The financing of continuing training in Denmark
The financing of continuing training in Denmark

Birthe Hedegaard

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The Centre was established by Regulation (EEC) No 337/75 of the Council of the European Communities
Following the studies conducted on the financing of initial training in Belgium, Denmark, Federal Republic of Germany, France, Ireland, United Kingdom and Netherlands (published in 1982) and in Portugal and Spain in 1988, CEDEFOP launched a series of studies in 1988 on the financing of continuing training (FOCUS II) in Belgium, Denmark, Spain, Federal Republic of Germany, France, Greece, Ireland, Italy, United Kingdom, Netherlands and Portugal.

Any analysis of continuing training raises complex problems, particularly because:

- the boundary between initial and continuing training is very difficult to establish. Many continuing vocational training schemes take the form, for example, of initial training or remedial training for certain target groups;

- the field of continuing training often covers a variety of schemes connected with the labour market or other schemes within and outside enterprise which are sometimes difficult to apprehend and describe and which, in any case, cannot be brought within an organized system (as in the case of initial training);

- the word "training" can be understood in different ways. For example, is a seminar informing employees about Community programmes necessarily perceived as training? The answer is probably no, even though attendance at this seminar entails costs (loss of productivity) which have to be accounted for and it may well be felt that this is training;

- continuing training schemes are often supported by mixed funding; this type of funding is not always clear. For example, how and where can one account for the free time which people spend on training organized by their firms half of which takes place
during working hours and half outside working hours? Where and how does one include State-funded schemes which people attend during their free time, sometimes at the "suggestion" of their firms?

- enterprise does not always declare its expenditure on training. For example, firms are hesitant to declare expenditure above certain limits because this might set a precedent for the future; in other cases expenditure on training may be included under the heading "acquisition of materials". Moreover, the expenditure on training which is declared does not always include certain indirect costs - loss of productivity, replacement costs, etc.

These and other difficulties encountered by the authors of the studies still persist despite CEDEFOP's efforts to provide a clear picture in the FOCUS II studies - it should be borne in mind that these studies are based on the information available in the Member States and that the existing information resources raise a certain number of problems which have yet to be resolved.

Overall, however, the studies provide considerable clarification especially as regards the information available in the Member States on this subject, as well as on a number of basic questions which any analysis of continuing training must take into account. The studies should therefore be seen as a starting point providing pointers for further work to be conducted in the future within the Community rather than as a finished and sufficient work.

REVIEW OF THE QUESTIONS RAISED BY THE STUDIES:

1. Definitions, concepts

The concept of continuing training encompasses different areas in each Member State which are discussed in a whole range of terminology.
Not all these differences are merely semantic - in most cases, they are due to complex situations encompassing a range of circumstances which are difficult to categorize. For instance, the boundary between education and vocational training is not clear-cut in most Member States; the same applies to the boundary between initial and continuing training.

The FOCUS II studies provide a great deal of (but not exhaustive) basic information on what is considered to be continuing training in each Member State. For comparison purposes, however, it is important to use this basic information as a starting point for agreeing on concepts and definitions at Community level.

2. Information sources

While there is now a system of information at national and Community level making it possible to collect reliable data on education (even though comparability problems still exist today), the gaps are still too great in vocational training. If this is true of "organized" and institutionalized vocational training, these gaps become much greater for types of training which are "not explicitly organized" and are closer to on-the-job training whose growing importance cannot be disregarded.

The question of information on continuing training cannot be seen, however, solely in terms of a lack of information. Even when such information is available (it should not be forgotten that some Member States already have a considerable volume of information available), problems of comparability and links between sources complicate the task of systematic gathering of reliable and comparable data.

Finally, the problem of centralization/decentralization may mean that information is broken down into small batches and may lead to major gaps if there is no central authority gathering information at national level.
All these questions have raised problems both as regards the volume of information supplied and the extent to which this information is reliable and comparable. An inventory of the main information sources has however been drawn up in the FOCUS II studies and provides a very good starting point for future work.

3. Information gathering

An analysis of continuing training can focus on a number of factors:

- **Funding instruments**

  An analysis of funding instruments provides essential information through which the continuing training schemes which these instruments are intended to support, as well as the people who benefit from them, can be located. This approach may, however, raise some basic questions. For instance, in cases where there are statutory obligations, an analysis of funding instruments makes it possible only to pinpoint the continuing training encompassed by these instruments with the result that any activities taking place outside them may be overlooked.

