 million in 2003 to 2.2 million in 2025.

<b>Table 3: Migration rates</b>		
<b>IMMIGRATION</b>		
(1991) 49 731	(1996) 39 895	(2004) 62 028
<b>NET IMMIGRATION</b>		
(1991) 24 986	(1996) 6 011	(2004) 25 442

Sweden has traditionally been rather ethnically homogenous. Before the outbreak of the Second World War, the Sami (Lapps) were the only distinct minority of any size in the country. Today, some 20 per cent of Sweden's inhabitants are of foreign extraction in the sense that they were either born outside the country or have at least one parent who was born abroad. The largest groups of foreign citizens, as of December 31 2004, were from Finland (90 000), followed by Iraq (40 000), Norway (36 000), Denmark (31 000), Yugoslavia (22 000), Germany (20 000), Bosnia (15 000) and Poland (15 000).

Table 4: Population structure by age group, 2004 (million)	
0-6	0.7
7-18	1.3
19-24	0.7
25-64	4.8
+65	1.6
<b>TOTAL</b>	<b>9.0</b>

### 0103 - ECONOMY AND LABOUR MARKET INDICATORS

Sweden is highly dependent on international trade to maintain its high productivity and good living standards. In 2004 exports, more than half of which go to other members of the EU, accounted for over 44 per cent of Gross Domestic Product (GDP). During the first three years of the 1990s, Swedish GDP declined by six per cent and the number of jobs fell by nearly 10 per cent. The unemployment rate surged from 3 to 12 per cent of the labour force and there was a drastic deterioration in public sector finances, from a fiscal surplus to a annual deficit as high as 12 per cent of GDP. Finally, a wave of bankruptcies devastated the banking sector, which had to make provisions for loan losses equivalent to 12 per cent of annual GDP.

Overall, the Swedish economic crisis of the early 1990s was the most difficult situation the country's economy faced since the depression of the 1930s. The situation called for an economic policy realignment including a major consolidation of government finances, including both tighter monetary and, especially, fiscal policy. In 1994 the major budget problems and the expansionary monetary conditions rebounded and since then the economy has been strong with average annual GDP growth exceeding the EU and OECD averages, fuelled largely by substantial growth in the value of exports.

The restoration of order to State finances, the low [inflation](#) policy (two per cent inflation target), investments in education and entrepreneurship as well as the emergence of a globally leading ICT industry are among the reasons why the Swedish economy has performed so well since the mid-1990s. The prerequisites for continued strong growth are favourable. Confidence in Sweden and its economy is apparent and the Swedish Crown has been stable in the current low interest rate environment.

During 2002-2003, the labour market situation weakened, reflecting an international economic slowdown but in 2004 signals of a cyclical recovery become increasingly clear and economic activity accelerated. Again, the strongest signs of recovery were noticeable in the export market.

<b>Table 1: Economic composition by sector, 2004 (%)</b>	
<b>EMPLOYMENT BY SECTOR IN 2004</b>	<b>IN PERCENT</b>
<b>AGRICULTURE, FORESTRY AND FISHING</b>	3,6
<b>MANUFACTURING, MINING, QUARRYING, ELECTRICITY AND WATER SUPPLY</b>	28,0
<b>(OF WHICH ENGINEERING INDUSTRY)</b>	13,4
<b>CONSTRUCTION</b>	17,2
<b>WHOLESALE AND RETAIL TRADE AND COMMUNICATIONS</b>	31,8
<b>FINANCIAL INTERMEDIATION, BUSINESS ACTIVITIES</b>	23,6
<b>EDUCATION, RESEARCH AND DEVELOPMENT</b>	20,6
<b>HEALTH AND SOCIAL WORK</b>	27,3
<b>PERSONAL SERVICES AND CULTURAL ACTIVITIES</b>	13,2
<b>PUBLIC ADMINISTRATION, SANITATION</b>	9,8
<b>UNKNOWN</b>	0,2

<b>Table 2: Employment</b>					
	<b>1990</b>	<b>1995</b>	<b>1999</b>	<b>2000</b>	<b>2004</b>
<b>POPULATION 16-64 (THOUSANDS)</b>	5,397	5,523	5,581	5,602	5,666
<b>LABOUR FORCE, 16-64 (THOUSANDS)</b>	4,560	4,319	4,309	4,362	4,421
<b>EMPLOYED, % OF POPULATION</b>	83.1	72.2	72.9	74.2	73,4
<b>- WHERE OF MEN</b>	85.2	73.5	74.8	76.1	75,0
<b>- WHEREOF WOMEN</b>	81.0	70.8	70.9	72.2	71,8
<b>UNEMPLOYED, % OF LABOUR FORCE</b>	1.6	7.7	5.6	4.7	5,5
<b>- WHEREOF MEN</b>	1.7	8.5	5.9	5.0	5,9
<b>- WHEREOF WOMEN</b>	1.6	6.9	5.2	4.3	5,5

The data are annual averages. The labour force is defined as the total number employed and the number unemployed. Those who are able to work but who are not actively looking for work on the labour market are thus not included. This means that students are excluded from the labour force and therefore do not appear in the statistics on unemployment.

<b>Table 3: Unemployment rates (young people under 25)</b>		
<b>1991</b>	<b>1996</b>	<b>2004</b>
45 000	73 000	69 900
13.8%	30.4%	14.3%

Unemployment, Per cent of labour force. Age 16-64 years. Seasonally adjusted

<b>Table 4: Public spending on education and training as a percentage of total public expenditure</b>	
<b>1991</b>	8 %
<b>1995</b>	7.46%
<b>2004</b>	8.0 %

The total cost of the schools system in 2004 was SEK 205 876 million (19.187 MEUR). (<http://www.scb.se>)

**TRENDS FOR THE FUTURE**

Employment in manufacturing industries will continue to decline, following its long-term downward trend, from 800 000 today to 650 000 in 2020. Sweden can however expect large variations among the different sectors. Employment in the construction industry increased significantly with the start of a home construction boom in 2003 but the number employed in agriculture and forestry is expected to fall by half by 2020. The number employed in the private service sector is projected to increase from 1.5 million in 2000 to close to 1.7 million in 2020. The increase will mainly occur in consultancy services focusing on the business sector. In contrast, employment in retail trade, banking, and financial operations is expected to decrease.

In the public education, health and social services sectors (e.g. childcare, schools, health and medical care, care of the elderly etc.) it is expected that employment growth will generally follow changes in the number of persons in the age groups that use the different services in these sub sectors. An increase in staffing ratios is also expected after the significant cutbacks during the 1990s. Elderly care will require a large increase in personnel over current levels and this will be a challenge given the aging population and decrease in labour force entrants. Overall, employment in the public sector (or rather for the activities that are currently mainly run under public management) is projected to increase by 270 000 through 2020, at which point 1.54 million individuals should be employed in this sector.

## 0104 - EDUCATIONAL ATTAINMENT OF POPULATION

Thirty years ago, the highest level of completed education among 60 per cent of working age adults was elementary or compulsory school (ISCED 97 levels 1-2) compared with 17 per cent of adults who have compulsory school as their highest level of education today. In the early 1970s approximately 40 per cent of adults had completed upper secondary education compared with 80 per cent today. Moreover, the share of the population with post secondary education (ISCED levels 5-6) has increased from less than 10 per cent to almost 30 per cent today. Over the past 30 years we have thus witnessed a significant increase in the education levels of the population but developments over the next 20 years are not likely to be equally significant. The share with post secondary education should however increase to close to 40 per cent, and the share with only elementary or compulsory school education should decrease to 10 per cent. The Eurostat data in the table above also indicates that Sweden has amongst the lowest proportions of population with less than upper secondary education and not in further education or training in Europe.

The share of the adult population with upper secondary education at their highest level of education is expected to remain the same -- about 50 per cent. Forecasts of the future are, of course, based on a large number of assumptions including a generally unchanged educational system. In practise this implies, among other things, that virtually all youth are assumed to begin upper secondary school. It is also assumed that the number of new students in higher education will remain at its current level. Other forms of education are also assumed to continue at their current size, with the exception of the Adult Education Initiative, which is assumed to be clearly smaller in the future. In terms of the labour market, it is expected that demand for those with only compulsory school education is further reduced by 50 per cent by 2020 (Trender och prognoser 2002 and 2005, SCB).

LEVEL OF EDUCATION			
	ISCED 0-2	ISCED 3-4	ISCED 5-6
EU-15	34%	42%	21%
SWEDEN	18%	54%	27%

ISCED 0-2: Pre-primary, primary and lower secondary education

ISCED 3-4: Upper secondary and post-secondary non-tertiary education

ISCED 5-6: Tertiary education

Source: Eurostat, Newcronos, Labour Force Survey

As seen in the table above, Sweden has a higher proportion of its population that has completed at least upper secondary school (81%) and tertiary education (27%) than the average among the EU15. That said, Sweden is behind several European countries as well as other countries such as Canada, Japan and the United States in terms of both upper secondary and tertiary completion rates.

Table 2: Percentage of the population, aged 18 to 24 years having left education and training with a low level of education (2000, 2002)		
SWEDEN		
2000	2002	2003
7.7	10.4	9.0b

Low level of education: pre-primary, primary and lower secondary education - levels 0-2 (ISCED 1997)

Source: Eurostat, Newcronos, Labour Force Survey

b = break in series

#### NUMBER OF CHILDREN AND TEACHERS IN CHILDCARE AND SCHOOLS, 2003/04

- 724,000 children attend Swedish pre-schools or childcare programmes for school children.
- Some 92,200 adults are employed within such establishments.
- 89,000 children attend pre-school class (kindergarden).
- 1,024,000 pupils attend compulsory school in Sweden. 95,800 teachers work in Swedish compulsory schools.
- 348,000 young people attend upper secondary school in Sweden. 33,200 teachers (full-time equivalents) work in these schools.
- Sweden has 13 state universities, 23 state university colleges, 1 county university college and 13 privately run higher education institutions.
- Over 370,000 students (303,000 full-time equivalents) are enrolled in undergraduate programmes and some 19,000 in research programmes. The higher education system employs about 20,000 teachers and researchers.
- Approximately 1,000,000 people receive some form of study grant to finance their studies.
- Over 550,000 children and young people between the ages of 7 and 25 are members of one or more of the roughly 100 youth organisations that receive central government support for their activities.  
[www.regeringen.se/content/1/c6/04/98/13/5ba9c9fe.pdf](http://www.regeringen.se/content/1/c6/04/98/13/5ba9c9fe.pdf)

## 02 - POLICY DEVELOPMENT - OBJECTIVES, FRAMEWORKS, MECHANISMS, PRIORITIES

### 0201 - OBJECTIVES AND PRIORITIES

As part of a general trend in Swedish society towards decentralisation of responsibility and decision-making powers, the education system (including VET) has undergone fundamental changes in recent years. In accordance with decisions in Parliament, in 1991 responsibility for teaching staff was transferred from the central authorities to the municipalities and their local school authorities, which were also given undivided responsibility for organising and implementing school activities. Parliament also laid down the principles of school management by objectives and results with fewer regulations and clearer goals. Another guiding principle of education policy has been to create scope for diversity within the education system, and freedom for individual students to choose between different types of schools as well as between study routes.

The main principle of division of responsibilities and functions within the Swedish education system today is that Parliament and the Government should control educational activities by defining national goals and guidelines for education. The central and local education authorities together with other education providers are responsible for ensuring that the education system is organised in accordance with national goals. Within the framework and guidelines laid down by Parliament and the Government, education providers enjoy considerable freedom to determine how activities are to be implemented and resources distributed and used.

The change over to goal and result-oriented steering of the education system requires the central and local authorities, as well as individual schools, to systematically follow up and evaluate educational activities in relation to goals and conditions applying to them ([www.sweden.se](http://www.sweden.se)).

General policy decisions on the objectives, activities and finances of the education system are a responsibility shared between Parliament and the Government.

Legislation is passed by Parliament, which also decides on the funding of appropriations to the educational system. The Government issues ordinances as well as general guidelines on the distributions of appropriations. The Government also lays down the curricula for the whole school system ([www.sweden.se](http://www.sweden.se)).

Describing the Swedish system for vocational training is a complicated task since there is no natural distinction between VET and general education. Hence, there are no separate schools for vocational training within the school system. A basic objective in the Swedish education system is to narrow the gap between vocational and general education as much as possible. That said, it is recognised that there is need for improved VET at the upper secondary level and the new upper secondary school system from 2007 will address these needs through enhanced quality of vocationally-oriented programmes and through the introduction of upper secondary apprenticeship programmes.

### ADMINISTRATIVE TRENDS

The administrative trend has been the introduction of:

- framework legislation,
- decentralisation,
- market mechanisms and increased competition between training providers,

- delegation of authority to individual training providers,
- free choice of education in a coherent and open educational system.

The overall administrative trend is characterised by a shift towards increased delegation and decentralisation, primarily through delegation of authority to regional and local bodies, especially to municipalities. The objective is to arrive at a situation where resources are allocated efficiently and with a view to local demands and needs. The actual delegation of power in the economic realm has been significant and municipalities and other regional/local bodies may now - within certain limits and in accordance with overall objectives - independently allocate their income (i.e. state grants and taxes).

