

CEDEFOP



European Centre for the Development of Vocational Training

PANORAMA

The financing

of vocational

education and

training in

Sweden

Financing portrait

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Foreword by

Sarah Elson-Rogers/Sven-Åge Westphalen

At the end of 1997, Cedefop launched a project to produce financing portraits of the vocational education and training (VET) systems within the individual Member States of the European Union. The portraits combine a qualitative description of the flow of funding through the VET structures, identifying the funding sources and allocation mechanisms, with quantitative data on expenditure for different training types. The reports are structured around initial vocational training, continuing vocational training and training for unemployed people. In recognition of the increasing overlap among these training types, some of the reports include an extra section on combined forms of training.

At the outset of the project, Cedefop asked the individual national authors to follow a uniform structure for the presentation of their financing training systems. This structure centred on the following issues:

- outlining the economic, political, legal and administrative background to the financing of the VET system;
- defining the different types of training according to the national context;
- identifying the funding sources (e.g. central government, regional/local government, employers, individuals, etc.);
- explaining the mechanisms for the distribution of funding;
- identifying the expenditure levels over 10 years (1986-96 or the most recently available years);
- concluding and discussing the trends and perspectives of the financing VET system.

The authors were requested, where possible, to distinguish between private/public and direct/indirect funding sources and to identify capital and revenue funding. They were also asked to provide a breakdown of expenditure according to the different sources of funding for each training type over a 10-year period.

While defining a common structure for each report allows for broad comparisons between the different systems and easier cross-referencing between the reports, it does not allow for detailed transnational comparisons. It was acknowledged at the outset of this project that creating comparable reports would not be possible for a number of reasons, including:

- Training definitions: initial vocational training, continuing vocational training and training for unemployed people means something different within individual national contexts. While creating a 'standard' definition of each training type would have facilitated comparability, it would have complicated the process of gathering and presenting data. For this reason, each author was requested to use a nationally-based definition.

- Data: there are a number of general obstacles to obtaining comparable data, for example: the lack of common definitions, different national accounting procedures and the problems of identifying expenditure where funding sources are diverse and estimates are based on surveys. More specific obstacles include the difficulty of aggregating data where funding is decentralised and estimating indirect sources of expenditure.

A number of barriers to achieving even basic common parameters arose as the work developed. Among others, these included:

- The increasing overlap between the traditional training categories. In some countries the division between the different training types is not as strict as in others. This means that some artificial divisions have had to be drawn by some of the authors, for example, between academic and vocational training. While this overlap may be, in part, the result of a general policy aim to level parity of esteem, it creates challenges in disaggregating data to identify expenditure on the vocational element. The notion of Lifelong Learning also has implications for creating more coherent training structures which include a wider range of learning activities. It is often difficult to identify and measure expenditure data on training that takes place outside of the formal structure.
- The complexity of financing training structures due to the number of different funding sources and mechanisms for financing VET. For example, levels of expenditure on indirect demand-side incentive mechanisms such as tax incentives are often difficult to identify. More fundamentally, this general complexity is enhanced in those countries where there is no national structure for training, i.e. where local governments have autonomy for financing training.
- The number of recent reforms to the financing VET system blur data comparability over time within individual Member States. The newness of many of these reforms means that there is often a lack of stringent evaluation according to efficiency, effectiveness and equity criteria.

There was no ideal way to create common criteria for the structure of this series of reports. There is a certain trade-off between attaining a common structure and reflecting the nuances of the individual national training systems. Nevertheless, this first set of portraits does serve to highlight many of the complexities involved with the financing of vocational education and training across the European Union. We hope you find the portraits informative and welcome your comments.

We would like to thank Mr Ronnie Andersson of Statistics Sweden, who prepared this portrait on the financing of vocational education and training in Sweden.

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Preface by the author

This report has been prepared by Ronnie Andersson from Statistics Sweden for the European Centre for the Development of Vocational Education and Training (Cedefop) during May 1998 to July 1999.

The scope of the financing portrait:

There is no distinct system of vocational education and training in Sweden. Rather the institutions promoting VET provision form part of a general educational philosophy stressing values like equity, integration and comprehensiveness. In Sweden, an officially recognised and commonly used definition of VET does not exist. VET may take various forms:

- initial vocational training (IVT), normally undertaken post full-time compulsory schooling age and is typically targeted at persons aged 16 to 19 years with no prior vocational qualifications;
- continuing vocational training (CVT), which targets persons already employed but who are required to train or retrain certain skills;
- training for the unemployed, which aims to qualify unemployed persons to enter the labour market;
- combined training programmes, which consist of a combination of two or more of the training types above.

The more exact training definitions in the Swedish context are provided in each of the four parts dealing with each of the training types. It should be mentioned that ISCED 97¹ contains a definition of general, pre-vocational and vocational education and training. At the moment, ISCED 97 is being implemented in Sweden and a preliminary classification according to ISCED 97 exists (Statistics Sweden, 1998b). It is this preliminary classification which is used in this report.

Methods of research:

The preparation of this portrait has primarily been carried out as desk research (see Annex 3). This research has been combined with a range of consultative processes which have been used to obtain consensus on the contents of the financial portrait among the major Swedish VET actors. The bodies consulted are: The Ministry of Education and Science, the Ministry of Labour, the National Labour Market Board, the Swedish National Council of Adult Education, the National Agency for Education, the National Agency for Higher Education, the National Board of Student Aid, the Commission on Qualified Vocational Education, the Commission for Adult Education and Training, the National

¹ See Unesco (1997).

Institute for Working Life, the Swedish Council for Work Life Research, the Swedish Federation of County Councils, the Swedish Association of Local Authorities, the National Swedish Agency for Government Employers, the Swedish Employers' Confederation, the Swedish Trade Union Confederation, the Swedish Association of Professional Associations, the Swedish Confederation of Professional Employees, the Joint Industrial Training Council, the Swedish EU Programme Office, the Swedish representatives of Cedefop's Management Board and the Cedefop documentary information network member in Sweden.

For more detailed information regarding the structure and content of different VET programmes, please see the Cedefop monograph on Sweden (Abrahamsson, 1997).

Difficulties in developing the portrait:

Statistics Sweden has found it difficult to write this report due to a missing definition and delineation of VET in Sweden and also because of lack of reliable data on financing, especially on the private sector market for CVT.

All figures in this report are from Statistics Sweden unless otherwise specified.

The EU exchange rate used in this portrait is ECU 1= SEK 8.47 (summer 1998) unless otherwise specified.

Örebro, July 1999

Ronnie Andersson

Part 1 Background information

1.1 Political and economic background

This section focuses on the economic and political climate in Sweden and its significance for the financing of vocational education and training in Sweden.

Benchmark statistics for Sweden

Sweden has a population of almost 8.9 million. The national language is Swedish. For many years, Sweden was ethnically and linguistically very homogeneous with only small groups of Finnish-speaking and Sami-speaking people in the north and northeast of the country. Today, more than 950 000 of Sweden's population are foreign born. Annex 3 provides some benchmark statistics on Sweden.

In Sweden, a large part of the population is gainfully employed in comparison with many other countries. Sweden has had the highest frequency of gainfully employed women in the world, but has now been replaced by Denmark.

The labour market in Sweden functioned without too many problems until the beginning of the 1990s. Unemployment was very low in international terms, and the idea of full employment was successfully implemented. In 1990, total employment started to fall. Between 1990 and 1993 about half a million jobs were lost. Swedish society has been characterised by a positive economic development during the last half of the 1990s. This has been reflected in increased growth but the decrease in unemployment has been limited. Youth unemployment has been a major problem during the 1990s and still is.

Table 1 Unemployment in Sweden, 1987-97

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Unemployment (thousands)	94	77	66	75	134	233	356	340	333	347	342
Unemployment ratio	2.1	1.7	1.5	1.6	3.0	5.2	8.2	8.0	7.7	8.1	8.0

Source: Statistical Yearbook of Sweden 1999: Unemployed in % of the labour force.

Table 2 Employment in Sweden, 1987-97

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Employment (thousands)	4 316	4 375	4 442	4 485	4 396	4 209	3 964	3 928	3 987	3 963	3 922
Employment frequency	81.4	82.2	82.9	83.1	81.0	77.3	72.6	71.4	72.2	71.6	70.7

Source: Statistical Yearbook of Sweden 1999: Employment frequency is defined as the number of employed persons between 16 and 64 years of age, as related to the total number of persons between 16 and 64.

The educational attainment of the Swedish population has grown rapidly during the post war period. Upper secondary education has changed from being a privilege of a minority to being the norm for most young people. A growing number is also gaining higher education. In international comparison, the educational attainment of the population is high in Sweden. Only Canada and the United States have larger rates of completion of tertiary education among the OECD Member States than Sweden. Furthermore, the rate of people with only compulsory education in Sweden is among the lowest among OECD countries (OECD, 1998b).

Educational expenditure in Sweden

According to the Swedish official statistics (Statistics Sweden, 1998d) the costs for 'formal' education in Sweden 1997 was about SEK 133 billion² (ECU 16 billion).³ Distributing it by 'education' gives the following table:

Table 3 Costs for 'formal' education in Sweden, 1997

Education	SEK billion	% of GDP ⁴
Pre-primary	9.8	0.57
Compulsory	50.9	2.93
Special education	3.4	0.18
Upper secondary	20.7	1.19
Municipal adult education	5.1	0.30
Tertiary education	30.4	1.75
Some central costs	1.3	0.07
Study grants (not loans)	11.2	0.65
Total costs	133.0	7.65

This is an underestimation of the cost for education in Sweden. The statistics do not cover all education and training. Folk high schools and study circles are not included, nor are labour market training and staff training. In the Government Bill 1998/99:1 the cost for

² 'Billion' equals 'thousand million' throughout this portrait.

³ ECU 1 = SEK 8.47.

⁴ GDP 1997 = SEK 1 739 billion.

child care and education in Sweden is given as SEK 165 billion. Also here some forms of education are missing. On the other hand all costs for child care - not only the educational part - are included. A more complete estimate for the total cost for education in Sweden is given below.

Table 4 Estimated total cost for education in Sweden, 1997

Education	Cost (million SEK, ECUs in brackets)		%	Cost per capita (SEK)
Pre-primary and child care ⁵	15 000	(1 770)	7.5	90 000
Compulsory school	51 000	(6 020)	25.5	52 400
Special education	3 400	(400)	1.7	-
Upper secondary school	20 700	(2 440)	10.4	66 700
University/university colleges	37 600	(4 440)	18.8	136 000 ⁶
Qualified vocational education	400	(47)	0.2	-
Municipal adult education	5 000	(590)	2.5	32 600
National schools for adults	60	(7)	0	-
Swedish for immigrants	700	(83)	0.4	-
Popular adult education	6 000	(710)	3.0	-
Employment training	6 200	(730)	3.1	-
Staff training	43 000	(5 080)	21.5	-
Study grants (not included above)	8 000	(940)	4.0	
Other education and training	2 000	(240)	1.0	
Total	≅200 000	(~24 000)	≅100.0	

Some small parts of the costs for education in Sweden are not included here. There is also some risk of double counting, though the amounts in this context are rather small. Thus, all things being considered, the total cost - both private and public - for education in Sweden 1997 is estimated at about **SEK 200 billion (ECU 24 billion)**, which is about 11.5% of GDP. The cost for VET in Sweden 1997 is of course a part of this total.

GDP in Sweden has grown over the past years after the decline in the beginning of the 1990s:

Table 5 GDP growth in Sweden, 1987-97 (SEK billion), 1991 prices

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP	1 379	1 410	1 444	1 464	1 447	1 427	1 395	1 442	1 498	1 517	1 544
Rates of growth	3.1	2.3	2.4	1.4	-1.1	-1.4	-2.2	3.3	3.9	1.3	1.8

Source: Statistical Yearbook of Sweden 1999. GDP in 1991 prices.

⁵ Educational part.

⁶ Research included.

The total investment in vocational education and training (VET) in Sweden has been estimated in an earlier report to be about 3.7% of GDP (Ministry of Education and Science and Ministry of Labour, 1997a). Our estimate is slightly higher 3.8% (see Table 22). Staff training (Section 3.3) and vocational education and training in upper secondary school (Section 2.2) are the most important VET systems in this respect. Therefore, this report focus on these two VET systems.

Strict monetary policy has led to falling inflation. The development of inflation during the past decade is shown in the table below:

Table 6 Inflation rate (Dec.-Dec.) and consumer price index (CPI, annual average) in Sweden, 1987-97 (1980=100)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Inflation rate (%)	5.2	6.3	6.7	10.9	8.1	2.0	4.1	2.6	2.4	0.1	1.9
CPI	167.0	176.7	188.1	207.6	227.2	232.3	243.2	248.5	254.8	256.0	257.3

Source: Statistical Yearbook of Sweden 1999 and Statistics Sweden's website, CPI.

Political climate

Sweden has been governed by Social Democrat governments since 1994. The majority of funding for VET (with the exception of staff training) has traditionally been provided by the State. During the 1990s there has been an increased focus on education and training. The notions of a learning society and lifelong learning are used frequently. Traditionally, there has been overall consensus among the different political parties, employers' organisations as well as in the labour movement as to the necessity of a well-qualified and well-trained labour force.

Popular movements and the social partners have played a significant role in the development of modern Sweden. Formal education has been developed through decisions by parliament and the government, whilst vocational education and staff training have also been influenced by the social partners. Thus, a major part of CVT 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 staff training and various forms of workplace training.

CVT is viewed by the social partners as a prerequisite for maintaining a well-qualified labour force in the face of rapid technological and industrial change. Well-educated employees are a prerequisite for adaptation and renewal. In addition, the social partners agree that almost all IVT and most of CVT (with the exception of staff training) should be publicly funded, as is still the case in Sweden today. This broad agreement and backing of VET has to do in part with the extensive representation of the social partners in the various administrative bodies especially at regional and local levels.

1.2 Legal background

This section focuses on the type of legislation for various types of training.

VET in Sweden is based on legislation both from the Ministry of Education and Science and from the Ministry of Labour.⁷ There is no specific legislation concerning VET. VET in terms of our definition will be found in different forms within the Swedish education system. The most important legal arrangements will be presented below (see also Annex 1).