- **People in training**

  The same course may be attended by people acquiring their initial training and others attending the course for continuing training purposes. The boundary between a continuing training and an initial training scheme can thus be determined by the particular circumstances of individuals.

  This approach is a necessary starting point for locating initial and continuing training schemes. However, it makes it possible to include only part of continuing training.
Institutions providing training

The institutions responsible for initial and continuing training traditionally differ from one another. Enterprise and its associated organizations are in any case playing a leading role in the supply of continuing training services.

The approach of those institutions responsible for continuing training is undoubtedly of help in characterizing the schemes in question. It does not, however, encompass the whole of the continuing training field and tends to exclude the movement away from institutionalized training currently taking place in enterprise with the development of "non-formalized training" linked to working situations.

Whatever the starting point, there is little doubt that each of these analyses will provide different results. An overall picture through which the dynamics of continuing training can be comprehended will have to be based on a combination of these different approaches.

The FOCUS II studies offer a general panorama making it possible to locate the potential information available for these different approaches and the existing gaps. This has not, however, prevented the authors of the studies, as a result of the different information systems in the various Member States, approaching the subject from different starting points which have conditioned the findings of the studies and their interpretation.

4. Knowledge gained

All the studies provide figures on continuing training expenditure - more detailed for the public sector, less detailed as regards expenditure by enterprise and even less detailed as regards household expenditure. Although there are aggregate figures for expenditure by enterprise in some Member States (even though these figures are not necessarily comparable), the figures for other Member States are only
partial - only three sectors were surveyed in Belgium; the survey covered 4000 large, medium-sized and small firms in Portugal. In other cases, information is provided on enterprise only when the public authorities have taken some kind of action (for instance Spain).

In these circumstances it is evident that any generalization is unwarranted and risky.

Moreover, none of the studies provide a detailed analysis of the mechanisms and volume of re-financing.

It needs to be stressed that the studies must be re-located in their original contexts - initial financing in some cases, final financing in others (France), institutions in others (Denmark) and an integrated approach in others - for an interpretation of their findings. These differences have affected the nature of the figures and, obviously, their interpretation, despite CEDEFOP's endeavours to formulate a precise specification providing for the collection of information at all levels - which was probably overly ambitious.

In any case, the lack of adequate statistical resources has led some authors to fill in the gaps with estimates and calculations, while others have based their figures on preliminary research work and others on official information sources.

This information on training expenditure cannot, however, be interpreted in an isolated way. While it can be seen, for instance, from all the studies that expenditure by enterprise is increasing, this does not provide any indication of the nature and effects of this investment as regards enterprise itself or the people benefiting from it - the type and length of the training, among other things, need to be known as well as its distribution and consequences. This a further area in which the nature and the volume of information available in the FOCUS II studies differs for the reasons discussed above.
Any attempt at comparison in these circumstances is very risky and it is difficult to pinpoint the ways in which the various information is inter-related - these inter-relations play an essential role in any interpretation of the figures.

The questions which we have raised are no more than examples of a more general set of questions which has to be used as a starting point for any attempt to analyse continuing training. We feel, however, that the FOCUS II studies provide a data base which will help to stimulate this overall reflection through the answers which it sketches out.

Considerable practical work remains to be carried out at national and Community levels and we hope that this contribution, however modest it may be, is able to provide some pointers.

Our thanks go to all the authors who have contributed, through their work and their participation in working groups, to progress with the problems surrounding "continuing training" which is, it should be borne in mind, still a very young subject.

Georges Dupont

Fernanda Reis
THE FINANCING OF CONTINUING TRAINING IN DENMARK
- the Danish contribution to CEDEFOP's survey

Birthe Hedegaard

M a y 1989
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Bibliography
Foreword

In this report the financing of continuing training in Denmark is described.

The report has been drawn up for CEDEFOP, EC's vocational training research-institution in Berlin, and therefore forms part of a larger international comparative analysis.

Defining continuing training is difficult. This term has been used in the CEDEFOP-context and part of the problem has been to provide a rendering of the term in Danish. In Section 1 an attempt is made to clarify the concept continuing training in relation to current use of language and to the available statistical material.

The report is based upon studies and research carried out earlier in the Vocational Teacher Training Department of the Teknologisk Institut (TI) and includes, in addition, other relevant investigations carried out elsewhere.

The statistical material of the report is incomplete and not up to date; but it does represent the best available which elucidates all of the area concerned.

The statistical material thus does not represent anything new compared with reports issued earlier. The overview and structuring of the training activities and the arrangements for finance and reimbursement, described generally and summarized in section 7, represent a further addition to elucidation of the whole area.