There is also a trend towards letting the market regulate training supply via purchasing training from different training providers, especially with advanced vocational education and training ([www.ky.se](http://www.ky.se)). The overall intention is to produce a more demand-oriented VET system, which ensures a more or less direct relation between allocated resources and the number of users. This trend has been accompanied by an increased focus on quality development and assurance.

More recently, there has been a tendency towards more government control in the education sector. For the moment, there is a great concern about quality, equal opportunity and conditions, and order in schools in the Swedish education and training system.

### 03 - INSTITUTIONAL FRAMEWORK - PROVISION OF LEARNING OPPORTUNITIES

#### 0301 - ADMINISTRATIVE FRAMEWORK

Overall responsibility for education (including VET) in Sweden rests with the Parliament and the Government. With the exception of the University of Agricultural Sciences, under the Ministry of Agriculture, and employment training, which is the responsibility of the Ministry of Industry, Employment and Communications, all public education, including childcare/pre-school, comes under the jurisdiction of the Ministry of Education, Research and Culture.

The Ministry of Education, Research and Culture (*Utbildnings- och kulturdepartementet*) is responsible for matters regarding pre-school education and child care for school children, pre-school classes, compulsory school and equivalent schools, upper secondary school, independent schools, adult education, popular adult education, post-secondary education, universities and university colleges, research, study support and student social issues. (<http://www.utbildning.regeringen.se>)

Those responsible for the provision of education under the Ministry of Education and Science are:

- The National Agency for Education (*Skolverket*)
- The National Agency for School Improvement (*Myndigheten för skolutveckling*)
- The Swedish Institute for Special Needs Education (*Specialpedagogiska institutet*)
- The National Agency for Special Schools for the Deaf and Hard of Hearing (*Specialskolemyndigheten*)

- The International Programme Office for Education and Training (*Internationella Programkontoret för utbildningsområdet*)
- The National Board of Student Aid (*Centrala studiestödsnämnden*)
- The Swedish National Council of Adult Education (*Folkbildningsrådet*)
- Swedish Agency for Flexible Learning (*Nationellt Centrum för flexibelt lärande*)
- National Agency of Advanced Vocational Education (*Myndigheten för kvalificerad yrkesutbildning*)
- The municipalities (*Kommunerna*)
- The county councils (*Landstingen*)
- Private mandators (*Fristående skolor*)
- The National Agency for Higher Education (*Högskoleverket*)
- The National Agency for Services to Universities and University Colleges (*Verket för Högskoleservice*)
- The Agency for Sweden's Internet University (*Myndigheten för Sveriges Nätuniversitet*)

The central administrative agencies work independently from the Ministry and decide on their own priorities in accordance with guidelines drawn up by the Government, not only in general instructions, but also in the annual government budget appropriation document, and by giving the authority special tasks. The following agencies and organisations, amongst others, come under the auspices of the Ministry of Education, Research and Culture.

[\(The National Agency for Education\)](#) has the responsibility of systematically following up and examining whether the national goals of the school have been achieved. One of the main tasks is to examine the quality and outcome of education in municipalities and independent schools, as well as supervise their activities. The National Agency for Education also has the task of developing the steering documents (e. g. syllabuses and grading criteria) as well as the responsibility for examining issues concerning independent schools. The authority also has the task of determining priorities for issues concerning quality, national equivalence and the right of the individual to legal security. Special school inspectors examine the quality of Swedish schools. The National Agency for Education allocates funds to universities and university colleges for research into the school system, for the training programme for school heads, competence development of teachers and personnel within the school concerning reforms decided at central level, as well as awarding teaching scholarships for competence development of individual teachers.

[\(The Swedish Agency for School Improvement\)](#) provides support for the development of local activities in pre-school, school and adult education. The main task of the new authority is to support and stimulate municipalities and schools in their work of achieving the national goals. Through the authority, the state will support work on developing

quality within nationally prioritised areas. In the next few years, the focus will primarily be on measures to achieve better results in basic skills, and to improve conditions for education in segregated areas.

The Swedish National Agency for School Improvement is also responsible for the national programme of training for school heads, as well as promoting the competence development of staff in the school and child care system. In addition, the Authority will stimulate the continuing use of information technology in the school, be responsible for development oriented information campaigns, as well as disseminating research findings.

[\(The Swedish Institute for Special Needs Education\)](#) is responsible for allocating public funds for special pedagogical issues. Its main task is to provide support to the municipalities, other school organisers and independent schools on special pedagogical issues concerning disabilities.

The school system is one of the largest, most important responsibilities of Swedish municipal governments. During the 2004/2005 school year, municipal school systems encompassed over 1.7 million pupils and students. The municipalities are responsible for:

- preschool classes for six-year-olds (88 407);
- the nine-year compulsory comprehensive school for all children aged 7-16 (995 457);
- the upper secondary school, attended by 90 percent of older teenagers, including VET (359 415);
- adult schools as well as Swedish language instruction programmes for immigrants, including VET (232 160); and
- special education programmes for children and youth, as well as adult programmes for people with intellectual disabilities, including VET(27 736) ([www.skolverket.se/sb/d/1231](http://www.skolverket.se/sb/d/1231)).

This means that practically all education below the university level is provided by municipalities. Privately operated "independent schools" (friskolor) approved by the State may also provide education.

Childcare (or as it is called in Swedish legislation, preschool activities - förskola) is a municipal task that has grown significantly over the past 40 years. Today municipalities are required to offer preschool activities to all children from the age of one year if their parents are gainfully employed or studying, or if the children themselves have a special need for support.

Since the 1990s, municipalities have assumed a growing share of responsibility for counter-cyclical labor market policy programmes (training and temporary employment openings). They take care of nearly 60 percent of all participants in these programmes, which are partly State-financed. A total of some 100,000 people are enrolled in these municipal programmes.

The county councils (Landstingen) operate a number of folk high schools (small, often residential adult schools) (Folkhögskolor) and are in charge of certain upper secondary school-level training programmes in the health care professions as well as in agriculture and forestry.

The county councils can also cooperate with two or more municipalities to form a joint board to handle a given operation, such as upper secondary schools.

The local authorities (Kommuner) have overall responsibility for the implementation and development of educational activities within the school system. The 1991 Local Government Act gives the municipalities and county councils (Landsting) the option of designing their own organisational structures with different committees having different areas of responsibility. The upper secondary school and adult education (including VET) usually come under an education and culture committee. The committee or committees responsible for schools are obliged to ensure, among other things, that:

- schools and pre-schools are built and sufficient facilities are provided
- the activities of schools, pre-schools and childcare services in the municipality are coordinated
- qualified teachers and other school staff are recruited and receive in-service training
- municipal funds are allocated to school and pre-school activities
- good conditions exist for achieving the goals laid down in the curricula
- general guidelines are complied with.

In practice, it is the responsibility of local municipalities to ensure that Swedish schools maintain equivalent standards all over the country. Each municipality is required to establish objectives for its schools in a school plan, adopted by the municipal council. The municipality is obliged to follow-up and evaluate the school plan and to provide the central authorities with reports on facts and circumstances of relevance for assessment of educational activities. In addition, every school has to devise a work plan, based on the curriculum and local priorities. The work plan must also be followed-up and evaluated. Finally, each municipality as well as each school must submit a quality account each year, assessing their results in relation to national goals, and measures to improve results.

Teachers' and other employees' organisations are entitled, under the Co-determination Act, to information about, participation in and influence over impending decisions. Pupil determination rights are enshrined in the Schools Act, but their practical implementation is determined locally. Parental and student influence in the management of schools is enhanced by participation on local school boards ([www.sweden.se](http://www.sweden.se)).

### **0302 - LEGISLATIVE FRAMEWORK FOR VOCATIONAL EDUCATION AND TRAINING**

As stated in section 0201, it is difficult to describe the Swedish system for vocational education and training (VET). There is no natural distinction between vocational training and general education at the upper secondary level in Sweden, and VET is often integrated with theoretical education programmes at upper secondary schools. A basic objective in the Swedish education system is to narrow the gap between vocational and general education as much as possible. Consequently, it is a comprehensive school system, which does not separate pupils attending different programmes before the upper secondary level and, even at the upper secondary level, pupils are obliged to study a common core of subjects.

Despite the fact that there are seldom clear-cut borders between various parts of the education system, the distinction between initial vocational (IVT) and continuing vocational training (CVT), used in Sweden is presented below:

- vocationally oriented programmes, at the upper secondary level (initial vocational training);
- labour market training (continuing vocational training);
- vocational training within the framework of municipal adult education (continuing vocational training);
- in-company training or staff training (continuing vocational training);
- advanced vocational education and training (continuing vocational training); and
- professional degrees at university level (continuing vocational training).

Table 1: Recent decisions concerning vocational education	
1991	The Riksdag decided on a new management system for schools. The principle of management by objectives was introduced and a decentralisation of the school system occurred by transferring responsibility for the school system to the municipalities.
1991	The Riksdag decided on reforms of the upper secondary school. Courses and special courses were replaced by 16 three-year national programmes. Programmes containing vocational subjects include at least 15 weeks as work-place training. All course alternatives give basic eligibility for higher education.
1999	The Riksdag decided to replace the timetable of the upper secondary school with a credit plan. All programmes are worth 2 500 credits. Project work was introduced. A new national programme was introduced, the technology programme.
2000	The Committee for Upper Secondary Schools 2000 was appointed. The committee was assigned the task, inter alia, of reviewing the number of national programmes in the upper secondary school.
2000	The Riksdag decided to raise the number of guaranteed teaching hours in the programmes that are preparatory for further studies and by 60 hours in programmes with vocational subjects.
2001	The Committee for Upper Secondary Schools was given an extended assignment in an additional directive concerning a transfer to subject grades in the upper secondary school and a review of core subjects. The Committee should also examine the need for an upper secondary school examination and propose forms for ways in which apprentice training could be introduced into upper secondary school.

In the spring of 2001 the Riksdag decided that advanced vocational education and training would become a regular part of the post secondary system as of 2002, building on the successful pilot that started in 1996.

The government has recently appointed a commission to look into how upper secondary schools might contract out entire programmes. In October 2004 The Riksdag decided on modernisation of the Upper secondary education, which can be summarised by way of the following eleven points:

- Subject grades to replace current course grades;
- An upper secondary diploma to be introduced;
- Modern apprenticeship training will revitalise vocational training;
- Better quality individual programmes;

- Unrestricted application to give pupils greater freedom of choice and to stimulate regional cooperation;
- History to be a new core subject;
- The core subjects should be characterised by the focus of the programme;
- Local programmes must be quality audited by the National Agency for Education;
- Quality of upper secondary vocational programmes to be improved;
- Upper secondary school projects to give better overall picture of a students' upper secondary education; and
- More extensive contextual and advanced programmes.

The most interesting point vis-à-vis VET policy is the introduction of upper secondary apprenticeship training from the autumn of 2007. A Government Committee on VET ([www.yrkesutbildningsdelegationen.se](http://www.yrkesutbildningsdelegationen.se)) was appointed in 2004 with a mandate to improve vocational education and training in Sweden, increase the status of VET and attract more students to VET.

### **0303 - ROLE OF SOCIAL PARTNERS**

#### **NATIONAL LEVEL**

When a national course belonging to a national programme or specialisation is established the National Agency for Education is obliged to involve the social partners to provide input, if the course is included in the more vocationally oriented programmes.

Thirteen of 17 national programmes are vocationally oriented and contain at least 15 weeks of workplace training (Arbetsplatsförlagd utbildning - APU) outside the school. The four other national programmes - the Arts, Natural Science, Social Science and Technology - do not have a compulsory workplace training component, though these often offer the possibility of conducting parts of the programme at the workplace.

#### **LOCAL/REGIONAL LEVEL**

School administrators are responsible for the procurement of training opportunities and for supervision of the students during their workplace training. The trainees retain student status for this part of the programme. Workplace training (APU) is syllabus-guided training. Only vocational courses may be transferred to a place of work. Local decisions determine which parts of these courses are to be located at a place of work. The board of the school is responsible for supplying workplaces and for seeing that APU meets the demands placed on the training. The advisory bodies for cooperation between schools and local trade and industry, vocational councils or programme councils, are very important in planning such items as the provision of training, the purchase of equipment, APU and the training of supervisors.

It is not mandatory to have special local bodies for cooperation between school and working life, but in a majority of municipalities there are what are known as vocational councils (yrkesråd) or programme councils (programråd). Here, cooperation between the school and local trade and industry is fostered by planning, for example, workplace

training. Larger purchases of equipment are discussed and the school receives advice about courses from professionals working outside the school. Other issues to discuss could be student counselling, marketing of a certain programme or quality assessment of the contents of a programme.

Other kinds of voluntary joint action between school and working life include business councils, reference groups and informal networks, foster companies, business seminars and conferences - all a great help when it comes to establishing contacts between school and working life. Within these bodies, it is also possible to monitor the development of, and need for, competences in the local labour market. The local school board can decide to establish courses in adult education suited to the needs of the local labour market. Local courses suited to the needs of the local labour market can also be established for students in upper secondary education (\*).