The VET system is characterised by a large degree of flexibility, where the Ministry of Labour and the Ministry of Education and Science perform their control function through general targets and frameworks, rather than through formal legislation and regulation.

IVT legislation

The School Act is the legal basis for IVT in upper secondary schools. The curriculum for upper secondary schools sets out the basic values of the education, its tasks and provides goals and guidelines.

CVT legislation

The Municipal Adult Education Ordinance is the legal basis for CVT in municipal adult education. The 1991 ordinance on subsidies for popular education regulates some of the conditions for State grants to e.g. folk high schools. Some special aims of popular education are stated but there are basically no rules on how popular education should be organised nor on its content.

The qualified vocational education project is based on Government Bill 1995/96:145 on QVE and the resolution of the Swedish Parliament concerning the Bill.

The government's goals for the adult education initiative (AEI) are multidimensional. This is evident from such documents as Government Bill 1995/96:222 ('Certain measures to halve unemployment by 2000'), which presents the principles applying to AEI.

Legislation for training the unemployed

Employment training is regulated under the Employment Training Ordinance (see Annex 1 for details). Employment training is for labour market purposes and during this period educational support is provided. The National Labour Market Administration has overall responsibility for Swedish programmes in this field.

⁷ Ministry of Labour has now become part of the Ministry of Industry, Employment and Communications.

1.3 Administrative background

This section focuses on the administrative bodies which are significant in the financing of different types of training. An overview is given which shows the division of responsibilities between different training types and different administrative bodies. More elaborate descriptions of the administrative structures are given in the relevant parts of the portrait.

Local level

Sweden is divided into 21 counties (*län*) and 288 municipalities (*kommuner*). During the 1980s, public administration underwent far-reaching decentralisation of responsibilities. The field of education was by no means an exception. In 1991, this change culminated in new legislation giving the municipalities a much stronger position in the development of local school policies. Thus, municipalities have a vital role to play in the decentralised system in terms of how school policy is put into practice. The municipalities decide on how the school is to be organised and how resources are to be allocated within the framework that parliament and government have laid down. They are also responsible for following up and evaluating school activities.

National level

A characteristic feature of the Swedish administrative system is the division of tasks between ministries and central administrative agencies. The ministries are relatively small units. They are mainly concerned with preparing government bills to be submitted to parliament, issuing laws and regulations and general rules for the administrative agencies. The enforcement of laws and government decisions is entrusted to the relatively independent central administrative agencies.

Education in Sweden has traditionally been organised within the public sector. Through legislation, regulations and curricula, the State issued detailed instructions and rules for the conduct of educational activities, as well as for the spending of State grants. The education system has, however, undergone fundamental changes towards a goal and result-oriented steering system in recent years.

Overall responsibility for all education, and thus all VET, is borne by parliament and the government. With the exception of employment training, which is the responsibility of the Ministry of Labour (MOL), all VET in Sweden comes under the auspices of the Ministry of Education and Science (MOE).

Thus, the responsibility for the main types of VET are shared in the following way:

- initial vocational training in upper secondary school (MOE),
- apprenticeship (MOE/employers),
- municipal adult education (MOE),
- folk high schools (MOE),
- staff training (employers),

- qualified vocational education (MOE/employers),
- other continuing vocational education and training (training providers, trade unions, individuals),
- training for the unemployed (MOL).

The main central authority for supervision of the MOE part of VET in Sweden is the National Agency for Education. Responsible central authority for employment training is the National Labour Market Board (AMS). The folk high schools fall under the responsibility of the Swedish National Council of Adult Education (FBR) and qualified vocational education is administered by the Commission for QVE.

In simplified terms, it can be said that IVT is funded by the municipalities (with the help of State grants). CVT is funded by the municipalities (adult education), the State (employment training, QVE) and employers (staff training). Note the important role mentioned above played by the social partners, especially in staff training and other workplace training.

Study assistance is important for the educational system in Sweden including VET. The National Board of Student Aid is responsible for administration, follow-up and evaluation of financial assistance to students in post compulsory studies both in Sweden and abroad.

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 the 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. Firstly, municipalities and other regional/local bodies may now - within certain limits and in accordance with overall objectives - independently allocate their income (State grants and taxes).

Secondly, there is a trend towards letting the market regulate training supply via purchasing training from different training providers. 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.

Recently, there has been some tendency towards more government control in the education sector. For the moment, there is great concern about *equivalence* and *quality* in Swedish education and training. To obtain these goals maybe a shift towards more centralisation is coming?

Part 2 Initial vocational training (IVT)

This part of the report focuses on initial vocational training, which broadly can be defined as training undertaken post full-time compulsory schooling age. A more exact definition is provided below.

2.1 Background

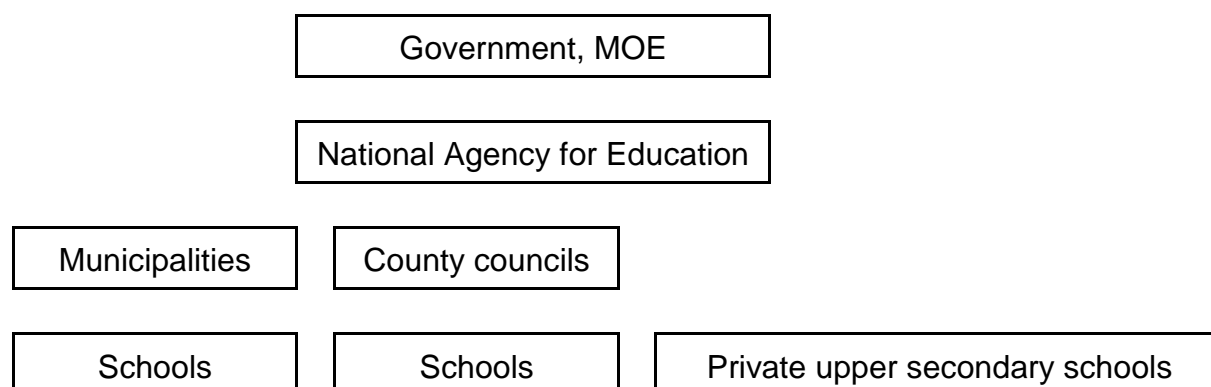
Description of the Swedish system for VET is a complicated task since there is no natural distinction between vocational training and general education. Hence, there are no separate schools for IVT within the school system. A basic idea in the Swedish education system is to narrow the gap between vocational and general education as much as possible. The implication is a comprehensive school system which does not separate pupils attending different programmes before upper secondary level. Even at upper secondary level, pupils are obliged to study a common core of subjects. Although Sweden has an apprenticeship programme at upper secondary level, this is on a very small scale. A number of measures have been taken to develop a more integrated system at upper secondary level. The most important mechanisms are the extension of all programmes to three years and the application of the concept of a core curriculum in all programmes irrespective of whether they have an academic/general or vocational focus.

2.2 Initial vocational training in upper secondary school

In principle, all IVT in Sweden is provided within the upper secondary school system and is more than 99% financed with public money. During the 1990s, upper secondary school was reformed and currently consists of 16 national programmes, 14 of which are primarily vocational oriented and 2 which prepare for further studies (also called general programmes). Most national programmes are divided into branches for the second and third year.

Students may also study in *individual programmes*, of which there are two kinds, *apprenticeship* and *other*. Other individual programmes are of remedial character and prepare for a national programme. Students who have special requirements other than those provided for in a national programme can opt to follow a *specially designed programme*. There is also the *International baccalaureate*.

Figure 1 Organisation of upper secondary school



With effect from 1 January 1993, State grants to municipalities have taken the form of a general equalisation grant. Therefore, it is not possible to quantify State grants to schools. The State grant provides a supplement to the tax revenues of each municipality and also aims at equalising differences between municipalities. State funding, however, does not determine the organisation of the school, the municipalities are at liberty to deploy grants within education as they see fit. However, if a municipality seriously disregards its obligations under the School Act, the government has a right to intervene. The municipalities are obliged to provide financial support to independent (private) upper secondary schools approved by the National Agency for Education.

Financial incentives for enterprises to invest in IVT do not exist. IVT is seen as the responsibility of the general education system.

The great majority of upper secondary studies take place in schools coming under municipal mandate (92%). Studies in agriculture, forestry, horticulture and certain health care occupations, however, take place in schools run by the county councils (5%). Private upper secondary schools (only those with State or municipal grants are included in the statistics) account for 3% of upper secondary studies.

Table 7 gives the structure of national programmes in upper secondary school classified in general and vocational programmes using the preliminary classification (Statistics Sweden, 1998b):

Table 7 Programmes and number of pupils in upper secondary school

	Gen./Voc.	No of pupils Oct. 1997
Mainly theoretical (general) programmes		139 500
Natural science	G	61 800
Social science	G	77 700
Mainly vocational programmes		142 700
Arts	V	14 900
Business and administration	V	16 300
Construction	V	6 900
Child Recreation	V	19 300
Electrical engineering	V	13 700
Energy	V	2 500
Food	V	2 200
Handicraft and trades	V	4 100
Health care	V	11 300
Hotel, restaurant and catering	V	14 100
Industry	V	8 100
Media	V	10 200
Natural resource use	V	7 000
Vehicle engineering	V	12 100
Specially designed programmes	V/G	11 600
Individual programmes		
Apprenticeship	V	15
Other (remedial programmes)	G	15 700
International baccalaureate	G	900
Total		310 000

In terms of accessibility about 150 000 pupils annually attend IVT⁸ at upper secondary schools. In relation to all pupils in upper secondary schools they represent about 50%.

⁸ There are a few differences in the classification given above from that used in the monograph by Abrahamsson, K. (1997). In that monograph, second and third grade technical and economic sub-programmes within natural and social science programmes are classified as vocational, likewise all individual and specially designed programmes. As said in the beginning of this report, the preliminary classification (Statistics Sweden, 1998b) will be followed here.

For the old educational structure in upper secondary school (early 1990s and before) there is no new classification of general and vocational so we will follow the classification used in Abrahamsson (1997), that all vocational lines and special courses according to the old educational structure for upper secondary schooling are classified as vocational.

In spite of a number of policy measures to broaden access to education for young people, youth unemployment is still a major problem on the Swedish labour market. The proportion of young persons starting work immediately after upper secondary education has been declining over time. It has become increasingly common to continue studying for a number of reasons, maybe particularly to avoid unemployment.

The transition rate from upper secondary education to tertiary education has increased significantly during the past decade. Nowadays, almost 40% of the upper secondary education graduates continue to higher education within three years. However, there is a large variation between different study programmes. The transition rate of vocationally oriented study programmes in upper secondary school is low. At the same time, the transition rate in the natural science programme exceeded 80% of the students graduating from that programme.

*Table 8 Transition rates to higher education within 1-10 years from upper secondary school, %**

	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
86/87	8	15	21	25	28	30	31	33	34	35
87/88	9	16	22	26	28	31	32	34	35	36
88/89	11	18	24	28	31	33	35	36	38	
89/90	12	22	28	32	35	37	39	41		
90/91	16	26	32	36	39	41	43			
91/92	18	28	34	37	40	42				
92/93	18	29	35	39	42					
93/94	18	30	37	41						
94/95	22	37	45							
95/96	17	30								
96/97	16									

* Note that the high transition rate 1994/95 depends on a change in upper secondary school.

At the same time as transition rates have increased, the share of school leavers having a job 'immediately' after school has declined. The labour market after compulsory school ceased to exist during the 1990s. The proportion of young persons starting work immediately after upper secondary school has declined from about 50% in 1991 to about 30% in 1996.

Workplace study schemes

In the vocationally oriented programmes, at least 15% of the student's total time takes the form of training at a workplace (APU). Only vocational courses may be transferred to a workplace. Local decisions determine which parts of these courses are to be located at a workplace. The advisory bodies for cooperation between upper secondary schools and local trade and industry, *programme councils*, are very important in planning such items as the provision of training, the purchase of equipment and the training of supervisors.

Training at a place of work requires close cooperation between the school and workplace. During this part of their education, pupils have a purely student status. Supervisors from the workplace play an important role in evaluating the performance of pupils. Through this training, pupils come into direct contact with working life and with enterprises, which may want to employ them. For the enterprises, this participation in workplace training allows them to influence the content, planning and implementation of training and also form an opinion of the individuals they may wish to see as future employees.

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 within certain branches, e.g. the building trade. In 1992, a possibility was created to integrate apprenticeship into the individual programme in upper secondary school. As mentioned above, this has been used only on a very small scale.

As a pilot project, apprenticeship systems will be introduced in 15 municipalities during 1998. The effect of the system is a prolongation of the period in upper secondary school to four years. During the third and fourth year, pupils will be apprentices at workplaces during a total of 500 hours (see Section 2.3 and 2.4 for more details, e.g. on economic compensation to the apprentices).

Costs for IVT in upper secondary schools

Operating costs for all upper secondary schools were SEK 20.7 billion in 1997 and the cost of study grants was about SEK 2.5 billion. Thus, the total cost was about SEK 23 billion. The average cost per pupil in 1997 in upper secondary school was SEK 66 700 with great variations between different programmes. Each pupil at upper secondary level is also entitled to a study grant of approximately SEK 6 500 per year.

The cost for IVT in upper secondary schools is estimated by using the number of students and the cost per study programme (National Agency for Education, 1998).

Table 9 Estimated costs for IVT in upper secondary school, current prices (million SEK, ECUs in brackets)

	Operating costs	Study grants	Total	% of GDP
1995/96	13 800 (1 630)	1 400 (165)	15 200 (1 795)	1.0
1997	12 000 (1 420)	1 200 (140)	13 200 (1 560)	0.8

The difference in costs between 1995/96 and 1997 is mostly due to the different definitions used in the monograph (Abrahamsson, 1997) and in this report concerning IVT in upper secondary schools. We have kept the figures from the monograph in the table just to show that the cost estimates are very sensitive for what you define as VET in Sweden.

2.3 Apprenticeship

Apprenticeship outside upper secondary school

Apprenticeship is not as common in Sweden as in many other European countries. Interest is, however, increasing in some branches. Creation of career paths, improving quality, increased international cooperation (especially in the building sector) and more frequent use of apprenticeship in many other European countries are mentioned as reasons for this.