Kaj Olesen
TI/Erhvervspædagogik
Introduction

1.1 Problem areas of the report

This report deals mainly with the financing of continuing training activities, and not with financing of the basic vocational training schemes. The latter are described in the SEL (National Vocational Teacher Training Institution) report: Finansiering af erhvervsuddannelse i Danmark (Financing of vocational training in Denmark), May 1984. There is, however, a relatively small overlap between the two reports, since parts of the public continuing training system are described in both reports.

Compared with a description of basic vocational training schemes, the continuing training schemes offer a varied picture. In CEDEFOP's presentation of this study, a broad definition of continuing training is given in Art.13, stating that it embraces
- deferred basic training for commerce and industry;
- updating of existing training for commerce and industry;
- further training;
- re-training

Continuing training schemes thus cover a very broad spectrum with respect to target group, purpose, participants, content, institutional framework, duration, teacher training, finance, etc. This diversity is one of the reasons why no systematic descriptions exist, or overall statistical surveys of continuing training schemes as a whole. On the other hand, descriptions and studies
exist of individual continuing training-areas, or descriptions which deal with continuing training from one particular standpoint - recruitment of participants, for example.

The fundamental perspective for this report is the financial circumstances surrounding continuing training schemes, including the dynamic interaction between the financial circumstances and the aspects mentioned above - target group, purpose, etc.

As a starting-point for the financial perspective, the complexity and inadequate statistical information of the continuing training area together form the pre-conditions for the presentation of continuing training in this report and for the structure chosen for the report.

A survey of continuing training can in principle be made with two sources:

a. the supplier, i.e., where applicable, the producer or procurer of the activity concerned;

b. the user of continuing training. Both existing (and potential) participants in continuing training, and the companies whose total productive capacity is increased through training of the employees.

The starting-point taken for the structuring of this report is the supplier-perspective. Both direct suppliers of
continuing training and any co-ordinating and resource-allocating bodies lying behind them, who determine the frameworks for the scope, purpose, content, control and target group of the continuing training schemes are regarded as suppliers of training. Examples of such suppliers which may be mentioned are public institutions, funds, trade unions and associations, commercial firms, companies, etc.

The supplier-perspective was chosen as the fundamental structuring principle for practical reasons, namely:

- Partly because a virtually complete survey of continuing training exists, which covers the full scope of continuing training measured in direct training costs and, at the same time, enables appraisal of the relative orders of magnitude of different types of continuing training. In this description of the Danish continuing training activities, the term 'vocationally-orientated adult training' is used. Vocationally-orientated adult training is characterized by:

1) aiming directly at use in working life;
2) being directed towards adults who have work experience or have completed a course of basic training;
3) taking the form of planned procurement of knowledge, skills and attitudes.
This definition of continuing training is slightly narrower than CEDEFOP's definition. In one single area it can give rise to difficulties in relation to CEDEFOP's definition, namely in relation to training schemes arranged especially for unemployed persons. These activities are therefore not included in the overall survey of continuing training activities in this section, but have been included in sections 2 and 3 to supplement the description.

- Partly because recording among suppliers is considered to be more reliable - particularly regarding the financial aspects of continuing training schemes - than a survey among users. However, it is typical of many suppliers of training that the financial aspects of continuing training activities rarely appear in annual reports, etc., which frequently focus upon the aspects of continuing training which concern content.

The definition of continuing training used in this report thus covers the training schemes which are designated above as 'vocationally-orientated adult training schemes' and also training arrangements for unemployed persons.
The definition chosen for 'continuing training' (efteruddannelse) thus does not presuppose that the participant has previously taken a course of training for commerce or industry. Participation in training of shorter duration (in practice shorter than 6 months) following employment in commerce or industry is therefore included in this report in the description of continuing training, even though the participants have not previously received any basic vocational skill training.

In relation to financial allocation mechanisms, the continuing training area can be broadly divided into three main sectors, namely:

- a predominantly supply-regulated continuing training area
- a predominantly demand-regulated continuing training area.

In relation to the overall structuring principle selected for this report, the relationship between supplier and source of finance is relatively simple within supply-regulated training areas, in which it is relatively easy to gather information from the supplier concerning scope, content, target group, etc.

The relationship between supplier and source of finance will be much more complex and opaque for the training activities which are demand-regulated. A probably increasing proportion of continuing training activities exists within the - viewed statistically - grey area in which content, scope, target group and duration become more difficult to record.
Despite these trends of development in continuing training activities, in the presentation of continuing training schemes in this report the starting-point taken will be the suppliers of continuing training. In the following sections the individual training areas will be described in more detail and the supplier-perspective will be supplemented here by a user-perspective.