Within a pilot project in progress for a new, modern apprenticeship programme called "learning in working life" (Lärande I Arbeta – LIA) the contents of the special syllabus for learning in working life is determined in agreement between the student, school and the workplace. Social partners take part in a programme council, which in co-operation with the school participates in the planning and implementation of the education. The new upper secondary apprenticeship will comprise at least 32 weeks of workplace learning (APU) and will launch at selected schools together with the new upper secondary system in the autumn of 2007.

Several enterprise-based secondary schools have been started during recent years. This type of school often provides more company-based education and training, often with education adapted to the enterprise's own needs.

Continuing vocational training (CVT) is viewed by the social partners as a prerequisite for maintaining a highly qualified labour force in the face of rapid technology and industrial change. Well-educated employees are a prerequisite for adaptation and renewal. Accordingly, the social partners agree that almost all IVT and most CVT (with the exception of in-company training) should be publicly funded, as is the case in Sweden today. This has to do in part with the extensive representation of the social partners in the various administrative bodies, especially at regional and local levels. Providers of CVT can be subdivided into public institutions, trade unions and employer associations, private enterprises, and training companies.

While education as a whole has been developed as a result of decisions of the government, vocational education has also been influenced by the social partners. Thus a majority of CVT in Sweden is not regulated by the government or parliament, but is subject to the negotiations and local solutions of the social partners. This is particularly true of in-company training and various forms of workplace training. This is especially the case for the sector-specific training many students enter after completing a vocationally-oriented upper secondary programme.

As of 1 January 2002 there is a new form of post-secondary education, advanced vocational education and training (AVE or Kvalificerad yrkesutbildning) in which at least one-third of the time is spent in the application of theoretical knowledge in the workplace. What this entails is not the traditional traineeship period but active workplace learning and problem-solving in an overall educational context. As with APU at the upper secondary level, traineeships during advanced vocational education and training are unpaid ([www.ky.se](http://www.ky.se)).

Advanced vocational education programmes are based on very close cooperation between enterprises and various course providers (higher education, upper secondary schools, municipal adult education and companies). They are intended to correspond to

real needs in the employment market but have no restrictions in terms of sector on the enterprises in which AVE is to be provided. The courses are open to both individuals coming directly from upper secondary school and to people who are already gainfully employed and wish to develop their skills within a defined area.

The County Labour Market Board (Länsarbetsnämnden) makes surveys of the regional needs for different skills. Decisions over which kind of education or training the County Labour Market Board will purchase are based on these surveys. The planning of CVT in the education system is different from that in the employment training system and this reflects the different roles of the two systems.

<b>Table 1: Summary of roles and responsibilities of social partners</b>		
	<b>RESPONSIBILITIES OF SOCIAL PARTNERS</b>	<b>TYPE OF ROLE (ADVISORY/DECISION-MAKING, DIRECT/INDIRECT)</b>
<b>NATIONAL LEVEL</b>	Policy input	Advisory
<b>REGIONAL LEVEL</b>	Policy input and labour market training	Advisory and decision-making
<b>SECTORAL LEVEL</b>	Training delivery, content and certification of occupations	Decision-making
<b>ENTERPRISE LEVEL</b>	In-firm training	Decision-making

#### 04 - INITIAL VOCATIONAL EDUCATION AND TRAINING

##### 0401 - BACKGROUND TO THE IVET SYSTEM AND DIAGRAM

[The Swedish public school system](#) is made up of compulsory and non-compulsory schooling. Compulsory Schooling includes regular compulsory school (usually nine years from the age of seven), Sami School (for Sweden's aboriginal people), special school (for the hearing and/or visually impaired), and programmes for pupils with learning disabilities. Non-compulsory school includes preschool class (a one year school form between preschool and the first year of compulsory school), upper secondary school, upper secondary school for pupils with learning disabilities, municipal adult education, and adult education for adults with learning disabilities. All education throughout the public school system is free. There is usually no charge to students or their parents for teaching materials, school meals, health services or transport.

According to the Swedish Education Act (Skollagen), all children and youth have a right to equal access to education, regardless of gender, where they live, or social or economic factors. The Education Act states that education shall "provide the pupils with knowledge and, in co-operation with the homes, promote their harmonious development into responsible human beings and members of the community." Consideration shall also be given to students with special needs.

Compulsory schools can be national, municipal or private (independent). More than 97% of all pupils attend municipal compulsory schools.

About 98% of compulsory school leavers go on to the three-year upper secondary school, which offers both vocationally oriented and academic programmes. A basic objective in the Swedish education system is to narrow the gap between vocational and general education as much as possible.

Upper secondary schooling for young persons and adults has a common curriculum with specific goals for each type of school. The goals stated in the curriculum are of two kinds: goals that the education should strive towards and those that everybody shall be given the opportunity to learn and achieve. The set of fundamental values which are to influence the activities of the school, and the demands imposed on students and school staff have been set out in six different sections: Knowledge and skills; Norms and values; Student responsibility and influence; Headteacher's responsibility; Choice and education - Working life; Grades and assessment.

The educational aims of the national programmes in upper secondary school are set out in programme goals. Programmes that are primarily vocationally oriented must give broad basic education within the vocational field, as well as providing the foundation for further studies at post-secondary level (i.e. all upper secondary programmes can lead to higher education) (*Skolverket*).

The syllabi, which are drawn up as to ensure continuity with those of the compulsory school, state the aims and goals of the course as well as the knowledge and skills that all students shall achieve on completion of the course. The Government has issued syllabi for all core subjects; syllabi for other subjects are determined by the National Agency for Education (*Skolverket*).

The Education Act also extends the right of education to adults. This can be provided through municipality run adult education (*Komvux*) or in adult education for adults with learning disabilities (*Särvux*).

#### **0402 - IVET AT LOWER SECONDARY LEVEL**

Although there is a degree of introduction to vocational and practical skills at the compulsory school level in Sweden, there is no significant IVET at lower secondary level in Sweden. IVET commences at the upper secondary level for those who enter one of the vocationally oriented programmes.

#### **0403 - IVET AT UPPER SECONDARY EDUCATION (SCHOOL-BASED AND ALTERNANCE)**

Municipalities are obliged under the Education Act, to provide upper secondary schooling for all residents who start studying before reaching the age of 20. Individuals beginning their studies after 20 can pursue upper secondary studies within the public school system for adults. About 98% of compulsory school leavers proceed to upper secondary school, typically from the age they turn 16 until the year they turn 19.

The majority of upper secondary studies take place in schools, which are under municipal jurisdiction. The four-year upper secondary school for young people with intellectual disabilities is also the responsibility of the municipalities. There are also a number of upper secondary schools run by private organisations, mostly in major urban areas. It is worth noting, however, that studies in agriculture, forestry, horticulture and certain caring occupations take place in schools run by county councils. The larger upper secondary schools usually include a variety of study programmes and courses, both vocationally-oriented and academic/theoretical. Certain adaptations of programmes (e.g.

for sports) have nationwide recruitment. Overall, there is no distinction between academic and vocationally-oriented programmes within the provider structure.

Current vocationally-oriented programmes are designed to confer wider and deeper knowledge compared with the former system. Students are also given increased choice with respect to the content of their own education, as well as better opportunities to influence their learning situation.

There are currently 17 national programmes, all of which are 3-year programmes. All programmes provide a broad general education and eligibility to study at the university or post-secondary level though the vast majority of higher education students come from one of the academic upper secondary programmes. Every programme comprises 2 500 upper secondary credits and all national programmes include eight core subjects: English, the arts, physical education and health, mathematics, general science, social studies, Swedish (or Swedish as a second language) and religion. Together, the core subjects add up to 750 credits.

Under the current system there is not an upper secondary certificate issued but, instead, students receive a transcript of courses and grades. The new upper secondary system starting in the autumn of 2007 will issue an upper secondary certificate to those students who meet the requirements, including completion of an upper secondary certificate project.

The programme-specific subjects, determined by the Government, entail a total of 1 450 credits. The vocationally-oriented programmes at upper secondary school (i.e. 13 of the 17 upper secondary programmes) contain at least 15 weeks at a workplace outside the school, so-called 'workplace training' (APU - *Arbetsplatsförlagd utbildning*). Four of the programmes - the Arts, Natural Science, Social Science and Technology - do not have a compulsory workplace training component, though even these programmes offer the possibility of conducting parts of the programme at the workplace.

Education organisers (i.e. the organisers of schooling such as municipalities, private schools, etc.) are responsible for the procurement of training opportunities and for supervision of the students during their workplace training. The students retain student status for this part of the programme. Many schools regard APU as a difficult area requiring major efforts in terms of both planning and implementation. The opportunities for arranging workplace learning vary, however, between programmes and schools are dependent on the links they have established with private and public organisations as well as the local business community. These difficulties reside mainly in being unable to secure a sufficient number of places to arrange high quality in workplace training connected to the goals of education. This is an area where workplace supervisors regard themselves as having insufficient knowledge and many feel schools need to improve their network with the community in order to deliver a sufficient number of workplace training spaces.

Most programmes are divided into different specialisations offered in years two and three. The National Agency for Education (Skolverket) determines which courses are compulsory for a national specialisation. Most municipalities do not offer all the national programmes and specialisations. Therefore, if a programme is not offered in their own municipality, a student may attend the programme in another municipality. In order to meet local needs, municipalities may approve local specialisations.

<b>Table 1: The national upper secondary school programmes and the distribution of pupils, 15 October 2004</b>	
<b>NATIONAL UPPER SECONDARY PROGRAMMES ARE:</b>	<b>NUMBER OF PUPILS IN PERCENT OF TOTAL STUDENTS</b>
Arts Programme/Art and Design, Dance, Music and Theatre (Estetiska programmet)	6 4
Business and Administration Programme/Commerce and service, Tourism and Travel (Handels- och Administrationsprogrammet)	5 2
Child and Recreation Programme/ Recreational, Pedagogical and Social Activities (Barn- och Fritidsprogrammet)	5 1
Construction Programme/Building, House construction, Painting, Plasterwork (Byggprogrammet)	3 9
Electrical Engineering Programme/Automation, Electronics, Electrical engineering and Computer Technology (Eiprogrammet)	5 1
Energy Programme/Operations and Maintenance, Marine Technology, Heating, Ventilation and Sanitation and refrigeration (Energiprogrammet)	0 8
Food Programme/Local specialisations, countrywide recruiting (Livsmedelsprogrammet)	0 6
Handicraft Programme/Various trades and crafts (Hantverksprogrammet)	2 0
Health and Nursing Programme/No national specialisations (Omvårdnadsprogrammet)	4 0
Hotel, Restaurant and Catering Programme/Hotels, Restaurant and Meal Services (Hotell- och Restaurangprogrammet)	6 0
Industry Programme/Local specialisations, countrywide recruiting (Industriprogrammet)	2 0
Media/Media Production, Printing Technology (Medieprogrammet)	4 1
Natural Resource Use Programme/Local specialisations (Naturbruksprogrammet)	3 0
Natural Science Programme/ Natural Sciences, Mathematics and Computer Sciences, Environmental Sciences, (Naturvetenskapsprogrammet)	14 4
Social Science Programme/Economics, Culture, Social Sciences, Languages (Samhällvetenskapsprogrammet)	26 0
Technology Programme/Local specialisations (Teknikprogrammet)	7 2
Vehicle Engineering Programme/Aircraft, Coach work, Machine and lorry, Cars, Transport (Fordonsprogrammet)	4 5

The list above excludes specially designed (local) programmes as well as the individual programme, detailed below. By combining specific subjects from different programmes, a municipality can put together specially designed upper secondary programmes (*specialutformade program*) to meet local and regional needs. A specially designed programme also includes the eight core subjects and project work, and corresponds to a national programme in terms of the level of difficulty and number of hours. Special programmes can also be designed to meet an individual student's specific learning needs.

<b>SPECIALLY DESIGNED PROGRAMMES (PUPILS 15 OCTOBER 2004)</b>	<b>30 000</b>
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An individual programme (*individuellt program*) can vary in length and content and is determined by the needs of the individual student. The aim is for the student to later transfer into a national- or specially designed programme. Otherwise, the student receives a final grade (learning certificate) from the individual programme, when he/she has completed the set programme syllabus. PRIV is an individual programme especially for students who are not eligible for national programmes due to their not meeting the requirements for passing grades in Swedish, English and Mathematics. Approximately ten per cent of Swedish upper secondary students participate in the individual programme.

<b>INDIVIDUAL PROGRAMMES (PUPILS 15 OCTOBER 2004)</b>	<b>25 700</b>
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There are approximately 2 400 students in International Baccalaureate (IB) programmes and 700 students in so-called other courses, which makes the total sum 333 928 pupils in Upper Secondary Education.

A student in upper secondary school can sit for examination in a course included in the programme before grades have been set or if s/he has received a failing grade for the course. People who do not attend upper secondary school may sit for examinations in all of the courses offered as part of the national programmes.