In 1997, some kind of apprenticeship leading to a journeyman certificate or a master certificate existed in 74 and 118 different occupations respectively. The number of given certificates is very low, just about 1 000 per year. There exist - to the best of our knowledge - no statistics on the cost of this type of apprenticeship. It should be noted that all staff training is paid - at least partly - by the employer and is included in Swedish staff training statistics (Section 3.3).

When receiving a certificate, the applicant also receives an ID card, which in five different languages describes the applicant's vocational competence. A journeyman or master certificate is often considered more marketable than ordinary school-leaving certificates when applying for work abroad.

Apprenticeship at upper secondary school

Most education and practice taking place in different workplaces is in conjunction with studies at upper secondary school. The cost for this workplace training is included in the cost of upper secondary school (see Section 2.2).

Including apprenticeship at upper secondary school in this section is partly due to the greater emphasis that this kind of education and training is planned to get in the near future. This is due to a new form of apprenticeship training for pupils in upper secondary school that is now under development and is planned to be implemented in autumn 2000.

Some parts of education in upper secondary schools has since 1992 taken place in different workplaces according to a system called workplace located education (APU). Often practice is in the form of education time purchased by the municipalities and is of quite short duration. There are quite large differences between schools regarding the amount and quality of this type of education depending on their economic strength. Several enterprise-based secondary schools have for instance 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. Society-oriented subjects and history are therefore often not considered to be especially important. This type of upper secondary school is, however, quite well off and can therefore acquire more and better study material and technical support for their pupils than ordinary schools.

A new form of apprenticeship training for pupils in upper secondary schools is now under development and is planned to be implemented in autumn 2000 (Government Bill 1997/98:169). The government has recently established a working group in which the social partners are included. The aim of the working group is to describe and make suggestions as to how cooperation between schools and working life can be improved.

According to the government, the planned new apprenticeship system will influence future forms of education and training in many workplaces. It will facilitate recruitment to small vocational branches and SMEs will also have better possibilities to receive and train pupils. In the new system, 'core subjects' like mathematics, natural science, English and Swedish will be sandwiched with learning and practical work in different workplaces.

At present, experiments with the new apprenticeship system are being carried out in 21 upper secondary schools and in the following educational programmes: industry, vehicle, hotel and restaurant, electricity, children and recreation, handicraft, health care, business and administration and in specially composed programmes. One important goal is to create a bridge between school and working life and thus facilitate the transition of pupils from school to the labour market.

2.4 Conclusions

The majority of municipalities are positive towards the new system of apprenticeship in upper secondary schools. A common view from several different bodies is, however, the need for specifying national goals and guidelines, but with local autonomy. The Swedish Employer's Confederation (SAF), in particular, stresses the need for flexible rules and that decisions should be taken at local level. The Swedish Trade Union Confederation (LO) believes there are some risks with the new apprenticeship system. For instance, the question of economic compensation for apprentices must be solved. If the new system means that trainees are treated as pupils for four years, the ordinary agreements on the labour market will not be applicable and schools will probably feel less responsibility while at the same time many employers will be quite satisfied having access to a cheap or free labour force for which they do not have full responsibility.

In spite of a number of policy measures to broaden access to education for young people, youth unemployment is still a major problem on the Swedish labour market. Young people, especially those in their early 20s, suffered most from the unemployment boom during the first half of the 1990s. It should be noted that the labour market after compulsory school ceased to exist during the 1990s. At least upper secondary school is required for 'all' available jobs.

Thus, bridging the gap between education and work is today a much more complicated endeavour than in a low unemployment context. There are fewer direct bridges from education to work. Employment contracts are increasingly of a temporary character and

the individual's occupational career is often preceded by a mixture of work study schemes, short job contracts, unemployment and further studies. In practice, this means that the school to work transition period is extended. In this situation a new system for apprenticeship seems worth trying.

As seen above, the reformed upper secondary school means that IVT in upper secondary school contains more general subjects than before and also a broader knowledge of vocational subjects. This means that a student who has gone through the new form of IVT in upper secondary school is more of a generalist than a specialist. Specialisation is regarded to be a matter for the future employer. IVT should be seen as the first step in a process of lifelong learning.

Part 3 Continuing vocational training (CVT)

3.1 Background

Since the 1960s, continuing vocational training (CVT) has played a central role in overall Swedish labour market policy. Sweden has a long tradition for offering CVT and for providing State support for participants. It is regarded to be of crucial importance that the labour force possesses the necessary general and vocational qualifications to ensure a flexible and competitive labour market. Education is regarded as a continuous, lifelong process.

Sweden has also a long tradition for deep involvement by the social partners in developing and implementing policy in the area of CVT.

CVT constitutes a part of the overall area of adult education. Adult education is characterised by a great variety in the type of educational offers, suppliers and financing.

In this paper⁹ the following are classified as CVT:

- municipal adult education (vocational part) (see 3.2)
- folk high schools (vocational part) (see 3.3)
- staff training (see 3.4)
- qualified vocational education (QVE) (see 3.5)
- other continuing vocational education and training (see 3.6).

Total levels of funding of CVT in Sweden

The costs for each type of CVT is given in Sections 3.2 to 3.6. Here just a summary is given:

Table 10 Estimated costs for CVT in Sweden, 1997 (million SEK, ECUs in brackets)

	Cost		% of GDP ¹⁰
Municipal adult education (vocational part)	1 100	(130)	0.06%
Folk high schools (vocational part)	370	(44)	0.02%
Staff training	43 000	(5 080)	2.47%
Qualified vocational education (QVE)	190	(22)	0.02%
Other continuing vocational education and training	100	(12)	0.00%
Total	~45 000	(~5 300)	~2.6%

⁹ Normally labour market training is included in CVT, but in this report labour market training has a part of its own (Part 4).

¹⁰ GDP 1997 = SEK 1 739 billion.

Financing distribution mechanisms for continuing vocational training

Almost all CVT in Sweden is financed with public money with the exception of staff training. The flow of money is different in different forms of CVT. (see Section 3.2 to 3.6).

Incentives for enterprise investment in CVT

A general and jointly shared attitude is that public investments in CVT are necessary to keep the labour force up to date and to develop their skills. There are many financial incentives for enterprises to invest in CVT, mainly publicly financed provisions for vocational training courses. Municipal adult education is provided free of charge with study grants paid to participants by the State.

Wage costs for the temporary employee within the temporary replacement scheme entitle employers to a tax reduction to meet the cost of the training given (see Section 5.3 for more details). There is no other special tax policy concerning CVT for enterprises.

Individual incentives for investment in CVT

All IVT in Sweden is traditionally free of charge for participants. The same conditions hold for CVT in adult education.

To be able to afford living costs during studies, there are possibilities for individuals participating in CVT to get study assistance (financed by the State).

Individual incentives for participating in CVT are to a large extent determined by the new labour market context and particularly motivation to avoid unemployment. When education and training increasingly is becoming a necessary tool to cope with new skill demands and a more efficient and flexible work organisation, it seems reasonable that this also has an impact on the individual's study motivation and incentives for learning.

Conclusions

Publicly financed adult education plays an important role in Sweden, because the political level has been giving 'lifelong learning' an even higher priority. Much of the public resources for adult education is for the moment put into general education, e.g. the adult education initiative programme, and not into CVT. The aim is to raise the educational level of the Swedish population.

Figures show that employers finance most of CVT (staff training) in Sweden. The costs for staff training is about 95% of the total cost for CVT. It should be noted that more than half of staff training takes place in the public sector. Staff training is the dominating part of CVT and that is why Section 3.3 on staff training is so detailed compared to other sections in this paper.

Since the social partners are involved at different levels in CVT, they play an important role as well.

3.2 Municipal adult education (vocational part)

Municipal adult education, for persons over 20 years of age, has existed since 1968. It has developed out of non-formal popular adult education, from evening classes and correspondence education. Popular education was the dominating forum in which adults pursued education up to the late 1960s. Increasing demand for competence in the labour market and for higher educational qualifications providing access to further training started to become more important and this was also the main reason for adult education for competence (*komvux*) being separated from popular nonformal education. As of the school year 1992/93, it has included basic adult education, upper secondary adult education and supplementary (post-secondary) education for adults.

Studies within municipal adult education lead to formal qualifications in individual subjects or to the equivalent of a complete certificate from the compulsory school and/or the upper secondary school. Education is organised in the form of separate courses, which should be arranged in such a way that students can combine studies with employment. Students are free to choose their own study programme and they can also combine studies at a basic and upper secondary level. There are, in principle, no entrance requirements or leaving examinations.

During 1997, the adult education initiative started within municipal adult education. This meant a large increase in the number of pupils compared to 1996. The total number of students (FTE) was 113 000 in 1996 and 154 000 in 1997. This was an increase of 37%. It is interesting to note that although municipal adult education is expanding, there has been a considerable drop in vocational courses in supplementary education. On the other hand, there has been an increase in vocational courses in upper secondary adult education.

Municipal adult education is almost totally publicly financed. The operating costs for municipal adult education was SEK 5 billion in 1997, and the costs for study grants was about SEK 4.5 billion. Thus, the total cost was about SEK 9.5 billion. The cost per pupil (FTE) 1997 was SEK 32 600, study grants not included. The cost was more than twice as high for adult education under county councils (SEK 75 400) as under municipalities (SEK 30 900). It was programmes in agriculture that contributed most to the high costs for adult education under county councils.

As in upper secondary school, there is no sharp borderline between vocational and general education in municipal adult education.

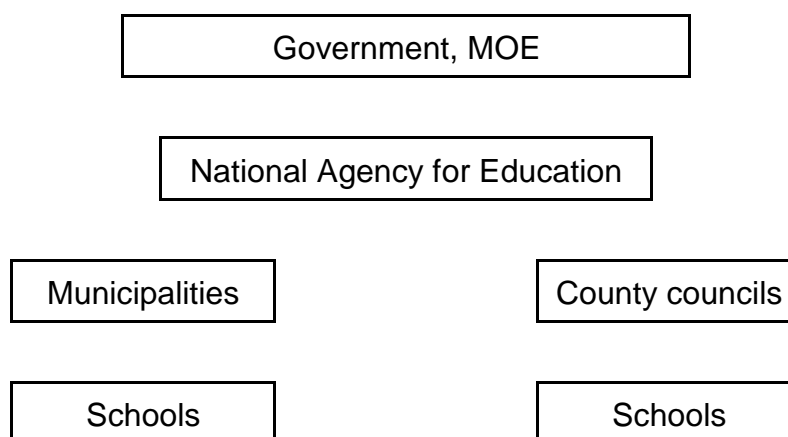
To calculate the costs of CVT in municipal adult education, we have used an estimated average per student (FTE) and then multiplied it with the estimated number of VET students within municipal adult education.

Table 11 Estimated cost for CVT in municipal adult education, 1995 and 1997
(million SEK, ECUs in brackets)

	Costs		Study grants		Total	
1995	500	(59)	400	(47)	900	(106)
1997	600	(71)	500	(59)	1 100	(130)

The estimated costs for 1995 are taken from the monograph Abrahamsson (1997).

Figure 2 Organisation of municipal adult education



With effect from 1 January 1993, State grants to municipalities took the form of a general equalisation grant. The State grant provides a supplement to the tax revenues of each municipality and also aims at equalising differences between municipalities. State funding, however, does not determine the organisation of the school; the municipalities are at liberty to deploy grants within education as they see fit. However, if a municipality seriously disregards its obligations under the School Act, the government has a right to intervene.

The great majority of studies in municipal adult education take place in schools coming under municipal mandate (96%). Studies in agriculture, forestry, horticulture and certain health care occupations, however, take place in schools run by the county councils (4%).

3.3 Folk high schools (vocational part)

The history of folk high schools stretches back to the turn of the last century. Political and social revolutions in Europe made people realise that they could truly influence their own future. But if people were going to have increased power, they would also have to obtain knowledge and education. There were elementary schools of course, but there was also much dissatisfaction regarding the educational activities they offered ordinary people.

The first folk high schools in Sweden were established in 1868 and today there are 147 in the country. Despite being separate, folk high schools are now a popular, important and established part of the Swedish education system. 99 of the schools are run by various popular movements, organisations and associations (NGOs), whilst the remaining 48 are run by county councils or municipalities.

A characteristic of the Swedish folk high schools is, among other things, their freedom to develop the content and direction of their own courses. This means that they diverge from ordinary schools in many ways. There is no centrally established, standard curriculum for folk high schools, each school makes its own decisions regarding teaching plans within the limits set by a special ordinance.

The overall object of the Swedish folk high school is to give general civic education. Each year about 200 000 students take part in folk high school courses. 40 000 of these students attend the longer courses, and the rest take part in short courses. Folk high schools receive financial support from the State which is their major financial source. A certain interest has been directed towards groups with special education needs, e.g. people with limited basic education or with various disabilities and immigrants. Sometimes the government awards special grants for extra educational places adapted to ad hoc needs on the labour market. Folk high schools also arrange different kinds of education on commission.

The minimum age for admission to general courses is 18 years. There is no upper age limit. An important part in many of the folk high schools is the boarding element. Studying and living at school creates a sense of community, gives possibilities of close companionship and the chance to exchange views during free time.