The new curriculum gives students considerable influence over the content and planning of education, as well as influence over their schooling in general. A student has the right to choose their programme and specialisation and every national programme also leaves room for course options, which varies from programme to programme. In total, programmes also allow students an individual option totalling 300 credits. Within these limits, the students may also choose from the courses offered in the municipality.

In addition to fully funded upper secondary schools, there are also a number of international schools in Sweden that receive partial government funding. These schools are intended primarily for the children of foreign nationals whose stay in Sweden is temporary.

Municipalities have an obligation to offer youths who do not meet the requirements of regular upper secondary, such as those with learning disabilities, a place in an upper secondary programme for pupils with learning disabilities. Like regular upper secondary schools, upper secondary education for pupils with learning disabilities has national-

specially designed- and individual programmes. The number of national programmes offered is fewer than in regular upper secondary school and programmes specialise in preparatory vocational training. All upper secondary programmes for pupils with learning disabilities are four-year programmes and offer a guaranteed number of course hours (3 600 hours) divided between core- and programme-specific subjects.

A student who has completed a vocationally oriented education at an upper secondary school in Sweden is more of a generalist than a specialist. In Sweden the acquisition of more specialised skills is often the responsibility of the employer. That said, several enterprise-based upper secondary schools have been started during recent years. This type of school often provides more company-based education and training, often with education adapted to the enterprise's own needs. Overall, most initial vocational training (IVT) in Sweden provides basic skills and general qualifications, which allow those who complete the programme to carry out certain functions in an occupation. Moreover, it is felt that vocational education should not be a dead-end but, instead, the first step in a process of lifelong learning. Indeed, the transition rate from upper secondary education to tertiary education has increased significantly during the past decade and today almost 45% of upper secondary students continue to higher education within three years. In principle, all initial vocational training in Sweden is provided at the upper secondary school level and IVT is almost entirely (over 99%) financed by public funds. In total, there are about 150 000 IVT students in Sweden, representing about 50% of the upper secondary student population.

The distribution of students by gender in the vocationally oriented upper secondary programmes varies dramatically in Sweden. In 2004 only 3.5% of the students in construction, 2% in electrical engineering and 1.5% in the energy programmes were female. At the same time, only 15% of the students in the healthcare programme were male. Vocational programmes where the gender distribution is fairly equal were business and administration, hotel restaurant and catering, food, media and natural resource use [www.skolverket.se/publikationer?id=1443](http://www.skolverket.se/publikationer?id=1443).

<b>Table 2: Students in upper secondary education by programme orientation (general / vocational), 2004</b>	
<b>UPPER SECONDARY EDUCATION TOTAL ENROLMENT</b>	<b>347 700</b>
<b>UPPER SECONDARY EDUCATION VOCATIONAL PROGRAMMES (%)</b>	<b>48%</b>
<b>UPPER SECONDARY EDUCATION GENERAL AND PRE-VOCATIONAL PROGRAMMES (%)</b>	<b>52%</b>

Upper secondary education: ISCED 97 level 3

Source: Eurostat, Newcronos, Education statistics based on ISCED 97

A new type of apprenticeship training was recently piloted in the Swedish system. The scheme, called Learning in Working Life (LIA) differed from traditional apprenticeship training since no employment relationship was involved, wages were not paid and the municipality remained responsible for the pupil throughout the training. Learning in working life was an alternative method of taking a national programme but still gave eligibility to apply for higher education. The purpose of this pilot was to meet the

changed requirement for qualifications in working life, to give employers the chance to take part and influence the contents and course of the training and to give pupils who so wish, the opportunity to carry out the major part of their training, at least 30 weeks, at a workplace. The pilot is complete but the new upper secondary apprenticeship programme starting in 2007 will be very similar.

All programmes with vocational subjects must include a period (at least 15 weeks over three years) of training located at the workplace outside the school. This training located at the workplace may also take place in other programmes, if authorised in a local decision.

Significant changes, including a new upper secondary apprenticeship programme, are slated for the upper secondary system from the autumn of 2007. There is also the possibility of even more wholesale changes to IVET in the upper secondary system, given the election of a new Government in September 2006. The new Government may place a greater emphasis in IVET in the system and introduce a three-tiered (academic, IVET and IVET/apprenticeship) upper secondary system to replace the current integrated system.

#### **0404 - APPRENTICESHIP TRAINING**

Since the 1970s, there has not been any general apprenticeship system in Sweden although the social partners have established their own systems for employees after upper secondary schooling in certain sectors (e.g. in the construction sector). In 1992, a possibility was created to integrate apprenticeship into upper secondary school (under the individual study programme) for those who have failed in the three obligatory core subjects Swedish, Mathematics and English from compulsory school but this has been used only on a very small scale. For example, in 2005 there were only 40 upper secondary apprentices in Sweden, split between the construction and hotel and restaurant sectors. In this small programme, students spend one year in the classroom and two years in work-based learning and the learning outcome is a school leaving certificate which gives general entrance to the labour market. There are, however, plans to introduce a larger scale upper secondary apprenticeship option in vocationally oriented programmes from the autumn of 2007. Moreover, the newly elected (September 2006) government in Sweden has stated its intention to introduce new forms of vocational training and apprenticeship training at the upper secondary level.

#### **0405 - OTHER YOUTH PROGRAMMES AND ALTERNATIVE PATHWAYS**

The individual programme in upper secondary education helps students who are not eligible, due to shortcomings in the three core subjects English, Mathematics and Swedish/Swedish as a second language, to apply to national or specially designed programmes. The individual programme is based on student needs and as each student has an individual study plan, the programme can vary greatly both in terms of length and content. The main point of the individual programme is to give the students a chance to enter/re-enter one of the regular national or specially designed programmes. Many of the students in the individual programme have barriers to learning such problems in the home, other social problems, etc.

Municipalities also have the right to establish individual programmes to which pupils may apply (PRIV). The aim of this alternative is that a pupil should be able to start education in national courses in a national programme at the same time as having the opportunity to study one or more of the subjects from the compulsory school where necessary. Having done this a pupil can then be admitted to a national or a specially designed

programme. The pupil is then credited with the courses completed in the individual programme.

The individual programme can also be customised to incorporate different contents for young persons who have recently arrived in Sweden e.g. special introductory courses in Swedish as a second language and social studies. A student in the individual programme can also combine employment, as part of a vocational education with studies of certain subjects in upper secondary school. Other courses of study that may be accommodated within the framework of the individual programme are those that cater for students with special needs, such as those with learning disabilities.

#### **0406 - VOCATIONAL EDUCATION AND TRAINING AT POST-SECONDARY (NON TERTIARY) LEVEL**

Post secondary initial vocational training at the post-secondary (non tertiary) level is available through municipal adult education (Komvux) as well as in labour market training programmes. In addition, *some* of the programmes at folk high schools, in post secondary training programmes and in supplementary education programmes can be considered to IVET at the post secondary level. Post-secondary training programmes are a type of non-compulsory schooling for training or further training in a profession. Most post-secondary training programmes last for 1-1½ years. The idea is that they are to lead to a new level within a profession, or a completely new profession.

IVET at the post-secondary level is targetted at adults, including both upper secondary completers and non-completers. Typically participants are in the early- to mid-20s but individuals in all adult age groups participate in IVET at the post-secondary level.

The main objective of this type of training is usually to facilitate labour force entry but this form of training can also lead to, for example, continuing vocational education and training or even to higher education. Learning outcomes are varied and can range from completion of an individual course, or upper secondary completion to completion of a more specific VET programme with subsequent certification. In the case of certification, it is largely administered by sectoral organisations.

#### **0407 - VOCATIONAL EDUCATION AND TRAINING AT TERTIARY LEVEL**

Although there is currently no specific IVET at the tertiary level in Sweden, the Government is investigating the possibility of introducing an adult education entry point for vocational education and training. This may also include VET for those with higher education. Moreover, some of the programmes available through advanced vocational education and training are for those without experience in the field.

### **05 - CONTINUING VOCATIONAL EDUCATION AND TRAINING FOR ADULTS**

#### **0501 - BACKGROUND INFORMATION ON CONTINUING VOCATIONAL EDUCATION AND TRAINING**

Much of continuing vocational education and training (CVET) in Sweden falls under the adult education framework, which is extensive, based on long traditions and provided in many different forms and under many different auspices, ranging from national or municipal adult education to labour market and staff training and competence development at work. The entire system is guided by the principles of lifelong learning, including formal, non-formal and informal learning. Labour market needs analyses are carried out before delivering certain forms of CVET (e.g. advanced vocational education

and training) while others such as adult education are typically more geared to individual learning needs and choices.

The public school system for adults is regulated under the Education Act and consists of: municipal adult education; municipal adult education for adults with learning disabilities (sär vux); Swedish language training for immigrants (SFI) for adults; and post-secondary vocational education. The liberal adult education sector, through folk high schools and adult education associations, as well as some of the supplementary education providers also provide adult education. As is the case with youth education, responsibility for this part of the education system rests with the municipalities.

The state is responsible for two actors: the Swedish Agency for Flexible Learning (CFL), which offers access to a range of programmes through open and distance learning methods; and the Agency for Advanced Vocational Education, focused on specialised VET in response to labour market needs as demonstrated by those who apply for funding to deliver advanced vocational programmes. This is a new form of CVET first piloted in 1996. In addition, the Labour Market Board is responsible for labour market training intended in the first instance for unemployed adults in need of retraining or further training and education.

The public education system for adults gives adults the opportunity to supplement their education according to their individual requirements. This is to enable those with limited education to strengthen their position in the labour market and in cultural and political life. The same curriculum (Lpf 94) applies to both upper secondary school and municipal adult education and it outlines the overall goals and principles of adult education. According to the curriculum, adult education should:

- Bridge education gaps and thus work for increased equality and social justice;
- Enhance students' ability to comprehend, critically examine and take part in cultural, social and political life;
- Educate adults for a range of work tasks; and
- Contribute to change in working life and the achievement of full employment as well as satisfy the individual desires of adults for broader study and education opportunities and give them the opportunity to supplement their upper secondary education.

There are access points for adults with all education and skill levels and the majority of CVET is tuition free, though there are forms of, for example, supplementary education that are fee-based (e.g. pilot training, certain aesthetic programmes, etc.). Supplementary courses of study aim to provide adults with training that will lead to job advancement or a new occupation.

#### **0502 - PUBLICLY PROMOTED CVET FOR ALL**

The vast majority of CVET in Sweden is publicly provided and tuition free due to full funding through either municipalities or the state. In terms of administrative structure, most CVET in the country is delivered through the formal education system whether through municipal adult education, post-secondary training, or advanced vocation education, among others.

Much CVET in Sweden is targeted at adults with low levels of formal education. However, the newest CVET model (advanced vocational education) is for those with completed upper secondary school and is designed to meet labour market skills needs in specific sectors. In 2001, almost 850 000 people participated in adult education and training in Sweden -- approximately 12% of the adult population in the country. Other target groups include immigrants and younger adults (e.g. under the age of 30) as well as other groups prone to under employment.

Publicly provided CVET providers in Sweden range from schools, to municipalities to higher education institutions, social partners and private training enterprises. Quality assurance mechanisms vary widely, according to the form of CVET. The National Agency for Education provides quality assurance for municipal adult education, post secondary training and supplementary education while the Agency for Advanced Vocational Education ([www.ky.se](http://www.ky.se)) supervises that CVET form. Folk high schools have a more decentralised quality assurance regime, at the school level.

The main forms of CVET in Sweden are outlined below.

### **ADVANCED VOCATIONAL EDUCATION**

Advanced vocational education (KY- Kvalificerad yrkesutbildning) may be the most purely CVET form in Sweden. It is delivered through municipal adult education in terms of further adult education as well as in labour market training programmes, through universities and university colleges, municipalities, county councils and independent enterprises. Advanced Vocational Education was first piloted in 1996 with a mandate to compile experience relating to new courses, new educational forms and new course providers. The Swedish Agency for Advanced Vocational Education administers and supervises this educational form on the national level and it reviews applications and provides funding. This form of CVET typically entails two years of full-time study with at least one-third of the learning at the workplace.

### **THE SWEDISH AGENCY FOR FLEXIBLE LEARNING**

The Swedish Agency for Flexible Learning (Centrum för Flexibelt Lärande - CFL) promotes the utilisation of open and distance learning methods in adult education and liberal adult education, and complements the municipalities' provision of adult education, primarily at upper secondary school level, by offering equivalent courses by means of distance education. Although most courses through CFL are theoretical, there are also a variety of vocationally-oriented courses.

### **SUPPLEMENTARY EDUCATION**

Supplementary education programmes are non-compulsory education programmes provided outside the public education system. These vocational courses last from 200 hours to 2-3 years, for young people and adults, and funded, eligible for student financial assistance or merely approved by the Swedish National Agency for Education ([www.skolverket.se](http://www.skolverket.se)). There are about 150 different educational providers who offer courses in, for example, art, dance, theatre, handicrafts, media, flying, etc. Supplementary education programmes do not provide any formal eligibility for further study, but can be seen as vocational courses or as courses that prepare for higher educational courses requiring skills in specific fields.