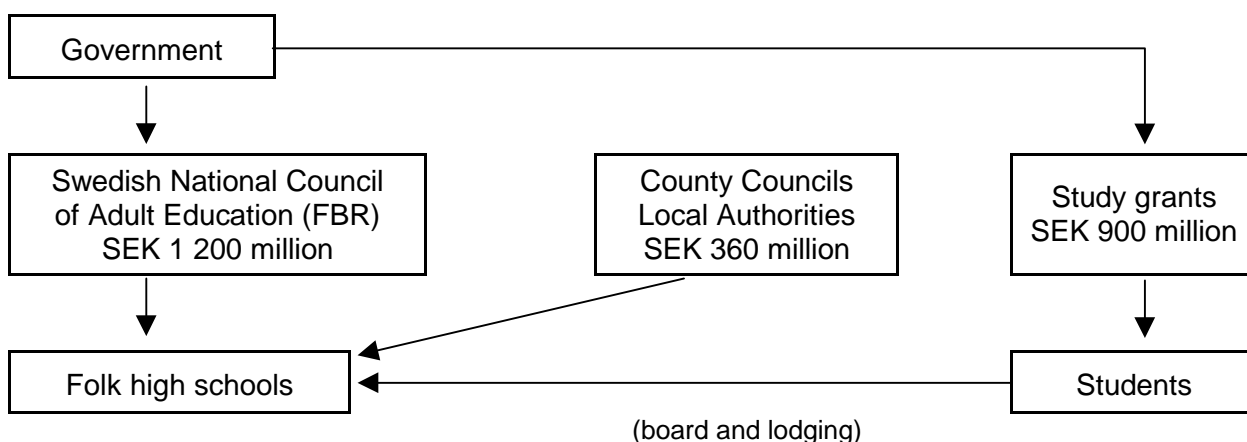
There are many courses to choose from, varying from a couple of days to a couple of years. All folk high schools give long **general courses**. They are suitable for those who have not completed secondary education or for those who want to go on to further education. The course content covers a broad spectra of subjects, with social studies, language and science as the main fields. In addition to general subjects, the student may also choose an optional special course such as computing, music, sport, art, etc. On certain conditions, general courses may be equated with upper secondary school, which means that these courses may qualify for higher education at university/university college. All general courses in folk high schools are classified as non-vocational in the preliminary classification of Swedish education by ISCED 97.

The majority of folk high schools also offer a wide range of long **special courses**, such as aesthetic courses (art and design, painting, weaving, etc.), music, journalism, business economics and studies on developing countries. Some schools provide vocational training for various leader categories, e.g. youth- and recreational leaders and drama leaders. About 75% of special courses are considered vocational (CVT) according to the classification mentioned above.

The variety of **short courses** (1-14 days), mostly during the summer, is also large - music, art and design and creative writing are just a few examples. All short courses are considered as non-vocational. The same goes for the other part of Swedish popular education, **adult study associations**. Their study circles, etc., are also classified as nonvocational education.

All tuition is free of charge but students pay their own board and lodging. Board and lodging costs about SEK 3 500 per month and students can apply for a study grant from the government to cover part of the costs.

Figure 3 The flow of financing folk high schools



Source: Swedish National Council of Adult Education.

The cost of the vocational part of the folk high school is estimated at 75% of the cost of the long special courses. Calculated in this way, the total cost for CVT in Swedish folk high schools is estimated at about SEK 370 million (ECU 44 million) (including study grants) for 1997.

Debate:

There is an almost national consensus in Sweden concerning the different kinds of popular education. A general opinion is also that popular education must be characterised by free seeking of knowledge and that most of the different activities should be free from general rules and demands from authorities.

Debate within different folk high schools often concerns pedagogical issues, how to profile a school or how to cope with the delicate balance of being a school form with clear differences from other forms of school. The problem of not being able in general to give certificates with marks is also something that is often discussed.

Traditionally, there have been quite distinct profiles for vocational and popular adult education. The role of popular education is to enhance the individual's personal development, to strengthen democracy and to support cultural development, while vocational education promoted more occupationally defined goals. During the early 1990s, new resources were allocated to popular adult education to provide new courses and alternative horizons for adults who were unemployed or temporarily redundant. This background justifies the inclusion of a part of popular adult education in a report on CVT in Sweden.

3.4 Staff training

Introduction

Significant resources are allocated to staff training every year. The need to study the costs of staff training has increased in tandem with Sweden's membership of the EU. EU is currently engaged in the collection of statistics on staff training and the cost thereof. In Sweden, collection of statistics on staff training has been carried out since 1986. Statistics Sweden's surveys do not include data on costs of staff training. Instead Statistics Sweden has developed a method for estimating these costs by template calculations.

The question of how these costs are to be calculated is of particular interest, in that the methodology in measuring staff training differs between Statistics Sweden and the CVTS¹¹ carried out by EU. In the CVTS, enterprises were approached to collect data, whilst in the Statistics Sweden survey, the data collected are obtained from interviews with people via a SLFS supplement.¹²

¹¹ CVTS= continuing vocational training survey.

¹² SLFS= Swedish labour force survey (In Swedish AKU).

In spring 1995, Statistics Sweden started a project with the aim of designing a method for estimating the costs of staff training. The project included the task of investigating whether a possible method would be to calculate the costs of staff training within the framework of additional issues within the labour force survey (AKU).¹³

By generating a cost standard it is possible to use the information in an SLFS supplement. The result of the work shows that the method of estimating the costs on the basis of supplementary questions to SLFS is beneficial with respect to both quality and cost. The project cannot, however, be considered to be completed. The cost standard needs to be adjusted and developed to meet future requirements.

In this chapter, the calculations of the costs for staff training in 1996 are presented. These calculations relate to the first half-year 1996. The object of the report is to provide an outline of the costs and the assumptions that have been made. For a more detailed description of the method, specific types of cost and assumptions, please see the method report (Statistics Sweden, Bf 1995).

It should be noted that the Swedish staff training statistics include both public and private sectors.

Some results on staff training 1996

During the first half-year of 1996 there were a little more than 4 million gainfully employed in Sweden. Of those employed just over 1.6 million persons (40%) took part in staff training according to Statistics Sweden's definition (see page 66). On average, those participating took part in 6.1 days' staff training per person and per half year. This is about 2.6% of the working time or just more than one hour per week. The total number of training days amounted to about 19.5 million days when doubled to refer to one year. This corresponds to about 75 000 FTE study places (SOU 1998:51, page 106).

In the table below, all course places during the first half-year 1996 are distributed by subject content of the courses. About one fifth were computing courses. Courses on 'working life' were also common (16%). Only 2% of all courses concerned language courses. Most of the needed knowledge in different languages in Sweden is obtained by studies in the formal education system or through participation in study circles in leisure time.

¹³ AKU is the Swedish labour force survey. This is carried out every month in the form of an interview-based survey. The survey is based on interviews with 17 000 people aged between 16 and 64. From 1995, on two of these occasions, supplementary questions on staff training are also included. This presently takes place at the end of June and December every year. During 1986 to 1994 (except 1988 and 1991 when no measurements were done) supplementary questions were asked only in June each year.

Table 12 Subjects within staff training, first half-year 1996

Course content	%
Behavioural science, humanities	9
Aesthetic subjects	1
Business economics, retail trade and office	11
Mathematics, natural science	2
Medicine, health care	10
Working life	16
Social science	7
Languages	2
Computing courses	19
Technology	11
Outdoor life, domestic science, social service	3
Courses referring to more than one subject group	6
Unknown	3
Total	100

Most staff training (about two thirds) is given inside the enterprise or organisation. It is unevenly spread within the workforce. Persons with higher education get more than people with lower education, with white-collar workers, full time employees, people with permanent employment getting more than other groups. The percentage of women participating in staff training is somewhat higher than for men. According to OECD (1998), smaller enterprises in Sweden (fewer than 100 employees) involve just as many of their staff in enterprise-based training as do medium-sized and larger enterprises, indicating the absence of the 'training gap' often found in other countries. Results from Statistics Sweden's survey 1998 do not support this (Statistics Sweden, SM 1998a). This survey shows that personnel in large enterprises (more than 250 employees) get more staff training than personnel in small enterprises. Furthermore, the difference is quite large.

There are large differences in the participation rates between different sectors and branches of the economy. In the public sector around 50%, in the private sector around 35% and among self-employed less than 20% each half year participate in staff training. Regionally differences in participation rates are small.

Table 13 Estimated number of participants and number of training days of staff training, first half-year 1987, 1994, 1995, 1996 and 1997 (millions)

	1987	1994	1995	1996	1997
No of participants	1.15	1.55	1.70	1.61	1.51
No of training days	6.5	10.4	11.4	9.8	9.7

Costs

It should be emphasised that vocational education and training in Sweden embodies a division of responsibilities that leaves the public sector as the main provider of training for the unemployed and enterprises as the provider of training services for their employees.

Table 14 Estimated costs of staff training for the first half-years 1987, 1994, 1995 and 1996 (million SEK)¹⁴

Type of cost	1987	1994	1995	1996
Labour	4 372	11 544	12 355	11 614
Direct cost of which:	7 251	11 190	12 551	10 940
Tuition	3 728	5 669	6 240	5 353
Accommodation	1 408	1 941	2 295	2 051
Premises	792	1 413	1 555	1 334
Administration	725	1 119	1 220	1 094
Material	345	613	725	648
Travel	207	353	419	374
Food	46	82	97	86
Total cost	11 623	22 734	24 906	22 554

For the first half-year 1996, the total costs for staff training amounted to just over SEK 22.5 billion. Just over half (around SEK 11.6 billion) consisted of labour costs. One quarter (around SEK 5.4 billion) of the total consisted of costs for teachers' tuition and preparation time. The accommodation cost of just over SEK 2 billion is the third largest type of cost. The categories for premises and administration each exceeded a value of SEK 1 billion (SEK 1.3 billion and SEK 1.1 billion, respectively). Material, travel and food costs together amounted to about SEK 1 billion.

It has been argued that labour costs should not be included as this is normally not done in other forms of education and training. Persons in other kinds of education and training could, at least in theory, be working instead of studying. On the other hand, the situation is different in staff training; the labour cost for the enterprise is more evident. From the enterprise's perspective, labour cost is a cost and should therefore, as we see it, be included in calculating staff training costs.

Statistics Sweden's measurements of staff training show that there are almost no differences in the amount of staff training given in the first and second half-year, so to arrive at the yearly cost, the figures given above are doubled. At the same time, figures are rounded off to an even SEK 100 million.

¹⁴ The direct costs 1987, 1994, 1995 and 1996 were calculated using the 1994 assumptions and are therefore in 1994 prices. Labour costs are calculated using the wage cost for the respective year.

Table 15 Estimated costs for staff training for 1987, 1994, 1995 and 1996 (million SEK)

Cost	1987	1994	1995	1996
Labour(current prices)	8 700	23 100	24 700	23 200
Direct(1994 prices)	14 500	22 400	25 100	21 900
Total	23 200	45 500	49 800	45 100
Consumer price index (1980=100)	167.0	248.5	254.8	256.0

Finally, we wanted the figures in fixed prices 1996 and also in ECU. Labour cost has been calculated using the wage cost for the respective year and has been transformed to 1996 prices using the Swedish consumer price index (KPI). The direct costs have been transformed from 1994 prices to 1996 prices also by using KPI.

Table 16 Estimated costs for staff training for 1987, 1994, 1995 and 1996 (fixed prices 1996)

	1987		1994		1995		1996	
	million SEK	million ECU ¹⁵	million SEK	million ECU	million SEK	million ECU	million SEK	million ECU
Labour cost	13 400	1 570	23 800	2 790	24 800	2 910	23 300	2 730
Direct cost	14 900	1 750	23 100	2 710	25 900	3 040	22 500	2 650
Total	28 300	3 320	46 900	5 500	50 700	5 950	45 800	5 380

To the best of our knowledge this is the best available estimate of staff training costs in Sweden 1996: SEK 45.8 billion (2.7% of GDP). It should be noted that estimating staff training costs is very difficult. First, it must be remembered that we can only measure part of all the competence development going on in the workforce (see page 66). Second, given the volume of staff training in participants and training days, a lot of assumptions on different costs have to be made. As a comparison, the total cost for formal education in Sweden is estimated at SEK 133 billion 1997 (Statistics Sweden, 1998d). In the Swedish State budget for 1998 (Government Bill 1997/98:1), the cost for education and child care 1995/96 is given as SEK 151 billion (staff training and employment training -AMU- not included). The corresponding figure for 1997 is SEK 165 billion (Government Bill 1998/99:1).

Assuming that the staff training cost is proportional to the number of training days given in different sectors of the labour market, the distribution public-private financing is about 52-48 in 1996. In another report (Ministry of Education and Science and Ministry of Labour, 1997b, p. 30), the corresponding figures for 1994 are estimated at 55-45. The 52% public financing of staff training may be divided into:

¹⁵ The exchange rate used ECU 1 = SEK 8.52 (average exchange rate 1996).

- Government (State) 15%
- Municipality 26%
- County 11%.

Staff training is, by definition, financed by employers. It is also possible to get subsidies from EU (Swedish EU Programme Office, 1997). There are today -1998- no special tax policy arrangements for enterprises in connection with staff training.

As there has been a slight decrease in the volume of staff training between 1996 and 1997 (see Table 13) the cost for staff training in Sweden 1997 is estimated to be **SEK 43 billion** (1997 prices) or **ECU 5 080 million**. 1997 is the first year for which we have calculated the whole year cost by template calculations, and not just doubled the cost for the first six months (Statistics Sweden, 1999a).

Types of costs

Cost template

A theoretical basis for a cost template can be found in the human capital theory which concerns, *inter alia*, skill training in workplaces. Some of the theories presented by Gary Becker (Becker, 1993) are particularly interesting when calculating staff training costs. The basic principles of Becker's theories are only presented superficially here. Enterprises do not invest in training for their staff if it is not expected to yield a future return at least equal to the investment cost. Costs arise in connection with staff training in the form both of an alternative cost and of direct costs. The alternative cost arises as a result of staff spending their time on staff training instead of production. The alternative cost is equal to the labour cost, something which is evident in the fact that the enterprise can choose to employ temporary staff to avoid falls in production. The direct cost can be broken down into different kinds of costs which arise in connection with staff training, such as the cost of premises, teachers, material, etc.

The costs for staff training can be divided into two parts, labour costs and direct costs. Assumptions in connection with the calculation of the type of cost will be reported in outline. Note that the amounts in SEK given in the section about direct costs are in 1994 prices.

Labour costs

The labour cost or the alternative cost arises in connection with personnel taking part in staff training instead of production. In simple terms, the cost can be said to constitute what it costs to replace personnel in training with other personnel so that production can remain constant. In other words, the labour cost is equal to the wage cost for participants in staff training.

The labour cost is calculated by multiplying the number of hours the person employed has taken part in staff training by the average hourly wage. The employer's contribution is then added to the wage total.

Direct costs

Direct costs consist of several types of cost. What they have in common is that they arise in connection with staff training taking place. To estimate these direct costs, a number of assumptions have to be made. Two important factors which form the basis of many of the calculations are the numbers attending external or internal courses and the average number of those participating in staff training courses. The basis for the definition of internal/external courses is that internal courses are held on the enterprise's own premises and external courses utilise rented premises.

Internal and external training

In connection with the calculations it has been assumed that the number of internal course days constitutes 35% and the number of internal course places constitutes 45% of the total number of study places.

Group size

In connection with internal training the group size has been assumed to be on average eight persons and in connection with external training 12 persons. These assumptions have been verified in connection with the 1995 study of staff training where respondents were asked to state how many persons attended the course.

Tuition cost

The number of hours of preparation per hour of tuition has been assumed to be one hour. The average hourly cost for a teacher is estimated at SEK 350 in the standard.

Cost of premises

Premises costs have been assumed to differ between courses held on the enterprise's own premises and courses which make use of rented premises. The cost of internal premises has been assumed to be SEK 400 and for external premises SEK 2 200 per day.

Travel cost

According to the standard, 45% of course participants have travelled in connection with staff training. Of the study-day participants, it has been assumed that 30% take part in a study day that involved travel. With subsistence, return travel has been calculated to cost SEK 400.

Cost of accommodation

The standard cost for overnight accommodation for one person is SEK1 000 . The standard assumes that one quarter of the course participants stay overnight in connection with personnel training. The result for 1995 personnel training statistics showed that one person has an average of 3.8 nights of accommodation. This result has been used in the standard for 1994 personnel training costs. The number of nights of accommodation must not exceed 120 nights during the first half-year.

Cost of food

One fifth of all study places have been assumed to involve consumption of food. The cost of food is estimated at SEK 200 a day.

Cost of material

The cost of material has been assumed to be SEK 300 per course place.

Administration cost

According to the standard, the administration cost constitutes 10% of the direct costs.

Views on staff training in Sweden

OECD has the following comments on staff training in Sweden (OECD, 1998): 'Staff training is one of the major parameters by which enterprises adapt to changes in their economic environment. In Sweden, this parameter is of larger significance than in most other countries insofar as enterprises in Sweden are subject to a rather strict employment protection and industrial relations legislation, limiting their possibility to adjust their workforce to changes in the overall level and composition of demand on their products. Wage bargaining mainly takes place at the industry level between organisations of employees and employers, would appear to give comparatively little leeway to enterprises to adjust wage rates to adverse developments in revenues. Indeed, this framework was deliberately set up to provide enterprises with incentives to upgrade the qualifications of their workers, so as to improve versatility over the longer run and to occupy them with in-plant training in time of slack.'

The allocation of training resources within enterprises may still be rather inefficient, and would benefit from a decentralisation of wage bargaining to allow for wage contracts that reward long-term employer-employee commitments. This would appear to be a more efficient way of promoting such commitments than through employment protection and industrial relations legislation which only serve to prolong imbalances in the labour market.'

Eurostat writes the following about staff training (Eurostat, 1998): 'Skill development by CVT in enterprises is seen as a critical factor in increasing economic performance and competitiveness as well as employment and social security. The investment in human resources by enterprises reflects therefore also their part to resolve labour market and employment problems. Measures of investment in human resources are becoming more and more important as indicators of the present and future achievement of enterprises and the economic and social conditions as a whole.'

The information on CVT is indispensable to assess the qualification level of the workforce, the possible discrepancies between skills supply and demand, regarding occupations, education levels or specific groups that are most affected, and the cost that originates both for the enterprise and the State. Consequently, information is vital to establish

policies and strategies with a view to adapting human resources to changes in the structure of production and service processes as well as of technologies in the different sectors of economic activity.'

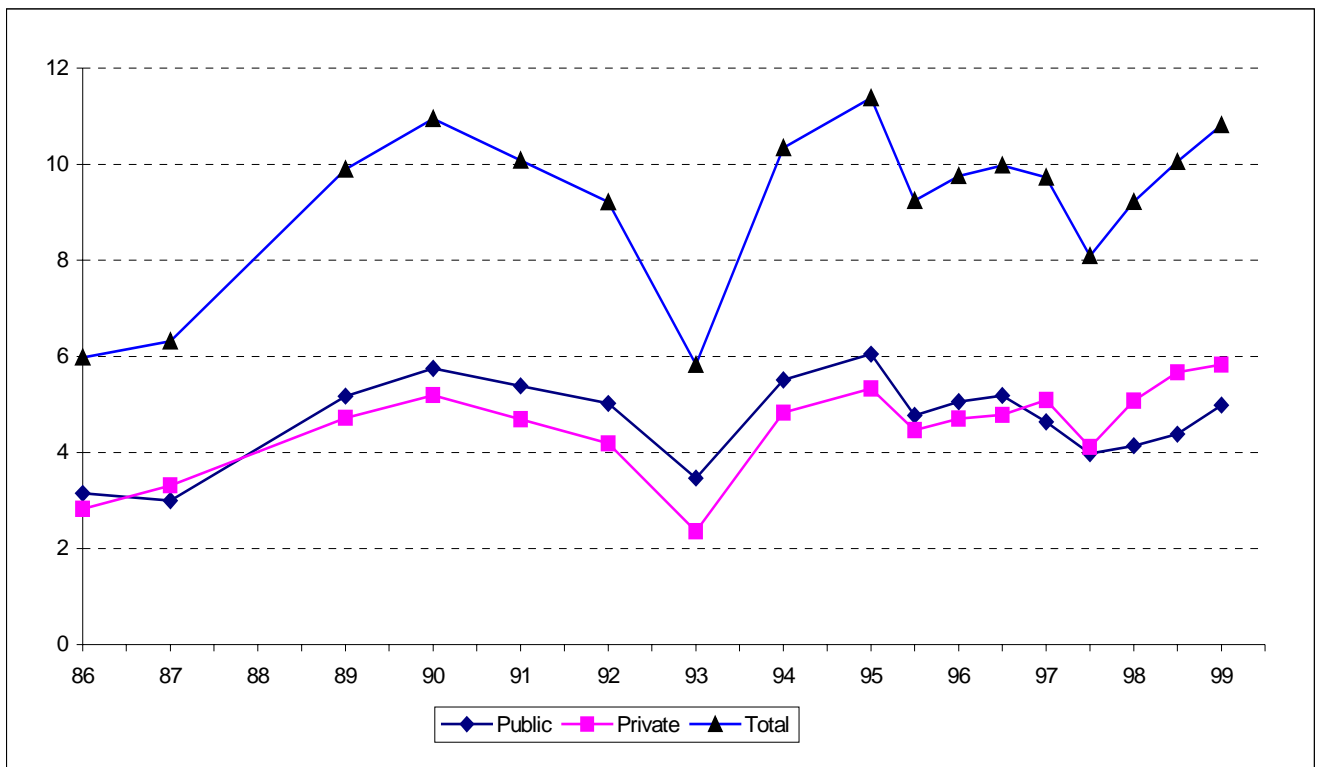
A special group on competence development in working life appointed by the Swedish government with representatives of the social partners has recently presented a proposal for improved staff education and training. The reform means that employer fees will be reduced for enterprises that have agreed with employee organisations to improve the competence of their staff. The working group has also proposed that small- and medium-sized enterprises (SMEs) should be able to put aside money in funds to be used for staff training during times of depression. It is also proposed that individuals should have the possibility to put aside money in special education accounts for their further education. The aim of the proposals is that all employees in the labour market should be able to participate in continuing vocational education and training and thereby be able to cope better with increased demands and changes in working life. The working group proposals have not yet been implemented. The main reason is that the financial issues are not yet solved. The cost is estimated at about SEK 4 billion per year. The different parties in the labour market, however, agree on the proposals and the importance of implementation of the reform.

The total labour cost for one year in Sweden is about SEK 750 billion. It is sometimes said that the workforce needs to devote 10% of its working time to competence development (at a cost of about SEK 75 billion) due to the fast changing labour market. Estimates (guesses) of the total cost for staff training (labour costs included) in Sweden varies from SEK 25 to 75 billion. Our estimate given earlier of about SEK 43 billion (2.5% of GDP) does not seem unreasonable and is most probably the best available estimate of the staff training costs in Sweden 1997.

Debate

As said before, there is a consensus in Sweden about the importance of staff training. However, statistics do not show a steady increase in the volume of staff training (see Table 13). Then the question has been asked: Is the importance of staff training just words and no action?

Figure 4 Staff training days per half-year, 1986-98 (million days)



3.5 Qualified vocational education (QVE)

Since autumn 1996, a pilot project involving qualified vocational education has been carried out in Sweden. QVE is a new form of post-secondary education in which one third of the time is based on advanced application of theoretical knowledge at a workplace. What this involves is not the traditional traineeship period, but active workplace learning and problem-solving in an overall educational context. Courses are based on close cooperation between enterprises and various course providers (upper secondary school, municipal adult education, higher education, training companies). They are open to those coming directly from upper secondary school and to people who are already gainfully employed but wish to develop their skills within a defined area.

Today, the employment market demands skilled labour. To be attractive on the labour market, a person must have not only traditional knowledge but also wide-ranging proficiency. This includes flexibility, social skills, a capacity to see both the overall picture and processes, and an ability to solve production problems in an activity. There are also areas where specialist know-how is currently in short supply. In several sectors, a new form of education closely linked to the employment market is therefore called for. Although the ranges of courses at post-secondary level is very broad in Sweden, in many areas there is a lack of education with strong elements of workplace learning.

The purpose of the QVE pilot project is to compile experience relating to new courses, educational forms and course providers. Concurrently with the project, there is an opportunity to investigate the interest in this type of vocational education on the part of the employment market and the students involved.

The education is post-secondary, in the sense that completed upper secondary education or equivalent knowledge is required for eligibility. The student is entitled to study grants according to current regulations for higher education. The courses should confer at least 40 'points' (i.e. comprise 40 weeks' full-time study). A course consisting of 80 points or more will culminate in an QVE certificate or diploma.

Workplace learning is emphasised in QVE. For one third of the course, students will be occupied at workplaces; training their analytical ability, applying comprehensive and system approaches, and assuming responsibility. For this to work properly, advanced supervision must be available. Another requirement is for the workplace itself to be so organised as to make learning feasible. Although the aim of training at workplaces is to impart familiarity with an occupation or vocational area, it must not be so narrow as to be in the nature of in-house company training.

A course provider applying for permission from the commission to arrange QVE must have an overall syllabus for the education and a course syllabus in which objectives are defined. Since the workplace training part of QVE is so important, active participation of employers in designing the courses is a requirement. Labour market representatives are therefore also required to make up a majority in the management group for a course. Enterprises pay the expenses of the workplace training part of the education. The education providers comprise of:

- Municipalities 50%
- Private training companies 30%
- Higher education institutes 20%.

Courses in the following areas are popular: information technology, manufacturing/product development, economics and tourism/restaurants.

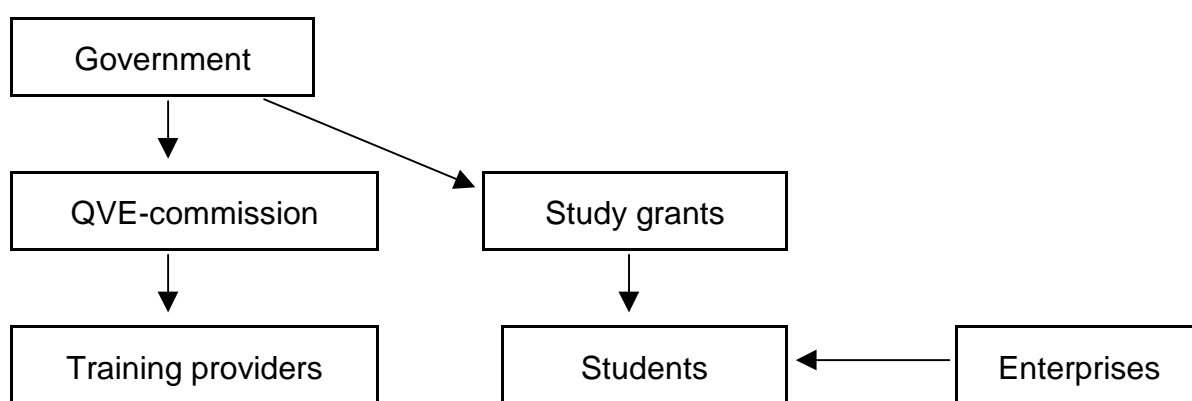
The Commission on Qualified Vocational Education has been directed by the government to run the QVE pilot project. This remit is based on the Government Bill 1995/96:145 on qualified vocational education and the resolution of the *Riksdag* (Swedish parliament) concerning the Bill. The commission comprises representatives of some political parties, labour-market organisations, municipalities and higher education institutes. To assist it, the commission has a central office.

When the pilot project started, there were no restrictions in which areas QVE was allowed. In 1998, the government gave the commission an assignment to concentrate QVE courses on occupational areas lacking skilled labour and thus contribute to avoid 'bottlenecks' in the labour market.

On the basis of the experience gained, the commission is to draft a proposal for how courses of this kind can be incorporated into the educational system. Based on the experiences, the government intends to decide on the future development of QVE.

QVE is still a pilot project but a rather fast growing one. It started in autumn 1996, had 2 000 FTE students in 1997 and in 1999 it will reach the level of 12 000 FTE. The cost for the government was about SEK 100 million in 1997 (approximately SEK 50 000/student and year). The costs for study grants can be estimated to SEK 40 million in 1997. To this should be added the cost for enterprises of taking care of the workplaced education (one third of the training) about SEK 50 million for 1997.¹⁶

Figure 5 The flow of financing QVE



As seen above the total cost for QVE in 1997 was about SEK 190 million (ECU 22 million).

3.6 Other continuing vocational education and training

CVT activities described in this section are often described as belonging to non-formal learning activities. The training providers we talk about often provide courses in which different groups of people participate in leisure time. Usually the participants themselves bear all costs for the training. Some of these courses entitle participants to study grants from the government. There are a lot of different private training providers (education enterprises) in Sweden. Educational programmes in many different fields of education are given, e.g. IT, economics, law, management and arts.

There are no recent and reliable estimates on how much Swedish households spend on education. In the beginning of the 1990s, a household expenditure survey estimated the costs for education (books not included) to be SEK 200 million. Only a rather small part of this is CVT, so we will assume that the household costs for CVT is negligible and estimate it to be about SEK 100 million (ECU 12 million). The cost enterprises/organisations pay for

¹⁶ Source for the statistics: the commission on QVE.

staff training to private providers is of course included in the cost of staff training (see Section 3.3).