### **POST SECONDARY TRAINING**

Post-secondary training programmes are a type of non-compulsory schooling for training or further training in a profession. Most post-secondary training programmes last for 1-

1½ years. The idea is that they are to lead to a new level within a profession, or a completely new profession.

#### **ADULT EDUCATION FOR INTELLECTUALLY DISABLED PEOPLE**

Adult education for people with intellectual disabilities corresponds to the instruction provided for intellectually disabled children in compulsory school and to vocational education in upper secondary school for young people with intellectual disabilities. Education is organised in the form of separate courses and municipalities are obliged to provide educational opportunities corresponding to demand and individual needs.

#### **SWEDISH LANGUAGE INSTRUCTION FOR IMMIGRANTS**

Municipalities are obliged to provide basic Swedish language instruction, averaging 525 hours, as well as an understanding of Swedish society for immigrants from the age of 16. Most municipalities run such courses themselves, but they can also be awarded to private organisations ([www.skolverket.se](http://www.skolverket.se)).

#### **MUNICIPAL ADULT EDUCATION**

Municipal adult education has existed in Sweden since 1968 and includes basic adult education; upper secondary adult education; and post secondary education for adults (featured above). Municipal adult education leads to formal qualifications in subjects or to a leaving certificate from compulsory and/or upper secondary school. Education is organised as separate courses which allows students to combine studies with employment. Students are free to choose their own study programme and can also combine studies at the basic and upper secondary levels. Although persons above the age of 20 are not "entitled" to upper secondary education, municipalities are required to provide educational opportunities corresponding to demand and individual needs. The Adult Education Initiative (Kunskapslyftet) between 1997 and 2002 was part of the Government's strategy to provide better education opportunities in order to raise competencies in the labour market. When the Initiative ended municipalities were offered new grants to expand adult education and this funding is now included in the regular state grant to municipalities and liberal adult education providers.

#### **FOLK HIGH SCHOOLS AND VOLUNTARY EDUCATIONAL ASSOCIATIONS**

Swedish adult education has its origins in national popular movements. Both the adult education associations and folk high schools have a strong base in trade union organisations, religious communities, political parties and some other popular movements. A major part of the study activities of these organisations, as well as education of its leaders and functionaries is carried out in co-operation with adult education associations and folk high schools. Municipalities and folk high schools arranging publicly financed adult education often provide education for adults on a commercial basis to both agencies and companies.

#### **0503 - TRAINING FOR UNEMPLOYED PEOPLE AND OTHERS VULNERABLE TO EXCLUSION IN THE LABOUR MARKET**

The Swedish Labour Market Board (AMS) is responsible for labour market policy and funding active policy measures such as labour market training and skills upgrading for the unemployed. Much skills upgrading occurs through the framework of municipal adult education, education for adults with learning disabilities and Swedish tuition for immigrants, all of which may be offered by different education providers including public, private and not-for-profit associations. Labour market training is arranged in all

municipalities, not only within the regular education system but also as specially procured education.

The main target groups for this type of training is adults without completed upper secondary education, immigrants, people with disabilities, young people and others. However, this type of training is available for all adults aged 20 or older and registered as unemployed with their local labour market authority office. Until the mid-1980s training for the unemployed was provided almost entirely by public training institutions but there are now a wide range of providers including public schools, social partners, non-profit organisations and private training enterprises.

Many forms of training including the largest, municipal adult education, have quality assurance mechanisms provided by the Swedish National Agency for Education. Other forms of training are evaluated by the Labour Market Authority as well as by other arms length actors such as the Institute for Labour Market Policy Evaluation ([www.ifau.se](http://www.ifau.se)).

#### **0504 - CVET AT THE INITIATIVE OF ENTERPRISES OR SOCIAL PARTNERS**

As a rule, CVET at the initiative of enterprises is not regulated by law in Sweden. Instead, these matters are often negotiated between social partners at either the sector or, more often, enterprise level. Much of the training is, of course, at the initiative of the employer.

Since 1975 all employees have been entitled by law to unpaid leave of absence for studying, providing they had the same employer the last six months or for a total of 12 months during the two previous years. The employee is also entitled to attend studies arranged by the trade unions irrespective of employment status. Each person has the right to choose the form of his or her studies. Neither the employer nor the trade union can give priority to persons opting for study programmes which they consider important from the viewpoint of the company or union and there are no restrictions on the duration of studies. Self-study, however, is not covered by law. Although the employer must grant a leave of absence to those who meet the standards outlined above, they may postpone giving leave of absence by up to six months.

Large companies are more likely to support in-service training than small and medium enterprises (SMEs) and in-service training in SMEs is often funded through European programmes such as the European Social Fund and structural funds. Between 2001 and 2003, 350 000 Swedish employees, largely employed by SMEs, participated in in-service training partially funded with ESF support.

The Swedish Trade Union Confederation (LO -- [www.lo.se](http://www.lo.se)) supports a large number of study circles through its partner organisation, the Workers' Educational Association (ABF -- [www.abf.se](http://www.abf.se)) and this allows unions to provide training opportunities to tens of thousands of workers annually.

As seen in table 0504, Swedish enterprises are among the most training intensive in Europe, trailing only Denmark with 91% of Swedish enterprises listed as training enterprises in 1999. In the first half of 2002 it was estimated that 2 650 000 Swedish employees participated in in-service training. The majority of this training (68%) is organised at the workplace but a variety of internal and external training resources are utilised. Professionals are most likely to receive in-service training followed by white-collar workers and, least of all, blue-collar workers.

<b>Table 1.: Training enterprises as % of all enterprises, by size class (1999)</b>				
	<b>TOTAL (%)</b>	<b>SIZE CLASS (NUMBER OF EMPLOYEES)</b>		
		<b>10 TO 49 (%)</b>	<b>50 TO 249 (%)</b>	<b>250 OR MORE (%)</b>
EU-25	61	56	80	95
Austria	72	68	91	96
Belgium	70	66	93	100
Cyprus	-	-	-	-
Czech Republic	69	64	82	96
Denmark	96	95	98	100
Estonia	63	58	85	96
Finland	82	78	97	99
France	76	70	93	98
Germany	75	71	87	98
Greece	18	11	43	78
Hungary	37	32	51	79
Iceland	-	-	-	-
Ireland	79	75	98	100
Italy	24	20	48	81
Latvia	53	49	70	91
Lithuania	37	43	60	80
Luxembourg	71	67	83	99
Malta	-	-	-	-
Netherlands	88	85	96	98
Norway	86	84	97	100
Poland	39	36	52	63
Portugal	22	17	46	78
Slovakia	-	-	-	-
Slovenia	48	35	72	96
Spain	36	31	58	86
Sweden	91	88	99	99
87	85	85	91	98

Note: 'Training enterprises' are enterprises that did provide any type of continuing vocational training to their employees; Cyprus, Malta, Slovakia, Iceland were not covered by CVTS2

Source: Eurostat, NewCronos, 2nd Continuing Vocational Training Survey (CVTS2)

### **0505 - CVET AT THE INITIATIVE OF THE INDIVIDUAL**

In Sweden there are several forms of CVET at the initiative of the individual including advanced vocational education (Kvalificerad yrkesutbildning - KY), supplementary education (Kompletterande utbildningar), CVET programmes through folk high schools and post-secondary training programmes (Påbyggnadsutbildning) funded through the KOMVUX (municipal adult education) framework. Moreover, a significant portion of regular municipal adult education (e.g. to attain upper secondary education) is also at the initiative of the individual.

In 2002 advanced vocational education ([www.ky.se](http://www.ky.se)) was established as a regular form of post-secondary vocational education and training after running on a pilot basis since 1996. The aim of KY is to satisfy the needs of the labour market for skilled labour with appropriate competence for the production of goods and services using modern technologies. At least one-third of the training must be work-based training. The education period can vary from one to three years (40 to 120 points) and a programme consisting of 40 points or more results in a KY diploma.

Through KY there are approximately 270 programmes covering most sectors. The number of places in KY has been continuously expanded. In 2005 over 27 554 people participated in advanced vocational education, an increase from 20 863 in 2004. The programme focuses on vocational areas where there is a clear shortage of skilled labour in areas such as, manufacturing, health care, ICT, etc. The courses are based on close cooperation between business and various course providers (higher education institutions, upper secondary schools, municipal adult education providers, companies, etc.). They are intended to correspond to real needs in the employment market. The courses are open to both individuals coming directly from upper secondary school and to people who are already gainfully employed and wish to develop their skills within a defined area.

For admission to the training, three-year upper secondary or corresponding qualifications are required. The course usually covers two years of studies (corresponding to full-time studies of 80 weeks) and the typical age of the students is between 20 and 35 years of age.

Since the workplace-training element of KY is so important, active participation by employers in designing the courses is a requirement. Working life representatives (e.g. business and labour) are therefore required to be in the majority in the management group of a course. The employment market is to defray the expenses of the work-place training component of the education.

Supplementary education programmes are non-compulsory education programmes provided out with the public education system. These are vocational courses lasting from 200 hours up to 2-3 years, for young people and adults. There are about 150 different educational providers offering courses in art, dance, theatre, handicrafts, media, flying, etc. Supplementary education programmes do not provide any formal eligibility for further study, but can be seen as vocational courses that prepare for higher educational courses requiring skills in one or more of the above areas.

The CVET programmes offered through folk high schools and through post-secondary training programmes range widely from traditional handicrafts, to personal services and technical areas.

The increasing requirement for skills in working life has highlighted the need for shorter vocational programmes after upper secondary school. It is important to develop such programmes to meet skills needs in both emerging industries as well as to safeguard the re-growth of certain handicraft trades.

## 06 - TRAINING VET TEACHERS AND TRAINERS

### ALTERNATIVE TRAINING PATHWAYS

Most Swedish universities offer distance study courses. The Agency for Sweden's Internet University (Myndigheten för Sveriges Nätuniversitet) consists of IT-based distance education courses and programmes, which universities and university colleges have registered with the agency.

Since 1991, teachers have been municipality employees (prior to that they were state employees). The municipalities are responsible for staffing schools with competent teachers who have been adequately trained for their duties. Teachers at independent schools (i.e. schools administered by actors other than the municipality or county) are, however, employed by these schools.

According to the Education Act, to be permanently appointed as a teacher in the national schools system an applicant must have a university degree in teaching, knowledge of the Swedish language as well as an appreciation of the regulations applicable to the school system, in particular the regulations concerning the goals of education. The applicant should also have undergone a teacher-training programme in Sweden, the main contents of which focus on the type of teaching the position involves, or equivalent training from another Nordic country or a country that is a member of EFTA or the EU. If the applicant has completed a higher education degree/teacher training diploma in a country/jurisdiction outside the above areas, the National Agency for Higher Education shall determine whether that training fulfils the necessary conditions for competence. Upper secondary schools should try to appoint teachers with a graduate degree (e.g., Masters or Ph.D.).

An applicant not fulfilling the above conditions may be employed for a maximum of 12 months at a time, unless there are special reasons justify a continuing employment contract.

According to a central agreement, teachers are employed on a 12-month basis before they receive a permanent position. The purpose of the probationary period is to give newly qualified teachers a year of introduction under the guidance of an experienced teacher. The major task for the in-service training of teachers in upper secondary school and municipal adult education is to supplement subject qualifications in order to bring them more up-to-date with the knowledge and skills needed in the new programmes within upper secondary education.

## 0601 - TYPES OF TEACHERS AND TRAINERS IN VET

The types of teachers and trainers in Swedish vocational education and training vary widely by VET form. These details are described in sections 0602 (IVET) and 0603 (CVET).

## 0602 - TYPES OF TEACHERS AND TRAINERS IN IVET

A new, integrated teaching degree was established in 2001, which will result in all future teachers sharing common basic competence, combined with a chosen specialisation in particular subjects/subject areas and/or age groups. The new teaching degree comprises a programme ranging from 3.5 to 5.5 years of full time study. To teach IVET at the upper secondary level, 120 credits are required, 60 of which can be validated based on worklife experience in a vocation. Instead of a specialisation in certain subjects, this degree requires extensive professional experience, combined with 60 credits in relevant, vocationally oriented, higher education courses. The degree for Upper Secondary School was replaced by a degree for teaching in the higher levels of the compulsory school and upper secondary school. The older degrees will be phased out during a period ending in 2008.

As there is a shortage of vocational teachers, there has also been a special initiative to attract more vocational teachers. Those without a teaching degree can teach half time and study half time in order to achieve a teaching degree. In the autumn of 2006 Sweden's government announced a plan to invest special teacher certification for IVET teachers. This will comprise 1.5 years of study in addition to competence in the vocation, which will result in validation of experience.