Sweden's employee organisations, the Swedish Trade Union Confederation (LO), the Swedish Confederation of Professional Employees (TCO) and the Swedish Association of Professional Associations (SACO), have extensive study programmes of their own. These are designed to give union members a solid background in union affairs and other social areas. They also supply trained union officials at local, regional and national levels. Most courses are residential and last one or two weeks, but some last up to six months. There are no government subsidies for these programmes. Reliable estimates of the costs for trade unions' CVT are not available. Some of these costs are probably included in the costs for staff training (Section 3.3).

There are also various federations of employers and different federations/ organisations of employees which have together or individually created institutes for pursuing and providing education.

Part 4 Training for the unemployed

4.1 Background

The statistics in Part 4 come from the National Labour Market Board.

Training for the unemployed is understood as training for people who are currently excluded from the labour market. In Sweden, there are a lot of employment market programmes/instruments, but only one of these is counted as VET for the unemployed, namely *employment training*. This is in accordance with other reports, e.g. the Cedefop monograph, on VET in Sweden (Abrahamsson, 1997). Another instrument, *educational leave replacement*, is dealt with in Part 5 (combined training programmes).

Employment training is primarily intended to help unemployed people and hard-to-place job-seekers lacking occupational skills. Training is provided by the public employment service and is expected to lead to permanent employment. Training programmes are primarily vocational, but can also include introductory and general theoretical instruction as a necessary adjunct of vocational training. All employment training in Sweden is classified as vocational education and training in the preliminary classification of education by ISCED 97 mentioned earlier and as said before we will follow that classification in this paper.

As a rule, employment training is conditional on current and imminent unemployment. In addition, the applicant must be at least 20 years of age and registered with the public employment service as a job-seeker.

Employment training forms part of an active labour market policy aimed at reducing unemployment, promoting economic growth and supporting disadvantaged groups. Employment training primarily takes the form of courses purchased by a county labour board (LAN) or an employment office (AF). County labour boards and employment offices plan their purchase of employment training with reference to the needs of the labour market and their knowledge as to which job-seekers have difficulty finding work. Training lasts on the average, for about 20 weeks, usually 40 hours per week. Consult the Cedefop monograph for further details about employment training in Sweden.

It should be emphasised that adult education and training in Sweden embodies a division of responsibilities that leaves the public sector as the main provider of training for the unemployed and enterprises as the provider of training services for their employees. This seems to be the most efficient way of organising this market, relying on private incentives for the broad segment of the workforce while focusing public resources on those affected by labour market imperfections.

4.2 Sources of funding

Employment training in Sweden is totally publicly financed. The cost was in 1997 SEK 6 200 million (0.4% of GDP) of which SEK 2 800 million is course costs and SEK 3 400 million is study grants. From autumn 1996, it has been possible to get EU subsidies (ESF Objective 3) for employment training.

*Table 17 Costs for employment training from 1987/88 to 1997, current prices¹⁷
(SEK million, ECUs in brackets)*

Fiscal Year	Course costs	Study grants	Total
1987/88	2 100	3 200	5 300 (625)
1988/89	2 300	3 300	5 600 (660)
1989/90	2 200	3 100	5 300 (625)
1990/91	3 100	4 000	7 100 (430)
1991/92	5 800	7 900	13 700 (1 620)
1992/93	6 300	8 600	14 900 (1 760)
1993/94	5 100	5 700	10 600 (1 250)
1994/95	5 600	6 300	11 900 (1 400)
1996 ¹⁸	3 900	4 400	8 300 (980)
1997	2 800	3 400	6 200 (730)

As seen in the table above, costs for employment training can be divided into two parts; namely costs for buying employment training courses (course costs) and study grants for the participants. The additional cost consists only of the course costs because the unemployed would in any case have unemployment allowances or study grants for participating in some other labour market programme. Part of the costs for study grants go back to the State in the form of taxes as grants are taxable. The county labour market board/the employment office carries the whole cost - except EU subsidies - for employment training.

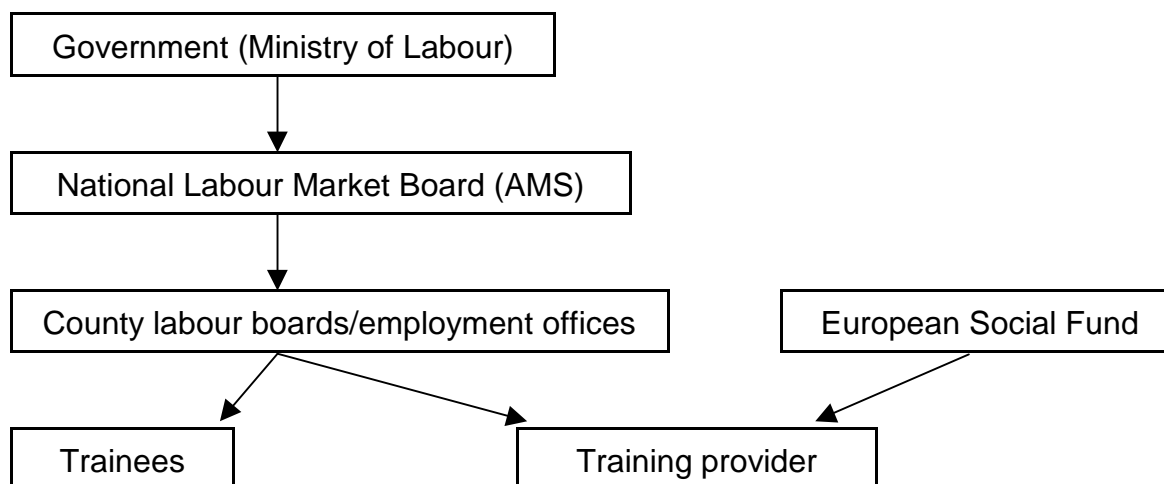
Total costs for study grants depend on the participants' rights to unemployment allowances based on earlier income, but also on changes in the regulations and the volume of participants. The number of participants was much lower in 1997 than in 1996. Besides, the lowest amount of study grants was heavily reduced in July 1997. All this decreased the costs for study grants considerably. The decrease in the number of participants and an increase in the proportion of cheaper types of VET in employment training made the course costs decrease even more than the study grants from 1996 to 1997.

¹⁷ EU subsidies **not** included (see Section 4.3).

¹⁸ The fiscal year 1995/96 comprised 18 months. Two thirds of the cost for that fiscal year have been assumed to be the costs for 1996.

4.3 Financing distribution mechanisms

Figure 6 Sources of financing employment training



Since January 1994, county labour boards and employment offices have been required by law to buy employment training courses in accordance with the Public Procurement Act. They can purchase training from the Employment Training Group (AMU group, previously a State-owned company, now a corporate company) or other tendering companies. A dramatic shift in the provider's organisational structure has taken place.

Table 18 The shares of participants in purchased employment training during the fiscal years 1989/90-1997 for different training providers

Training provider	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1996	1997
AMU group	74	69	55	52	41	36	35	29
Municipal adult education	10	12	15	14	10	8	7	1
Upper secondary education	6	4	5	3	3	2	1	5
University and university colleges	1	1	1	<1	<1	1	1	1
Training companies ¹⁹	7	9	18	22	37	45	48	58
Popular education	2	4	6	8	9	8	8	6
Total	100	100	100	100	100	100	100	100

Parliament and government (Ministry of Labour) allocate funds for labour market policy programmes through the national budget. About 25% of this was applied to employment training 1996. The National Labour Market Board (AMS) distributes these funds to the county labour boards with reference to the labour market conditions in the various counties. The National Labour Market Board also issues general guidelines and follows up activities in the counties. Within the counties, the county labour boards are responsible for

¹⁹ Training companies are private training providers offering training courses.

labour market activities. Part of the funding for labour market policy programmes goes to the employment offices, which decide whether applicants meet the requirements for employment training and help them to choose a suitable programme.

Table 19 Unit cost for employment training (purchased courses), 1992/93 - 1997 (SEK, ECUs in brackets)

	Cost per participant and month		
Fiscal year	Purchased education	Formal education	Total
1992/93	19 400	10 800	17 300 (2 040)
1993/94	18 300	7 600	16 600 (1 960)
1994/95	18 300	7 100	17 200 (2 030)
1996	16 800	7 400	15 120 (1 785)
1997	15 900	6 900	13 900 (1 640)

The unit cost for purchased education comprises both study grants and costs for buying the education. The unit cost for formal education comprises only study grants since formal education in Sweden is free of charge. 'Total' is the average unit cost for both purchased and formal education.

The decrease in the unit cost for formal education is partly due to the lowering of the amount paid in study grants and partly that the composition of participants in employment training has changed. The proportion having unemployment allowances decreased from 74% to 60% from 1996 to 1997. This is also partly the explanation for the decreased cost for purchased education. In addition, participants in ESF's Objective 3 project are from autumn 1996 included as participants in purchased education at the same time as the National Labour Market Board for this group only carry the cost for study grants. The total cost of purchased education was in this way divided among more participants, which meant that the unit cost decreased.

The AMU group offers employment training courses to semi-skilled workers, skilled workers and unemployed persons as well as courses introducing young people to the labour market. Training courses are regulated by the Employment Training Ordinance of 1987 and are based upon very close collaboration with the social partners. During 1996, the AMU group met with very tough competition from other providers such as training companies and municipal adult education (see Table 18 above). Furthermore, the government announced that the county labour market boards should reduce the level of employment training and give higher priorities to employment development schemes. The employment development programme (ALU) was introduced in 1993. Among its aims is to take advantage of the desire of unemployed persons for activity and personal development, as well as make it easier for them to return to the regular labour market. ALU projects must not compete with tasks normally performed in the regular labour market.

Finally, figures in fixed prices 1997 and also in ECU will be presented. The cost for employment training 1987/88 and 1991/92 have been transformed to 1997 prices using the Swedish consumer price index (KPI).

Table 20 Cost for employment training in 1987/88, 1991/92, 1996 and 1997 (1997 prices)

Fiscal year	Cost (million SEK)	Cost (million ECU)
1987/88	8 200	950
1991/92	15 600	1 800
1996	8 300	980
1997	6 200	730

As mentioned above SEK 6.2 billion corresponds to 0.4% of GDP.

The European Social Fund (ESF)

The European Social Fund (ESF) is one of the three structural funds of the European Union (EU). The overall objective is to ensure greater social cohesion and prosperity within the Union. The Social Fund supports the development of human resources with the aim of avoiding unemployment and for those already unemployed. In Sweden, the activities of the fund are part of the active labour market policy. The National Labour Market Board is responsible for ESF in Sweden. For ESF Objective 3, the National Labour Market Board and its regional organisations also have responsibility to carry out the programme.

Work with Objective 3 is carried out in close cooperation with regional and local committees in which the social partners and other organisations are represented. The Objective 3 programme started in autumn 1996. Until December 1997, almost 90 000 persons participated in Objective 3 projects, of which almost 30 000 in competence development.

Sweden had at its disposal during the period 1995 to 1999 about SEK 3 billion for Objective 3 programmes. Up to December 1997, about SEK 1 billion had been paid out of which about one third to employment training.

4.4 Overall conclusions and debate

Unemployment is a very important political issue in Sweden today. Sweden has traditionally had high employment and relatively low unemployment. During the 1990s, unemployment, as in many other European countries, increased substantially. The Swedish government has proclaimed that open unemployment will be reduced by 50% at the turn of the century. Another goal is to increase the employment frequency for people 20 to 64 years of age to 80% at the end of 2004. The Government Bill 1995/96:207

comprised an action programme including massive investment in education. This task has been difficult due to the deficit in the State budget for several years. Partly because of this, large parts of Swedish labour market policy have been challenged.

Sizeable investments are being made in fields other than labour market policy to counteract the negative effects of joblessness. One important way of combating higher unemployment, while raising the skills in the labour force, is to operate various skill-enhancement policies as part of government educational policy. The Swedish government has expanded the number of study places in education during the 1990s very much.

According to traditional Swedish labour market policy, the unemployed have been offered a short, practical vocational training course aimed at a specified occupation. As the labour market changes faster and faster, this type of training has been questioned more and more. As a result, there have been cuts in the amounts of employment training. Instead, more general and theoretical education and training has been prioritised. It is against this background that a large amount of money has been put into the *adult education initiative programme (Kunskapslyftet)*.

Employment training is mainly vocationally oriented. From 1 July 1997, the adult education initiative programme has operated for a five-year period. Adults missing a complete upper secondary education have the opportunity to study core subjects at upper secondary level with a special education grant corresponding to their unemployment allowances. Priority is given to unemployed adults, but employees with short education can be admitted. Also adult education at compulsory level is possible.

The current condition and future prospects of the Swedish employment training system is very vulnerable. This is partly due to major changes in the competence development market with increasing competition from other training enterprises and from the formal adult education system providing general subject and formal upgrading at a lower cost than vocationally-based courses and more extensive workplace learning schemes. As mentioned before, the government has recently decided that the major purchaser of employment training, the National Labour Market Board with its regional offices, should heavily increase working life development schemes (ALU) and workplace introduction (API) at the expense of employment training.

Employment training expanded at the beginning of the 1990s and reached its peak in October 1992. Afterwards, one can conclude that increase in the number of participants in employment training meant that this training had to take too much responsibility for unemployment at the beginning of the 1990s. The very rapid expansion of employment training also meant some lack of quality in the purchase of training programmes and recruitment of participants. At the same time, a much lesser proportion of participants got a job after training because of the worsening labour market situation. Employment training had to carry a very heavy workload and this led to massive but maybe a little unfair criticism.

During 1997, employment offices directed about 70 000 job-seekers to the adult education initiative programme. During the summer of 1997, the number of new jobs reported to employment offices increased and the question of the possibilities for employment training to prevent a shortfall in certain occupations was discussed. As the adult education initiative programme took care of a large part of the general education of the unemployed, employment training could again be more directed to vocational training especially in technical areas.

This trend that purchased vocationally-oriented employment training should be given priority and directed to prevent a shortfall in certain occupations has recently been stressed by the government.