Vocational education and training teachers at the IVET level in Sweden can be described as organised by the following two types of educational institutions:

*Gymnasieskolan* (upper secondary school), offering 17 national programmes of two types: 14 *yrkesförebereadande program* (vocational programmes) and three *studieförebereadande program* (general programmes) for the age group 16-19. Thereby VET and general education form an integrated upper secondary school. Within *yrkesförebereadande program* (vocational programmes), part of the curriculum (minimum 15 weeks) is appointed for *arbetsplatsförlagd utbildning*, APU (workplace based training). There are two kinds of teachers: *karaktärsämneslärare* (specific subject teacher), who teach subjects specific for the respective programme; and *kärnämneslärare* (core subject teachers), who teach core (general) subjects common for all programmes. This division of teachers was introduced in relation to the reform of upper secondary school in 1991. Complementary to the national programmes *specialutformade program* (specially designed programmes) may be formed locally. A common way of forming specially designed programmes is to increase either the part of general subjects in vocational programmes or to include vocational subjects in general programmes. A third form is the pilot experiment LIA, part of the curriculum (approx. 30%) for a national programme is replaced by *lärande i arbetslivet*, LIA (learning at work), which includes hands-on/workplace training. For this form of specially designed programmes it is presumed that the workplace provides the trainers they find suitable for the task.

*Kommunal vuxenutbildning*, Komvux (municipal adult education), offering initial vocational education and training for adults, corresponding to those of upper secondary school; continuation courses for adults; and complementing previous education with specific courses, either to complete an unfinished upper secondary programme or to complement a programme in order to qualify for higher education. Although initial vocational education within the municipal adult education organisationally is separated from upper secondary school, they often share the same buildings and many teachers

teach in both institutions. Specific (vocational) subject teachers and core subject teachers are required within municipal adult education. The qualifications are the same as for upper secondary school. When workplace-based education is part of a continuation course, the workplace is presumed to provide the trainers (as above).

Teaching diplomas may be awarded in the following areas:

- University Diploma in Aviation Education;
- University Diploma in Folk High School Education;
- University Diploma in Education; and
- University Diploma in Special Education.

### **0603 - TYPES OF TEACHERS AND TRAINERS IN CVET**

As outlined in section 0502, there are several forms of CVET in Sweden including: advanced vocational education (Kvalificerad yrkesutbildning - KY); supplementary education (Kompletterande utbildningar); CVET programmes through folk high schools; and post-secondary training programmes (Påbyggnadsutbildning) funded through the KOMVUX (municipal adult education) framework. The administration of these forms of CVET in Sweden are often devolved to the training providers, which are often created to meet specific training needs. Unlike IVET teachers at the upper secondary level, post-secondary CVET teachers/trainers are often recruited because of industry experience rather than possession of a teacher's degree. Consequently, the most important factor for Swedish CVET teachers is expertise in the field combined with pedagogic aptitude. That said, some CVET is delivered by more established post-secondary institutions where teachers often possess post-graduate degrees and/or teacher certification.

The training of trainers/teachers at the workplace is the responsibility of the work place and comes under ordinary in-service training or learning on the job. Upper secondary schools cooperating with a certain work-place often offer a short course on how to function as a mentor for a student in workplace training. The types of teachers/trainers in two types of CVET are detailed below.

*kvalificerad yrkesutbildning*, KY (advanced vocational education) has a variety of teachers, depending on the type of programme and on the facilitator. "Teachers and trainers are to be competent for the teaching they are to provide, either by education or by experience". When the facilitator is a university/university-college, the requirements for the teachers are the same as for a position as an *adjunkt* (assistant master, i.e. the lowest university-teacher (bachelor, master, or equivalent)). The teachers in work-based training comprising 30% of KY-programmes are mostly employed by companies. When the facilitator is a municipal adult education, the requirements are the same as for IVET teachers (specific subject teachers within vocational programmes or core subject teachers) within upper secondary school. People with other qualifications may, however, also be hired when considered necessary. When educational enterprises are facilitators, they use both specific subject teachers and other employees with 'relevant' experience for the school-based part of the programme and employees from the respective company as trainers. Finally craft related organisations may be facilitators for KY-programmes. A pilot project on modern apprenticeship for adults requires that the trainers must be journeypeople approved by the respective crafts organisation. For general subjects, core subject teachers are required. The main difference between modern apprenticeship and other types of advanced vocational education programmes concerns the proportion between teachers' and trainers' responsibility. Within programmes related to handicraft,

the trainers are responsible for 80% of the programme and teachers for the remaining part, whereas within other types of programmes, teachers are responsible for 70% of the programme.

In *Yrkesteknisk högskoleutbildning*, YTH (higher technical vocational education) the requirements for the teachers within both these forms of education are the same as for a position as an *adjunkt*. Higher technical vocational education YTH will, in due time, be replaced by advanced vocational education and higher vocational education ([www.regeringen.se/sb/d/108/a/2803](http://www.regeringen.se/sb/d/108/a/2803)).

## 07 - SKILLS AND COMPETENCE DEVELOPMENT AND INNOVATIVE PEDAGOGY

Much of the work in recent years in terms of the development of innovative pedagogy in Sweden has been related to introducing information and communication technology (ICT) into the teaching and learning process. The Government developed the National Program for ICT in schools (IT i Skolan, ITiS) to give teachers support in acquiring and exploiting the opportunities provided by ICT. This also meant creating greater variety in the work of teachers overcoming obstacles and using ICT to develop the work of the school. The goal was not to focus on technology for its own sake, but rather to use it wisely to promote learning. Development begins with teachers and only when teachers feel they have a firm grasp of the new technology as a pedagogical tool that it can become a tool for change.

The national programme for in-service training in ITiS is based on teachers taking responsibility for their own learning at work where they should feel they receive powerful support from school management and facilitators. Parallel with this, ITiS supports development in the municipalities by providing some of the funding for the expansion of schools' ICT infrastructure. The overall effect of these measures help to ensure that schools are able to take advantage of the opportunities for learning by the new technology.

The Delegation for ICT in Schools was responsible for planning and implementing the programme which included in-service training for 75,000 teachers in teams; computers for participating teachers; state grants to improve schools' access to the Internet; e-mail addresses for all teachers and pupils; support for developing the Swedish Schoolnet and the European Schoolnet; measures for pupils with special needs; and awards for excellent pedagogical contributions.

ITiS was implemented over a four-year period. Four guiding principles underpinned the planning of the action programme and were applied in its implementation in the municipalities: equal standards between schools and quality for pupils; school development; supplementing and reinforcing programmes planned and already completed by the municipalities; and increasing the school's accessibility to the Internet and e-mail. Since 1994 the Swedish Schoolnet (Skoldatanätet) has served as a website for teachers, educators and students. The goal in 1994 was, as is today, to stimulate the use of information technology in schools.

### INNOVATION IN ASSESSMENT

In order for assessment to be as unified as possible across the country, teachers are recommended to use the national course tests for upper secondary education set by the National Agency for Education. These are course tests in Swedish, English and Mathematics. There is also a pilot project with an aim is to develop course tests in vocational subjects through the use of multimedia.

The new national assessments for upper secondary school were developed with the purpose to contribute to the quality of VET. They are competence based, and are built on authentic situations or problems, which teachers and representatives from working life have identified as key problems in their specific domain. The problems are presented in multimedia, and the students are expected to deal with them authentically. The student's ability to handle the problem, i.e. dealing with various aspects of planning, practical action and evaluation, is thus assessed. The new assessments are regarded as a service material for schools, and they are available through the Internet. The development of this was led by the Stockholm Institute of Education and Växjö University (Skolverket, Dnr 2000:1734, paper presented at international conference in Lisbon in 2001).

### **0701 - MECHANISMS FOR THE ANTICIPATION OF SKILL NEEDS**

The linkage between labour market skills needs and VET outputs varies according to the type VET in Sweden. The largest VET form is vocationally-oriented upper secondary education, which has a relatively weak link with labour market skills needs. It is, instead, more geared to student learning choice through municipalities, which are responsible for upper secondary education, sometimes restrict entrance to programmes without sufficient labour market demand.

Other forms of vocational education and training in Sweden are more closely aligned to labour market needs. For example, advanced vocation education programmes are only funded if there is a demonstrated industry need for the training. The same logic applies, albeit to a lesser extent, with supplementary education and post-secondary training programmes.

All national programmes at upper secondary level provide a basis for further studies and basic eligibility for higher education. A course-based upper secondary school provides great opportunities to ensure education is relevant by, for example, facilitating switching and changing courses, and also by creating flexible education routes with good opportunities for pupils to choose.

### **0702 - BRIDGING PATHWAYS AND NEW EDUCATIONAL PARTNERSHIPS**

#### **INTER-INSTITUTIONAL PARTNERSHIPS**

In order to ensure relevance compulsory and upper secondary school principles cooperate to ensure the two forms interact and "mesh." The curriculum states that all work in the school shall act to develop contacts not only with working, cultural and organisational life, but also with other activities outside school. Teachers also have a responsibility for contributing to the development of contacts with receiving schools as well as with organisations, companies and other bodies. Compulsory and upper secondary schools should also cooperate closely with working life, higher education institutions and society in general. This helps ensure quality and provide a basis for choosing courses and continuation to further studies or vocational activity. It is especially important that schools cooperate with working life on vocationally oriented education.

In order to increase cooperation in different parts of the education system, students may take courses at the upper secondary level while at compulsory school, and those in upper secondary school may take higher education subjects if they have attained the knowledge goals, while completing their upper secondary education.

## **ADMISSION REQUIREMENTS AND CHOICE OF SCHOOLS**

All municipalities are obliged under the Education Act to offer young people, until the year they turn 20, who have completed compulsory school, or the equivalent, upper secondary school education. To be admitted to a national programme or a specially designed programme, pupils must have passed Swedish, English and Mathematics at compulsory school or demonstrate equivalent knowledge. The municipality must provide a broad range of education and try to match the number of places in different programmes with student choice. If the programme of choice is not available in a student's home municipality, they have the right to apply to another municipality. If accepted, their municipality must pay the cost of the education. If the number of applicants is higher than the number of places available, selection is on the basis of final grades from compulsory school. A limited number of places at upper secondary school are set aside for pupils who, due to special circumstances, should be given preferential access.

## **COURSE-BASED SYSTEM**

The course-based system together with the absence of a nationally decided timetable gives upper secondary schools great freedom to organise education. Courses may be studied intensively by taking several subjects at once or, instead, spreading them out over their entire upper secondary education. Courses may be integrated with other subjects, grouped into modules or studied by themes. Students studying a course may be grouped together from different classes and programmes. Subjects are divided into one or more courses.

Students may choose to specialise within the block of options and have greater freedom of choice within their individual options or take part in one or more courses outside the complete programme -- referred to as an expanded programme. Those experiencing significant study-related difficulties may be allowed to opt out of one or more courses in what is called a reduced programme. The normal period of study is three years, but under the system of courses and credits, pupils can complete upper secondary schooling over a shorter or longer period.

## **BRIDGING POST-SECONDARY VET PATHWAYS**

VET forms at the post secondary level (i.e. advanced vocational education, post secondary training and supplementary education) have very close links with the labour market and with social partners. Indeed, most of those programmes must demonstrate labour market need in order to attain funding. Moreover, advanced vocational education (KY) is designed to bridge pathways and forge new educational partnerships with a wide range of education providers as well as industry. Although it has not been achieved yet, it is hoped that KY studies will provide transfer credit in case the student wishes to pursue a degree programme at a higher education institution.

## **0703 - RENEWAL OF CURRICULA**

### **MODERNISATION OF UPPER SECONDARY EDUCATION**

In October 2004 the Swedish Parliament decided on the modernisation of the upper secondary education, which can be summarised with the following eleven points:

- Subject grades to replace current course grades;
- An upper secondary diploma to be introduced;

- Modern apprenticeship training will revitalise vocational training;
- Better quality individual programmes;
- Unrestricted application to give pupils greater freedom of choice and to stimulate regional cooperation;
- History to be a new core subject;
- The core subjects should be characterised by the focus of the programme;
- Local programmes must be quality audited by the National Agency for Education;
- Quality of upper secondary vocational programmes to be improved;
- Upper secondary school projects to give better overall picture of students' upper secondary education; and
- More extensive contextual and advanced programmes

This significant reform of upper secondary education in Sweden was planned for the autumn of 2007 but the new government, elected in September 2006, has stated its intention to develop a new system, based on new priorities. It is likely some of the elements highlighted above will be included in the new system. The details of the new Government's reforms are not yet known but it will likely include two distinct VET streams including an apprenticeship system. In this renewal of curricula as well as quality improvement of upper secondary school stakeholders such as researchers, teachers/trainers, education authorities, social partners and learners will be involved both at national, regional, local and sectoral levels. More details will be included in a subsequent update to this Thematic Overview, including information on the type of basic skills and competencies emphasised in coming reforms.

In order to strengthen interest in mathematics and the natural sciences, a Mathematics Committee has been appointed with the task of developing and implementing a national plan for mathematics from pre-school to higher education, including vocational education and training.

The Government has started a pilot project on distance learning in the upper secondary school. By means of distance learning, pupils can combine studies in the upper secondary school in their home municipality with other courses, not provided in their home municipality, at an upper secondary school in a different municipality. The Agency for school development is responsible for the pilot project, which also aims at developing new forms of learning where ICT is an important means of support and also provides better opportunities for cooperation between municipalities.

## 08 - ACCUMULATING, TRANSFERRING AND VALIDATING LEARNING

### 0801 - VALIDATION OF FORMAL LEARNING: GENERAL CONCEPTS AND SCHEMES

In Sweden, most vocational occupations are not regulated and virtually all are administered at the sectoral level rather than by government. Consequently, practices concerning validation of IVET vary somewhat from occupation to occupation.

Validation can be defined as a precise assessment, valuing, documentation and recognition of knowledge and competences that an individual has gained, irrespective of how and where they have been acquired. The responsibility for validation in Sweden is divided between the education system and the social partners. In December 2003, the Swedish government established The Swedish National Commission on Validation to develop the processes of quality and methods for validation through 2007. The tasks of the commission are to:

- develop legitimacy and equivalence;
- carry on and support development;
- strengthen regional cooperation in order to reach well adapted working methods for development, consultation and evaluation;
- inform; and
- work out proposals on what measures should be taken to assure validation activities after 2007.

The vast majority of IVET in Sweden occurs in the vocationally-oriented programmes at upper secondary school where the grading system is related to goals and knowledge. School results are assessed in relation to attainment of the goals of the courses as laid down in the syllabus. There are special grading criteria to be used when awarding grades and these stipulate the knowledge required for each grade. There are four grade levels in the upper secondary school system: Pass with Special Distinction (MVG); Pass with Distinction (VG); Pass (G); and Not Passed (IG).

Students are awarded grades for the various courses they have completed. Theoretically, there is thus no unique point in time when all students receive their grades but they may obtain a transcript of their grades for completed courses. Before giving grades in Swedish/Swedish as a second language, English and Mathematics the teacher should use compulsory national tests.

Students, and their parents through compulsory personal development dialogue, have the right to be informed of the student's progress and schools are obliged to arrange meetings to this end at least once a semester. After completing their upper secondary education students are entitled to re-sit examinations to improve their grades. During their upper secondary education students are only entitled to resit examinations if they failed a course. Municipalities are entitled to charge a maximum fee of SEK 500 (€ 50) for re-sitting an examination.

A planned modernisation of Upper Secondary School in 2007 was to have included replacing course grades with broader subject grades. Upon completion of each course, the student would receive a subject grade replacing any previous grade obtained in the subject and providing a holistic picture student progress in the subject. However, this reform has been re-called by the new Government, which will instead introduce new reforms in the coming year.

Upper secondary school do not currently lead to a diploma. Each pupil instead receives a final certificate consisting of a transcript of grades. To receive a school-leaving transcript (Slutbetyg från gymnasieskolan) students must complete a national or specially designed programme and receive grades for all courses as well as their project work.

Students who take more courses than their programmes require may, up to a certain point, decide whether these courses should be included in their final certificate. All programmes fulfil the basic eligibility requirements for access to higher education studies. However, nearly all higher education requires special qualifications in one or more subjects. It is likely that an upper secondary diploma will be introduced in the coming years.

## **0802 - VALIDATION AND RECOGNITION OF NON-FORMAL AND INFORMAL LEARNING**

Swedish approaches to assessment and recognition of non-formal learning are not limited to centrally initiated projects. Identification of prior and non-formal learning is indirectly demonstrated by many local and regional initiatives, which were supported by the government in the Adult Education Initiative. Sweden has started work on the development of general systems for assessment of competencies that have been acquired outside formal learning settings. The initiatives from the government together with the involvement of social partners, has led to increased attention to this issue. While social partners are more concerned about the utilisation of competencies developed in working life (e.g. how can it be used, developed, accumulated and disseminated etc.), the the government is more focused on the need to make public educational institutions more flexible (e.g. to open the system for immigrants, for adults with significant working experience, to reduce costs, etc.) and achieve broader involvement in the setting of competence standards.

During The Adult Education Initiative a number of pilot projects were launched, where new forms of accreditation of prior learning and validation were the focus. In the Bill Adult Learning and the Future Development of Adult Education, 2000/2001:72, the Parliament adopted goals for both adult learning and a strategy for formal adult learning -- together with higher education -- in a society characterised by lifelong learning. The proposals contained in the government Bill take as their starting-point the need for change and development of adult education in order to meet the needs for lifelong learning.

One of the main developments since the Bill on Adult Learning was the Bill on Validation (Ds 2003:23), which recommended that there should be increased opportunities for the individual to have informal learning recognised. The Bill also recognised the need for regional cooperation in this matter, a need to look into the legal rights of the individual as well as quality assessment of validation throughout the country. In this context the government considers validation to mean a structural assessment involving assessing and recognising knowledge and competence wherever these have been gained. For the individual this involves validating knowledge and competence obtained in different ways through certification providing eligibility for further studies, as well as occupational or industrial competence related to working life. Validation can also be used as an instrument in adult education to customise the education to the individual's preconditions and initial knowledge.

A government authority, the Swedish National Commission on Validation ([www.valideringsdelegationen.se](http://www.valideringsdelegationen.se)), was appointed for the period 2004-2007. The authority's main tasks are to promote and advance the development of methods and systems for validation and to work towards national equivalence, high quality and security for the individual. The government also gave the National Agency for School Improvement the task of extending adult skills validation pilot schemes. The report that

led to the establishment of the Commission also presents other measures to promote validation work. One such measure is the development of a national on-line portal containing information on all education in Sweden ([www.utbildningsinfo.se](http://www.utbildningsinfo.se)).

## **09 - GUIDANCE AND COUNSELLING FOR LEARNING, CAREER AND EMPLOYMENT**

### **0901 - STRATEGY AND PROVISION**

There are no formal special institutions for guidance and all education and vocational guidance is given in schools. In all types of schools, it is the responsibility of the school head to ensure that all students receive educational and vocational guidance before choosing from the range of options that the school has to offer and before deciding how best to continue an educational route. Most schools have specially trained guidance officers to deal with such questions.

Schools arrange some form of practical work life orientation, where students spend one to two weeks gaining practical experience at a workplace. In other areas study visits and information about the labour market, different professions and career options are included in many subjects in compulsory school.

At the local level, schools cooperate with industry, social partners and industrial organisations, as well as with universities and university colleges to provide students with educational guidance for their further education. This is, however, not regulated at the central level. Educational and career guidance are also provided by other actors such as the national employment agency, trade unions and private employment service.

This is a website -- [www.studera.nu](http://www.studera.nu) -- with information about higher education including a searchable database containing descriptions of courses and education programmes available in higher education.

The government supports a number of measures to strengthen access to independent guidance and counselling. The National Agency for Education was commissioned by the government to develop a web-based portal for information and guidance -- [www.utbildningsinfo.se](http://www.utbildningsinfo.se).

The Swedish Employment Service (Arbetsförmedlingen Internet) provides services such as the Job Bank, Job Seeker Bank, Temporary Worker Bank, Image and Artist Bank, information on occupations and training programmes as well as general information on the labour market, forecasts and in-depth analyses of current labour market dynamics.

The activity guarantee programme was introduced in 2000 for unemployed individuals who are, or risk becoming, long-term job seekers registered with the Employment Service. Participants receive intensive guidance in groups of 10-15 people, while having access to all the standard labour market policy programmes. Each job seeker and job counsellor are expected to jointly work out an action plan. The job seeker participates in the activity guarantee programme until s/he finds a job for more than six months, begins a regular course of studies or chooses to leave the programme. This programme will be phased out in 2007.

### **0902 - TARGET GROUPS AND MODES OF DELIVERY**

A great deal of study guidance is provided in upper secondary schools with a view to supporting the student's subsequent studies. Vocational guidance is concerned both with the labour market as a whole and with individual sectors. In primarily vocationally oriented programmes, contact with working life is an integral part of teaching.

All programmes may include workplace training (i.e. part of the course of studies is at place of work outside the school --APU). APU can, on the basis of local decisions, be provided within the Arts Programme and also in the Natural Science, Social Science and Technology programmes. In all other programmes, i.e. the ones with a vocational orientation, APU forms a compulsory part and at least 15 weeks of the total period must be spent on workplace training in those programmes.

There are a number of specific measures, mainly through the national labour market authority but also through municipal programmes and through other national agencies and programmes, designed to provide vocational and labour market guidance and assistance to young people, people with disabilities, the long-term unemployed and immigrants. Most of these measures are provided for those registered as unemployed with the labour market authority but there are also pro-active programmes through the municipalities and other agencies such as the Swedish National Board for Youth Affairs, the Swedish Integration Board. etc.

### **0903 - GUIDANCE AND COUNSELLING PERSONNEL**

The municipalities are responsible for guidance and counselling staff in schools while the national labour market authority is responsible for the majority of labour market counselling. Most counselling staff in schools have either teacher training (i.e. an education degree) or other specialist competence usually associated with the attainment of a social sciences university degree. Schools and the labour market authority provide further in-service training to improve counselling skills and keep skills and information up-to-date.

## **10 - FINANCING - INVESTMENT IN HUMAN RESOURCES**

### **1001 - BACKGROUND INFORMATION CONCERNING FINANCING ARRANGEMENTS FOR TRAINING**

The structure of government funding has not changed significantly since the early 1990s. Funding of schools (including IVET and adult education) is shared between the state and municipalities. State funds are paid to municipalities through the general state grant to municipalities, which then allocate resources to individual schools. The municipalities may also receive revenues from municipal taxes, which are used to finance municipal activities. Higher education and university colleges are financed directly from the state budget.

There are plans to improve and increase the emphasis on IVET and this may result in more funding for vocationally oriented programmes at the upper secondary level, though the structure of funding (i.e. state grants to municipalities) would remain the same.

Some forms of CVET such as supplementary education may involve tuition fees while others, such as advanced vocational education, have received significantly higher state funding in recent years.

Table 1: The cost of different types of schools in 2003	
	SEK/EURO MILLION
PRE-SCHOOL CLASS	3 947 / 367
COMPULSORY SCHOOL	70 499 / 6 570
EDUCATION FOR PUPILS WITH LEARNING DISABILITIES	5 102 / 475
SPECIAL SCHOOLS	476 / 44
UPPER SECONDARY SCHOOL	26 937 / 2 510
SUPPLEMENTARY SCHOOL	310 / 29
MUNICIPAL ADULT EDUCATION	4 795 / 447
MUNICIPAL EDUCATION FOR ADULTS WITH LEARNING DISABILITIES	147 / 14
SWEDISH TUITION FOR IMMIGRANTS	774 / 72
NATIONAL SCHOOLS FOR ADULTS	43 / 4

The total cost of the schools system in 2003 was SEK 113 028 million.

Table 2: Total cost of different types of schools per organiser in 2003	
	SEK/EURO MILLION
MUNICIPALITIES	104 345 / 9 724
COUNTY COUNCILS	665 / 62
STATE	552 / 51
INDEPENDENT ORGANISERS	7 466 / 696

(<http://www.skolverket.se> Beskrivande data om förskoleverksamhet, skolbarnomsorg, skola och vuxenutbildning 2003).

#### 1002 - FUNDING FOR INITIAL VOCATIONAL EDUCATION AND TRAINING

In Sweden the vast majority of VET is publicly funded with most IVET (i.e. at the upper secondary level) fully funded by municipalities through their portion of income tax and other state grants. Municipal tax revenues are the municipality's main source of income. Apart from income taxes, which finance the majority of municipal education, municipalities also receive state grants that are not earmarked for specific activities. The structural element of the grant is determined by several underlying factors such as the size of the population in the municipality, its age structure, population density, social structure and number of immigrants. Tax revenues and state grants thus

provide the vast majority of resources for compulsory and non-compulsory education in the municipalities.

The system of governance in Sweden is very decentralised and each municipality determines how it will allocate resources and organise its activities. The municipalities are, however, obliged to provide their inhabitants with a certain level of services and schooling as determined by the government and central state agencies. In the area of education, municipalities must fulfil obligations in accordance with the Education Act regarding, for example, activities and quality.

Municipalities usually have a local board of education, which decides on the allocation of funds between different schools in the municipality. This local body also decides on the funds to be allocated to independent schools in the municipality. There are no national regulations on how resources should be allocated between schools. The responsibility for determining teacher salaries and other expenditures are usually decentralised to the individual school, but the municipality may choose to make such decisions at a higher level. When it comes to capital expenditures such as school infrastructure, municipalities show a less uniform platform. Some prefer to decentralise responsibility for these expenditures to each individual school, while others keep responsibility for local costs at the municipal level.

The Government has decided to set aside specific funds for research in the area for pupils with disabilities and for the competence development of teachers.

In addition to the general state grant to municipalities, the Swedish Government decided that over a five-year period (2001-2006) additional resources will be given to municipalities specifically for the employment of teaching and other staff. The reason for introducing this grant was the difficult economic situation in most municipalities, and subsequent decrease in municipal education budgets resulting in less staff in schools.

Funding of post-secondary training is also usually driven by municipalities while supplementary education and VET at folk high schools have irregular funding models ranging from full funding by the state to tuition-funded programmes.

Advanced vocational education is fully funded, centrally, through the Agency for Advanced Vocational Education.