Part 5 Combined training programmes

There is not a long tradition for combined programmes in Sweden. Of course, every single enterprise has been able to combine an employee's need for CVT with an unemployed person's need for job experience by letting the unemployed get a temporary job, while a member of staff improves his or her qualifications, but there have not been programmes for it.

5.1 Introduction

Combined training programmes are interpreted as schemes which cross traditional training boundaries. In Sweden this includes:

- job rotation,
- educational leave replacement.

5.2 Job rotation and educational leave replacement

Job rotation is one way to combine continuing education and training of employed persons with job training for the unemployed. Job rotation is sometimes defined as an agreement between one or more employees and their employer that an unemployed person will replace the employees while they are absent, for instance because they wish to follow an educational or training programme. The government can promote rotation by making it attractive to hire unemployed persons and/or make it attractive for employees to leave their work for a while.

Job rotation is defined according to OECD (1997) as an employee's movement through a sequence of jobs to broaden or deepen his or her skills. It is a process which enables employees to exchange jobs for a given period so as to broaden their work experience and acquire new skills or deepen existing ones. This is not of relevance in this context.

To the best of our knowledge, no data on costs for job rotation exist in Sweden, except for educational leave replacement programmes, which may be seen as a special case of job rotation.

It is possible for employers to get government grants for *educational leave replacement*, which have the dual purpose of training existing employees and giving temporary jobs to unemployed persons (National Labour Market Board, 1998).

The programme entitles an employer to pay reduced social welfare contributions providing a substitute referred by the employment service is employed to replace a regular employee away on educational leave.

This is done in connection with the adult education initiative programme (*Kunskapslyftet*), which started in 1997. Adults missing a complete upper secondary education have the opportunity to study core subjects at upper secondary level with a special education grant corresponding to their unemployment allowances. Priority is given to unemployed adults, but employees with short education can be admitted. Also adult education at compulsory level is possible.

Educational leave replacement is mostly used in the public sector (76%) and by women. Health care and child care are the most common areas.

The cost (for reduced social welfare contributions) was in 1995/96, SEK 2 600 million. The fiscal year 1995/96 comprised 18 months so two thirds of the cost (SEK 1 730 million) for that fiscal year has been assumed to be the cost for 1996 .

Table 21 Costs for reduced social welfare contributions in connection with educational leave replacement, current prices (SEK million, ECUs in brackets)

Fiscal year	Cost	
1992/93	1 330	(160)
1993/94	1 900	(220)
1994/95	2 020	(240)
1996	1 730	(200)

The system was changed in 1997. Reduction in social welfare contributions have been replaced with subsidies.

Part 6 The future of financing VET: trends and perspectives

6.1 Trends and forecasts on population, education and the labour market

As background, we will give a short account of the trends and forecasts concerning population, education and the labour market in Sweden (Statistics Sweden, 1999c).

Some key results

Population

The number of persons of 'working' age (16 to 64 years) is projected to increase by 180 000 up to year 2010. Average age of the labour force will increase since the proportion between 55 and 64 years will increase significantly. The wide variations in the birth rate over the last 10 to 15 years have already had and will in the future have major consequences on the need for personnel in childcare and schooling. The number of pensioners will increase rapidly as a result of the large number of persons born in the 1940s becoming pensioners shortly after the turn of the next century. Up to the year 2015, there will be an additional half million pensioners, around 2 million in total, compared to the 1.5 million today. The number of very old persons (85 years and over) will not increase as rapidly over the next 10 to 15 years, but from around the middle of 2020s there will be a much greater increase.

The labour force

During the first three years of the 1990s, the number of persons employed decreased by approximately half a million. At the same time, the number of unemployed increased, not however to the same extent, since the number not actively looking for work (and who were thus not regarded as being unemployed) also increased. Thereafter, both the number of persons employed and the number unemployed remained essentially at the 1993 level, even though some improvement could be seen last year.

On the basis of this alone, it is, of course, difficult to make accurate forecasts of future employment and unemployment. Instead, we have chosen to make two alternative assumptions of future employment and unemployment. In the first alternative (low), the proportion of persons employed and unemployed at different ages is assumed to remain at the 1997 level. This results in a forecast for the year 2010 where approximately the same number of persons will be employed as at present. In the second alternative (high), the situation existing in 1992 has been assumed, and this leads to a forecasted increase in employment of around 400 000 by year 2010.

Industrial branches

Employment in *manufacturing* will continue to decline in the low alternative, but at a significantly slower rate than over the past 20-year period. In the high alternative, it is assumed that employment in manufacturing will be largely the same as at present.

The *private service sector* is projected to increase its employment under both alternatives. The increase applies in the first instance to consultancy services focusing on the company sector, and secondly to services for households.

In the *public sector* – childcare, school, health and medical care, care of the elderly, etc. – it is assumed in principle that employment will match changes in the number of persons in the age groups using different services in these subsectors. The low alternative involves no change in personnel manning levels, whilst the high alternative implies an increase in levels of ambition. As regards care of the elderly, a major increase in personnel over manning levels of today is required. Total employment in the public sector (or rather activities currently operated by the public sector) is estimated in the low alternative to increase by 70 000 and in the high alternative by 240 000 up to the year 2010.

Education levels of population

Today 23% of the population aged between 16 and 74 years have a post-secondary education and 44% have an upper secondary school level. Under the planned expansion of higher education, it is assumed that the proportion with post-secondary education will increase to 30% by the year 2015. At that time, 32% of women and 28% of men will have a post-secondary education. The proportion of the population with compulsory school education as a maximum will decline from a third to less than a quarter by the year 2015.

Shortages and surpluses in year 2010

In general terms, there will be a balance between supply and demand for those with post-secondary and upper secondary education, and a large surplus of persons with no more than compulsory schooling. This will occur despite a relatively large number of persons with lower levels of education leaving the labour force.

The major shortage appears to occur in *health and social care*. At the same time as demand for these personnel increases, supply will decrease. This does not concern doctors in the first instance, but rather nurses and nursing assistants. Primarily, this is due to necessary increases in staff for care of the elderly.

A significant *shortage of teachers* will occur over the next eight to 10 years. As a result of major differences in the size of child cohorts, shortages will vary over time and occur at different levels in the school system. We will have a surplus of pre-school teachers in the immediate future, but later this will come into balance. The shortage of teachers in compulsory and upper secondary schooling will also come into balance and gradually there will be a surplus, but this is hardly likely until after the year 2010.

In terms of *scientists/technicians*, a relatively balanced situation will occur in the future despite a major increase in demand. However, this will largely be compensated by an increase in supply. We expect some shortages in engineers with qualifications from upper secondary school and shorter courses in higher education, as well as shortages of persons with a technical-industrial upper secondary education. On the other hand, the supply of engineers with university diplomas will satisfy demand, mainly as a result of a major increase in the number of study places.

Amongst *social scientists* there will be a relatively balanced situation. There may be a small surplus of economists with higher education qualifications. In this context there could well be an element of 'vertical' substitution with respect to economists with an upper secondary education. We can expect a major shortage of persons with an IT education and possibly a minor shortage of lawyers.

There will be a surplus of those with purely *humanistic* qualifications. This is not inconsistent with the fact that languages in conjunction with other educational qualifications could become more valuable.

The largest surplus is likely to occur amongst those from the *aesthetic and media programmes* in upper secondary school, if these programmes do not become more vocationally oriented. These programmes have been very popular amongst young persons, but so far the labour market situation for persons with these qualifications has been extremely bad.

6.2 Total cost for VET in Sweden

Table 22 Estimated total cost for VET in Sweden, 1997

Education form	Cost million SEK	% of GDP	Cost million ECU
IVT	13 300	0.8	1 560
CVT	45 000	2.6	5 300
Employment training	6 200	0.4	730
Combined programmes	1 700 ²⁰	0.1	200
Total	66 200	3.8	7 800

The cost of VET forms part of general education spending. The total cost for education in Sweden is estimated at almost SEK 200 billion. The cost for VET is almost 40% of all education costs in Sweden. The major components of VET are publicly financed with the exception of staff training which at around 50% takes place within the public sector and is thus financed by public money, but not through the State education budget.

²⁰ Refers to 1996.

It is not possible to give time series data on the total cost for VET because data for important parts of the VET system are missing for earlier years. For some VET programmes, data for different years exist, see the different sections for which years data exists.

6.3 Trends in funding levels, distribution of funding and financing arrangements

Nearly all of the different forms of CVT in Sweden will become more important in the future. A general and jointly shared political attitude is that investments in CVT are necessary to keep the labour force up to date and develop their skills. There is expected to be a need for an extension of CVT. It is reasonable to expect that the expansion will have to be financed through a combination of greater public expenditure, user payments by enterprises and vocationally oriented CVT as leisure time studies (unpaid) for employees. In general, there is also debate going on as some organisations believe that individuals themselves should take greater responsibility for their own further education and that it would be mutually beneficial for both individuals and enterprises to deposit money in different funds for future staff training.

6.4 Future changes and debates

There is no robust method to forecast the future demand of labour within different educational levels and fields of education. Consensus exists only that a well-educated labour force is an advantage to economic development. In a time where the labour force attains a higher educational level, just because those who enter the labour market have a higher educational level than those leaving the labour market, maybe fields of education is the most important issue rather than the educational level.

The education system in Sweden has undergone a fundamental organisational transition during the past decade. VET is now in a new social context:

- *Education and the unemployment boom.* Less than 10 years ago policy-makers talked about the shortage of young people in the labour market. Today youth employment is a major problem in most Member States.
- *Changing skill requirements.* The high speed of changes in the labour market has an impact on the need for skills and competence in the workforce. A significant increase in the provision of competence development at work is of crucial importance for Sweden's survival in growing international competition.
- *New intercultural context.* Education is surrounded by a quite different cultural context. Sweden is increasingly shifting from a socially and culturally homogeneous country to a mixed culture.

For a long time, education has been a matter of high priority, both as a means of stimulating economic growth and levelling out social inequalities. The statistics show that well educated people receive extensive CVT and the poorly educated receive very little. If the latter cannot get sufficient competence development in their work today, they will not be able to carry out their jobs tomorrow. This potential competence gap is one of the really major problems Swedish working life is facing today.

Annex 1 Legal provisions

This annex focuses on the type of legislation introduced for various types of training.

VET in Sweden is based on legislation both from the Ministry of Education and Science and from the Ministry of Labour. There is no specific legislation concerning VET. VET in terms of our definition will be found in different forms within the Swedish education system. The most important legal arrangements concerning legal arrangements are presented below.

The 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.

Thus, the VET system is characterised by a large degree of flexibility, where the Ministry of Labour and the Ministry of Education and Science perform their control function through general targets and frameworks, rather than through formal legislation and regulation.

IVT legislation (Ministry of Education and Science)

The School Act (*skollagen* 1985:1100) is the legal basis for CVT in upper secondary schools. The curriculum for upper secondary schools (LPF 94) sets out the basic values of the education, its tasks and provides goals and guidelines for the education.

CVT legislation (Ministry of Education and Science)

The Municipal Adult Education Ordinance (*förordningen* 1992:403 *om kommunal vuxenutbildning*) is the legal basis for CVT in municipal adult education. LPF 94 also applies to municipal adult education.

Education in the national distance schools for adults (SSV) is regulated under the National Schools For Adults Act (*Lagen* 1991:1108) and the Ordinance (*förordningen* 1992:601). The schools, which are run by the State, supplement municipal adult education by offering basically the same kind of education but in the form of distance education.

The 1991 Ordinance (*förordning* 1991:997 *om statsbidrag till folkbildningen*) on subsidies for popular education regulates some of the conditions for State grants to e.g. folk high schools. Some of the special aims of popular education are stated but there are basically no rules on how popular education should be organised nor on its content.

The qualified vocational education project is based on Government Bill 1995/96:145 on QVE and the resolution of the Swedish parliament concerning the Bill.

The government's goals for the adult education initiative are multidimensional. This is evident from such documents as Government Bill 1995/96:222 ('Certain measures to halve unemployment by 2000'), which presents the principles applying to AEI.

Legislation for training for the unemployed (Ministry of Labour)²¹

Employment training is regulated under the Employment Training Ordinance (*förordningen 1987:406 om arbetsmarknadsutbildning*). Employment training is for labour market purposes and during this period educational support is received. The Labour Market Board has overall responsibility for Swedish programmes in this field.

Educational leave replacement is regulated in Ordinance 1987:405 (*förordningen 1987:405 om den arbetsmarknadspolitiska verksamheten*).

Since 1 January 1999, Ordinance 1998:1784 of labour market policy programmes (*förordningen 1998:1784 om arbetsmarknadspolitiska aktiviteter*) replaces the Employment Training Ordinance and some other ordinances in this area.

²¹ Now Ministry of Industry, Employment and Communications.

Annex 2 Abbreviations and Glossary

Abbreviations

AEI	Adult education initiative (<i>Kunskapslyftet</i>)
AF	Public employment office
AgV	National Swedish Agency for Government Employers
AKU	The Swedish labour force survey
ALI	National Institute for Working Life
ALU	Employment development programmes
AMI	Employability institutes (responsible for skill assessment, vocational guidance, etc. for adults with functional impairments)
AMS	National Labour Market Board
AMU	Training for the unemployed/employment training/labour market training
AMU group	A leading employment training corporation
AMV	National Labour Market Administration (AMS including regional boards and local employment offices and special institutions; e.g. AMI)
API	Workplace introduction
APU	Workplace-located education at upper secondary school
Cedefop	European Centre for the Development of Vocational Training
CSN	National Board of Student Aid
CVTS	Continuing vocational training survey
ESF	European Social Fund
EU	European Union
FBR	Swedish National Council of Adult Education
FTE	Full-time equivalent
GDP	Gross domestic product
ISCED	International standard classification of education
IVT	Initial vocational training
KLK	The Commission for Adult Education and Training
KPI	Swedish consumer price index
KOMVUX	Municipal adult education
LAN	County Labour Market Board
LF	Swedish Federation of County Councils (<i>Landstingsförbundet</i>)
LFS	Labour force survey
LO	Swedish Trade Union Confederation

LPF 94	National curriculum for upper secondary schools and municipal adult education
LPO 94	National curriculum for the compulsory school
MOE	Ministry of Education and Science
MOL	Ministry of Labour
NAE	National Agency for Education (<i>Skolverket</i>)
NGO	Non-government organisations
OECD	Organisation for Economic Cooperation and Development
QVE	Qualified vocational education
RALF	Swedish Council for Work Life Research
SACO	Swedish Association of Professional Associations
SAF	Swedish Employers' Confederation
SCB	Statistics Sweden
SEK	Swedish crowns
SLFS	Swedish labour force survey
SMEs	Small- and Medium-Sized Enterprises
SOU	Official government reports
TCO	Swedish Confederation of Professional Employees
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	Vocational education and training

Glossary

We will start trying to explain the terms CVT and IVT:

Continuing vocational training (CVT)

CVT covers training activities of short duration, typically courses of a couple of days or weeks, aimed at updating, refreshing or extending knowledge and skills gained during basic training. In a time of rapid technological innovation, CVT often provides the first introduction to new technology. CVT is given either at the workplace, private or public training organisers or trade/vocational organisations. A major arena for CVT in Sweden is staff training.