### **1003 - FUNDING FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING, AND ADULT LEARNING**

State and municipal IVET, and most CVET, in Sweden is free of charge, funded by municipalities and state grants, respectively. To create better opportunities for adults to study, there are different forms of study financing: study assistance (grants and loans) and special educational grants. The reformed system for study assistance, in force from 2001, covers all students in compulsory and secondary education, including adult education, as well as higher education and other post-secondary education. Adults in municipal adult education can apply for study assistance or special education grants. This funding is administered by the Swedish National Board of Student Aid.

The system for study assistance consists of two components – grant and loan. There are two grant levels: 34.5 per cent and 82 per cent. The lower grant can be received by all, irrespective of educational level (compulsory school, upper secondary or post upper secondary levels) while the higher grant level is directed towards priority groups. The total amount (grant and loan) is approximately €200 per study week.

In 2003 a new study system of adult study support – Adult Education Recruitment Grants – was brought in to replace the special education allowance. People from the age of 25 who have relatively little previous education, who either are unemployed or at risk of becoming unemployed or who have functional disabilities and are in need of additional time for their studies may be awarded support. The recruitment grant is 100% grant with no loan element and provides € 230 per week (2004).

Sweden has one of the most intensive in-company CVET regimes in Europe (Table 1) along with Denmark, the Netherland and the UK. In-company training provided by companies and public authorities has expanded faster than any other form of CVT in recent decades. Over the past two decades the participation rate in in-company training has almost doubled and in any given year, about 40 per cent of Swedish employees participate. In-company training is by definition, financed by employers. The costs of in-company training account for the vast majority (95%) of the total cost of CVT.

<b>Table 1: Cost of CVT courses as % of total labour cost (all enterprises), by type of cost (1999)</b>			
	<b>TOTAL COSTS</b>	<b>DIRECT COSTS</b>	<b>LABOUR COSTS OF PARTICIPANTS</b>
<b>EU-15</b>	2.3	1.4	0.8
<b>SWEDEN</b>	2.8	1.6	1.3

*Total costs:* sum of direct costs, staff time costs and balance of contributions to national or regional training funds and receipts from national or other funding arrangements

*Direct costs:* costs of CVT courses

Source: Eurostat, Newcronos, 2nd continuing vocational training survey in enterprises (CVTS)

There are very few government regulations governing in-company training but collective agreements cover over 80 per cent of the work force and play a role in determining in-company training.

#### **1004 - FUNDING FOR TRAINING FOR UNEMPLOYED PEOPLE AND OTHER GROUPS EXCLUDED FROM THE LABOUR MARKET**

Labour market training is organised primarily for the unemployed in need of retraining or further training and education. In the first instance, the Labour Market Board, an agency accountable to the Ministry of Industry, Employment and Communications, is responsible for labour market training. The Labour Market Administration is responsible for the following activities:

- Facilitate and improve the match between supply and demand in various sectors of the labour market.
- Skills enhancement programmes as well as support for those who are having the greatest difficulties in the labour market.

- Operational development, monitoring, oversight and financial control of the Employment Service, labour market policy programmes and the unemployment insurance system
- Working Life Services.

The state funds activities for the unemployed.

## **1005 - PERSPECTIVES AND ISSUES: FROM FUNDING TO INVESTING IN HUMAN RESOURCES**

There are no known changes in policy priorities for funding vocational education and training at the moment. Therefore, the vast majority of both IVET and non-enterprise CVET will remain publicly funded. However, both the previous and the new government have stated the importance of improving the quality of both IVET at the upper secondary level and CVET at post secondary levels. There is a growing realisation in Sweden by all parties that VET has been under-emphasised in recent decades and it is likely that more resources will be devoted to VET in Sweden in the coming years.

## **11 - EUROPEAN AND INTERNATIONAL DIMENSIONS, TOWARDS AN OPEN AREA OF LIFELONG LEARNING**

### **1101 - NATIONAL STRATEGIES RELATED TO POLICY PRIORITIES, PROGRAMMES AND INITIATIVES AT EU LEVEL**

#### **THE BOLOGNA PROCESS**

Several actors at different levels contribute to the follow-up of the Bologna Process in Sweden. By signing the Bologna Declaration and other important international agreements, such as the Lisbon Convention, the government and its representatives have helped to improve the conditions for better mobility and employability. Students, teachers and other staff at universities/university colleges are helping to implement all the goals in the Bologna Declaration.

#### **FUTURE OBJECTIVES OF EUROPEAN EDUCATION AND TRAINING SYSTEMS**

The European Union has reached an agreement on shared goals and objectives for their education and training systems. As an initial follow-up exercise, the Ministry of Education and Science has drawn up a status report primarily intended to emphasise that Sweden takes the goals and objectives seriously, among other things by presenting a clear picture of Sweden's education and training systems and Swedish education policy in relation to the shared goals and objectives.

#### **PLACEMENTS ABROAD AS PART OF UPPER SECONDARY EDUCATION**

The National Agency for School improvement was commissioned by the government in 2003 to develop forms for cooperation between Swedish upper secondary schools offering programmes incorporating vocational subjects and educational programmes in a number of developing countries. The pilot ended in 2006 but the aim is for development efforts to lead to proposals for a regular programme to be introduced in connection with the forthcoming upper secondary school reform.

The government also has the intention to encourage the use of the EUROPASS by introducing provisions regulating the document in the Ordinance in Upper Secondary Education.

To promote internationalisation of vocational training the Government has commissioned the National Agency for Education to establish a National Reference Point for Vocational Qualifications (Nationellt centrum för yrkesutbildning) for information on vocational education, and further to allocate support for pupils in upper secondary vocational programmes who do their work-place training abroad. The NRP is an international information network, which promote the recognition of foreign qualifications. The Swedish NRP ([www.senrp.se](http://www.senrp.se)) serves as a contact point for vocational qualifications and also serves as the national centre for Europass Certificate Supplement.

Sweden uses the Europass, which is a certificate of recognition of work-linked training carried out within the EU. The document certifies that one or more parts of a work-linked training programme have been completed/taken place abroad.

A number of national initiatives have been taken with the aim of promoting internationalisation at all education levels. Besides Western European and Nordic integration, another political priority since the early days of the dissolution of the Soviet Union has been cooperation in the Baltic region, especially with Estonia, Latvia and Lithuania.

A number of agencies play a central role in the implementation of national policies through the administration of cooperation and mobility programmes, information activities and other initiatives.

The International Programme Office for Education and Training (Internationella programkontoret -- [www.programkontoret.se](http://www.programkontoret.se)) is the main national agency supporting schools, universities, companies, organisations and private individuals who wish to take part in international cooperation, mobility and projects. This covers activities ranging from international co-operation projects in education and competence development to placements and studies abroad. The International Programme Office is responsible for the two of the largest education programmes within the EU, Socrates and Leonardo da Vinci, as well as for Linnaeus-Palme and "One year in Germany, Austria, France and Spain," mobility programmes open to students in the first or second year of upper secondary school.

The International Programme Office is also responsible for the implementation of International Association for the exchange of Student for Technical Experience (*IAESTE*) for students in technical higher education while the Labour Market Board is responsible for administering Inter-practice (Interpraktik) scholarships for unemployed young people.

Since 2002 the National Agency for Education has been responsible for the distribution of scholarships to upper secondary pupils for workplace training abroad. This activity is complementary to mobility for people in initial vocational training in the Leonardo da Vinci Programme, but is not limited to Europe. About 500 IVET students are part of their work-based training abroad every year through this programme.

Sida, the Swedish International Development Assistance and Cooperation Agency, has bilateral agreements for development support with around 40 partner countries in the developing world. The promotion of basic education is a central objective in many of these programmes. In addition, a majority of schools, universities, university colleges and other education institutions also have their own bilateral cooperation agreements with institutions in other countries. The Linnaeus-Palme programme (LP), which was established by the Government in 2000, aims at strengthening co-operation between universities in Sweden and developing countries. LP is modelled on the Erasmus programme but promotes exchange with countries outside the OECD area.

The Swedish Institute (Svenska Institutet) promotes the internationalisation of Swedish education by awarding individual scholarships for long-term or brief study visits, both for foreign students in Sweden and for Swedish students abroad. Another function of the Institute is to disseminate information outside Sweden, about Sweden in general and about Swedish education and opportunities to study in Sweden. Recently a special website was launched for this purpose: <http://www.studyinsweden.se>. The Institute also has the responsibility to promote the teaching of Swedish as a foreign language at universities abroad, and administers the Visby programme, supporting co-operation and exchange between Sweden and one or more of the Baltic countries, Poland, north-west Russia, Belarus and the Ukraine at all educational levels above compulsory school.

## **1102 - IMPACT OF EUROPEANISATION/INTERNATIONALISATION ON EDUCATION AND TRAINING**

Sweden collaborates with other countries on education and training issues through several international organisations: the central ones being the European Union, the Council of Europe, UNESCO, OECD and the Nordic Council of Ministers. This cooperation takes different forms, depending on the aim and activities of the organisation.

### **EUROPEAN UNION**

The largest multilateral cooperation in education takes place within the framework of the EU education programmes Socrates (education) and Leonardo da Vinci (vocational education and training). Swedish interest in participating in the EU education programmes is considerable and, over the course of a year, over 4 000 Swedes are engaged in studies, traineeships, etc. in EU-funded programmes. At the same time, over 5 000 students and trainees come to Sweden every year through these programmes. In addition, a large number of schools and tertiary education institutions take part in trans-national cooperation projects, for instance, projects to develop new teaching and learning methods, curricula development etc.

### **THE COUNCIL OF EUROPE AND UNESCO**

The Council of Europe is an important European co-operation forum for Sweden. Together with UNESCO, the Council of Europe has drawn up the so-called Lisbon convention on recognition of diplomas in higher education in Europe. The Convention, which aims to facilitate the international mobility of students, was adopted in 1997 and ratified by Sweden in 2001.

A large number of Swedish schools are active in the Baltic Sea Project – an international network among schools for a better environment in the Baltic area.

### **OECD**

Of particular interest has been the development of statistical indicators within the field of education (INES programme) and thematic reviews of various policy issues ([www.oecd.org](http://www.oecd.org)). Sweden is an active participant in benchmarking activities such as PISA.

### **NORDIC COOPERATION**

Ministers of education and research meet in the Nordic Council of Ministers three times a year and education, including VET, is considered to be one of the main areas within Nordic Cooperation. With a view to strengthen Nordic educational cooperation, a number

of cooperation and mobility programmes have been created for different target groups, such as teachers and students at all levels, including IVET.

**IEA-INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT.**

Sweden, via the National Agency for Education, is also engaged in the work of the IEA. The primary purpose of this international co-operative of research institutions and governmental agencies is to conduct large-scale comparative studies of educational achievement

([www.skolverket.se](http://www.skolverket.se)).

## List of Sources and References

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Arbetsmarknadsstyrelsen (National Labour Market Board), Arbetsmarknadspolitiska program, årsrapport 2002 (Ure 2003:2), (Labour Market Policy Programmes, Annual report 2002)

CEDEFOP, Vocational education and training in Sweden, European Communities 1999.

CEDEFOP, The financing of vocational education and training in Sweden (Panorama), European Communities 2000. Eurostat (2003): "Continuing vocational training survey, Community outline questionnaire."

Folkbildningsrådet (Swedish National Council on Adult Education), Facts on Liberal Adult Education in Sweden, Stockholm May 2003

Government Bill 2003/2004:1: Budgetproposition för 2004. (In Swedish).

Landsorganisationen i Sverige (Swedish Trade Union Confederation – LO), Kompetensutveckling och lärande i arbetslivet (Competence development and learning in working life) 2003.

National Agency for Education, Descriptive data on childcare, schools and adult education in Sweden 2004.

OECD, Thematic Review on Adult Learning, Sweden, Country Note (November 2001). Paris.

OECD (2004): Education at a glance. OECD Indicators 2004. Paris. Statistiska Centralbyrån (Statistics Sweden), "Personalutbildning första halvåret 2003" (Staff training first half year 2003). Stockholm.

Statistiska Centralbyrån, Vuxnas lärande 2003 (Adults' Learning 2003), December 2003

Statistiska Centralbyrån: Statistisk Årsbok 2004 (Statistical Yearbook of Sweden 2004). (In Swedish with English table headings).

Websites:

Eurydice, [www.eurydice.org](http://www.eurydice.org)

National Agency for Advanced Vocational Education, [www.ky.se](http://www.ky.se)

National Agency for Flexible Learning (CFL), [www.cfl.se](http://www.cfl.se)

National Agency for School Improvement (MSU), [www.skolutveckling.se](http://www.skolutveckling.se)

National Council for Labour Market, [www.ams.se](http://www.ams.se)

Swedish Trade Union Confederation (LO), [www.lo.se](http://www.lo.se)

Swedish Council for the Social Fund, [www.esf.se](http://www.esf.se)

Swedish Ministry of Education, Culture and Research, [www.regeringen.se](http://www.regeringen.se)

Swedish National Agency for Education, [www.skolverket.se](http://www.skolverket.se)

Swedish National Board of Student Aid, [www.csn.se](http://www.csn.se)

Swedish National Council of Adult Education, [www.folkbildning.se](http://www.folkbildning.se)

Statistics Sweden, [www.scb.se](http://www.scb.se)