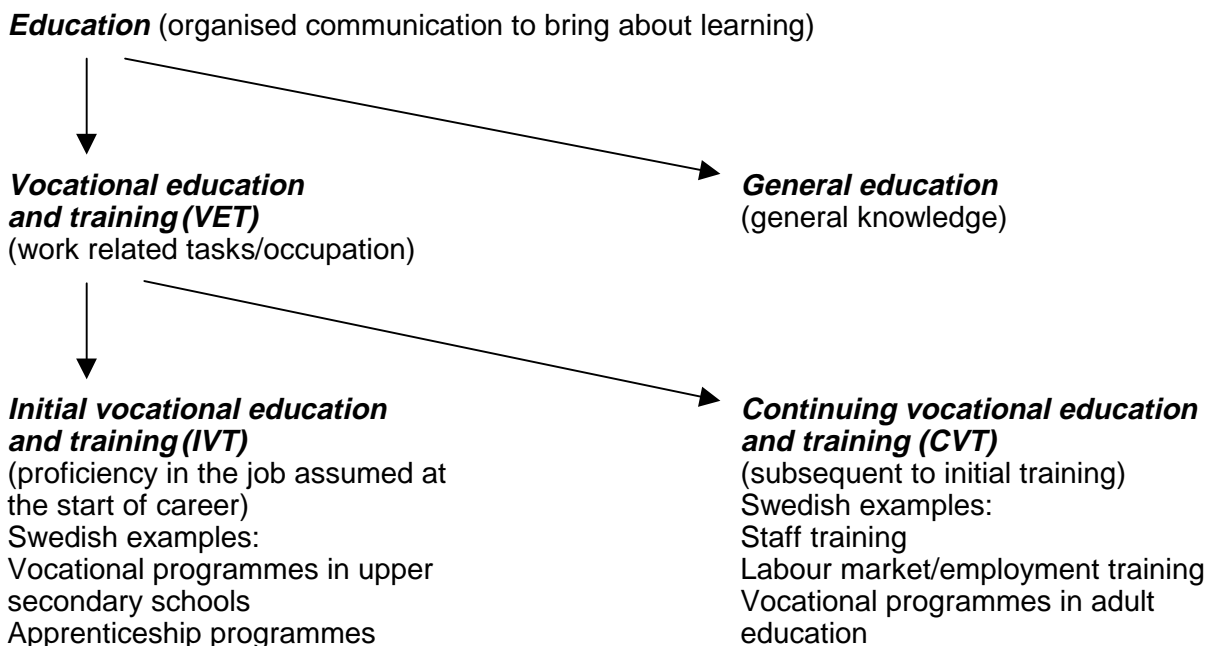
Cedefop defines CVT as training for employees, although not those participating in IVT programmes within an enterprise. It includes such training as attendance at formal courses, on-the-job training, open learning courses, etc. It would also include adult vocational training. Note that Cedefop excludes 'Training for the unemployed' (AMU) from CVT. This is not normally done.

Initial vocational training (IVT)

IVT represents the fundamental education and training within a given trade or occupation. As a general rule, this training provides basic skills and general qualifications, qualifying the newly trained to carry out certain functions in an occupation. In practice, however, it is necessary to add an introductory or apprenticeship period at work before the employee has reached full potential at work. In the Swedish education system, IVT is found in municipal upper secondary school.

Cedefop defines IVT as training undertaken post full-time compulsory schooling age. It would usually cover training for those between the ages of 16 and 19. It could be purely based within an educational institution or undertaken within an enterprise. An example is apprenticeship training. According to Cedefop, IVT does not include higher education. This is a point that might cause confusion in Sweden, because higher education is fundamentally oriented towards professional careers. The Swedish system is subsequently in contrast to higher education in other Member States, extended to several types of education without academic traditions (i.e. university diplomas in nursing, physiotherapy, career counselling, etc.). It should be pointed out that the complementary dimension 'Programme orientation (general-, vocational-, pre-vocational education)' does not exist at tertiary education (levels 5 and 6) in ISCED 97. Maybe the solution for Sweden is to call the 'vocational' part of higher education professional education falling outside the scope of IVT/CVT.

A figure may help to make the terminology clearer:



Employment development programmes (ALU)

ALU refers to a study-work programme for unemployed adults, which aims at a better working life orientation and also increasing employability. It is not an apprenticeship activity at a certain workplace, but more often a created workplace context. It is important that ALU projects do not compete with or force out ordinary jobs.

Employment training/labour market training/training for the unemployed (AMU)

For many years, employment training was provided at local AMU centres specialising in vocational training and flexible upgrading with respect to the current labour market demand. Today, the concept of employment training is more complex. It refers to the purchasing of employment training courses administered by regional labour market boards in a new market context with increasing competition between the AMU group, municipal adult education and new training companies.

Labour Market Trade Committee (Arbetsmarknadens yrkesråd)

The Swedish Employers' Confederation (SAF) and Swedish Trade Union Confederation (LO) have created the Labour Market Trade Committee with the task of:

- investigating and following the need for education within the labour market and through different measures, act to increase and make vocational training more effective;
- supervising and coordinating activities at local trade market committees;
- handling questions of general and principal significance for vocational training;
- keeping in touch with national authorities as well as organisations working within vocational training.

Staff training

People's knowledge and competence also grow outside the formal education system. This is true especially for employees who have the opportunity to develop in their work. An employee may have access to modern applications within his/her occupation and be close to ongoing changes, and as such he/she is stimulated to keep up with developments in his/her occupation.

To stimulate informal learning, different enterprises have different strategies. To use job rotation may be one way to develop employees; delegation of responsibilities or ensuring that younger colleagues become involved in projects where they have much to learn are other ways. Enterprises can also stimulate their employees' own interest for studying by, for example, supplying them with literature and study equipment.

All informal competence development which goes on in the workforce is not registered and is impossible to measure exactly. What Statistics Sweden tries to measure is the **formal (teacher-controlled) staff training paid (at least partly) by the employer** and only that part is of very large proportions.

Most staff training is given inside the enterprise or organisation, but not all. That is why the term staff training is preferred by Statistics Sweden and not the terms in-company training or enterprise-based training, which are sometimes used.

Workplace introduction (API)

Labour market measures operated by the National Labour Market Board and its regional offices and comprising the previously available submeasures as introductory programmes for youth, academics and immigrants.

Annex 3 Benchmark statistics

	1986	1991	1996	1997
The country				
Area, square km	449 964	449 964	449 964	449 964
Population, 31 December	8 382 000	8 644 000	8 844 000	8 848 000
GDP, market price 1991 prices, million SEK	1 337 355	1 447 327	1 517 219	1 544 139
GDP growth rate	2.3	-1.1	1.3	1.8
GDP, Current prices, million SEK	947 263	1 447 327	1 688 200	1 738 859
Consumer price index (1980=100)	160.3	227.2	256.0	257.3
ECU/SEK	-	7.50	8.40	8.47 ²²
The labour market				
Population 16-64 years	5 286 000	5 425 000	5 537 000	5 549 000
Labour force 16-64 years	4 386 000	4 530 000	4 310 000	4 264 000
Labour force 16-24 years	692 000	680 000	467 000	482 000
Labour force 16-24 years (% of the labour force 16-64 years)	16%	15%	11%	11%
Activity rate	83%	84%	78%	77%
Employed population 16-64 years	4 269 000	4 396 000	3 963 000	3 922 000
Employed population 16-24 years	654 000	639 000	394 000	380 000
Employed population 16-24 years (% of the employed population 16-64 years)	15%	14%	10%	10%
Unemployed population 16-64 years (LFS)	117 000	134 000	347 000	342 000
Unemployed population 16-24 years (LFS)	39 000	45 000	73 000	101 000
Unemployed population 16-64 years (% of the labour force 16-64 years)	3%	3%	8%	8%
Unemployed population 16-24 years (% of the labour force 16-24 years)	6%	7%	16%	21%
Unemployed 16-64 years who have been unemployed one year or more	10 000	5 000	92 000	99 000
Unemployed 16-64 years who have been unemployed one year or more (% of the labour force 16-64 years)	0.00	0.00	0.02	0.02
Education and training				
Percentage of the labour force with educational qualifications at ISCED levels 1,2	30% ²³	29%	24%	24%
Percentage of the labour force with educational qualifications at ISCED levels 3	48% ²³	48%	49%	50%
Percentage of the labour force with educational qualifications at ISCED levels 5,6,7	22% ²³	24%	27%	27%
Percentage of the employed 25-64 years participating in education and training (first 6 months of the year). Only training provided by or sponsored by the employer.	-	36%	42%	38%
Percentage of the labour force 16-64 years enrolled in regular education at secondary or tertiary level.	-	-	5%	5%

²² Summer 1998.

²³ Data in the column '1986' refer to 1989.

Annex 4 Bibliography

Abrahamsson, K (1997): Vocational education and training in Sweden. Monograph prepared for Cedefop and the Swedish EU Programme Office. Draft, July 1997.

Becker, S. G (1993): Human capital, a theoretical and empirical analysis with special reference to education, Third edition, The University of Chicago Press, Ltd, London 1993.

Cedefop (1998): Financing portrait of vocational education and training in Denmark. Final report, October 1998.

European Commission (1999): Continuing training in enterprises: facts and figures. Luxembourg 1999.

Eurostat (1993): Continuing vocational training survey, Community outline questionnaire. Doc E3/841/93-EN.

Eurostat (1996): Continuing vocational training in enterprises - an essential part of lifelong learning. *Statistics in focus*, Population and social conditions 1996:7.

Eurostat (1998): Continuing vocational training survey - CVTS2 - Information needs. Draft document 30/9/1998.

Government Bill 1997/98:169: *Gymnasieskola i utveckling - kvalitet och likvärdighet*. Stockholm 1998. (In Swedish).

Government Bill 1998/99:1: *Budgetproposition för 1999*. Volym 8. Stockholm 1998. (In Swedish).

National Agency for Education (1998): *Kostnader samt priser enligt samverkansavtal per gymnasieprogram 1997*. Memo 1998-10-28 (In Swedish).

National Labour Market Board (1998): *Arbetsmarknadspolitiska åtgärder. Årsrapport 1997*. Apra 1998:2. (In Swedish).

OECD (1997): Manual for better training statistics. Conceptual, measurement and survey issues. OECD documents 1997.

OECD (1998a): OECD economic surveys 1997-98; Sweden. Special features; Education, training and labour market reform. OECD 1998.

OECD (1998b): Education at a glance. OECD Indicators 1998. Paris.

SOU 1998:51: *Vuxenutbildning och livslångt lärande. Utbildningsdepartementet 1998*. (In Swedish).

SOU 1999:39: *Vuxenutbildning för alla? Utbildningsdepartementet 1999*. (In Swedish).

Statistics Sweden (1995): Staff training costs, presentation of template calculations. Bf 1995:7, SCB, Örebro.

Statistics Sweden (1997): *Personalutbildning 1996 och 1997*. U 39 SM 9701, SCB, Örebro. (In Swedish with English summary and list of terms).

Statistics Sweden (1998a): *Personalutbildning första halvåret 1998*. U 39 SM 9804, SCB, Örebro. (In Swedish with English summary and list of terms).

Statistics Sweden (1998b): *Förslag till klassificering av svenska utbildningar enligt ISCED 97* (Proposal of classifying educational programmes in Sweden by ISCED 97). Draft Memo, December 1998. (In Swedish).

Statistics Sweden (1998c): Staff training costs 1996. Bf 1998:6, SCB, Örebro.

Statistics Sweden (1998d): *Utbildningskostnader 1993-97* (Educational expenditures 1993-97). *Statistiska meddelanden* O 23 SM 9801. (In Swedish with English summary and list of terms).

Statistics Sweden (1998e): *Statistisk Årsbok'99* (Statistical Yearbook of Sweden 1999). Stockholm 1998. (In Swedish with English table headings).

Statistics Sweden (1999a): Staff training costs 1997. Bf 1999:1, SCB, Örebro.

Statistics Sweden (1999b): *Befolkningens utbildning 1998-01-01* (Educational attainment of the population 1998-01-01). *Statistiska meddelanden* U37 SM 9901. (In Swedish with English summary and list of terms).

Statistics Sweden (1999c): *Trender och prognoser '98* (Trends and Forecasts 1998). (In Swedish with English summary).

Swedish EU Programme Office (1997): *Växtkraft Mål 4. EU-stöd till kompetensutveckling i företag*. Andra upplagan, Publica, 1997. (In Swedish).

Swedish Ministry of Education and Science and Ministry of Labour (1997a): National Report on the implementation of the Leonardo da Vinci programme 1995-96. Summary Sweden.

Swedish Ministry of Education and Science and Ministry of Labour (1997b): *Genomförande av yrkesutbildningsprogrammet Leonardo da Vinci i Sverige*. (In Swedish).

The Commission for Adult Education and Training (1998): The Commission for Adult Education and Training and evaluations of the adult education initiative. Brochure, 1998.

UNESCO (1997): International standard classification of education - ISCED - 1997.

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Financing portrait

*Mr Ronnie Andersson
Statistics Sweden, Sweden*

CEDEFOP panorama

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