These suppliers represent the finance-aspect in various ways, since training-suppliers are the direct procurers of continuing training. Thus, training-suppliers constitute the point at which the sources of finance meet the people who receive continuing training and the continuing training is produced (cf. table on p.12).

On the basis of this close connection between training-suppliers and the financial sources behind them, continuing training activities can be sub-divided into the following five main categories.

**Continuing training divided into main categories**

I) The public authorities as training-suppliers (apart from the activities described under II and V). These continuing training activities are financed directly through taxation and procured through county authorities, local authorities and national organizations.
II) Continuing training activities financed through the AUD-fund (labour market training fund) fixed by legislation and procured through the AMU-direktorat (Labour Market Training Directorate) under the Ministry of Labour.

III) Continuing training activities based upon voluntary collective agreements between labour market partners, or activities provided by them for their own members, procured through the workers' organizations, redundant workers' organizations and also trade and employers' organizations.

IV) Commercial continuing training activities offered on the open market and procured by self-owning institutions and firms providing courses.

V) In-house continuing training activities for the individual firm's own employees, provided and financed by the individual firm. This category embraces both public and private firms' in-house continuing training activities.

The relative size of the individual areas can be seen from table 1.1, which shows the direct costs of the training activities in 1986.
### Table 1
Scope of vocationally-orientated adult training

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Education</td>
<td>100</td>
<td>187</td>
<td>360</td>
</tr>
<tr>
<td>Other ministries</td>
<td>40</td>
<td>63</td>
<td>100</td>
</tr>
<tr>
<td>Local authorities and county authorities no info</td>
<td>50</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Total CATEGORY I</strong></td>
<td><strong>140</strong></td>
<td><strong>300</strong></td>
<td><strong>530</strong></td>
</tr>
<tr>
<td>Labour market training schemes</td>
<td>199</td>
<td>457</td>
<td>830</td>
</tr>
<tr>
<td><strong>Total CATEGORY II</strong></td>
<td><strong>199</strong></td>
<td><strong>457</strong></td>
<td><strong>830</strong></td>
</tr>
<tr>
<td>Employer and trade organizations</td>
<td>25</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>Workers' organizations</td>
<td>40</td>
<td>93</td>
<td>130</td>
</tr>
<tr>
<td>Redundant workers' associations</td>
<td>35</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total CATEGORY III</strong></td>
<td><strong>100</strong></td>
<td><strong>213</strong></td>
<td><strong>300</strong></td>
</tr>
<tr>
<td>Commercial course-suppliers</td>
<td>25</td>
<td>76</td>
<td>110</td>
</tr>
<tr>
<td><strong>Self-owning institutions</strong></td>
<td>20</td>
<td>83</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total CATEGORY IV</strong></td>
<td><strong>45</strong></td>
<td><strong>159</strong></td>
<td><strong>230</strong></td>
</tr>
<tr>
<td>In-house courses of firms</td>
<td>45</td>
<td>350</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total CATEGORY V</strong></td>
<td><strong>45</strong></td>
<td><strong>350</strong></td>
<td><strong>500</strong></td>
</tr>
<tr>
<td><strong>Total CATEGORY I-V</strong></td>
<td><strong>529</strong></td>
<td><strong>1,479</strong></td>
<td><strong>2,390</strong></td>
</tr>
</tbody>
</table>

**Source:** Medarbejderuddannelse - hvordan udvikles kvalifikationer i virksomheden (Employee-training - trend of qualifications within the firm). TI/Erhvervspædagogik 1986.
Remarks: This table does not include activities especially arranged for unemployed persons, which are described in sections 2 and 3.

Turnover figures are shown at current prices.

The 1981-figures are based upon a comprehensive survey among suppliers on the market. The survey is believed to cover 95% of all suppliers.

The 1986-figures are based upon budget figures for 1986 as far as the ministries are concerned, whereas for the other activities account is taken of a 40%-rise in current prices. This lies at the top of the relevant increase in the cost-of-living-index.

This sub-division into five continuing training categories forms the background to the description and analysis of continuing training activities in sections 2-6.

1.2 Difficulties of methods

In Denmark the sphere of training, including the continuing training area, has been undergoing a number of changes in the last few years, involving continuing change in the relationship between suppliers, finance and control. As an example, it may be mentioned that taking stock of many of the continuing training activities used to be a relatively uncomplicated matter with the training-supplier, as an activity under the institutional control of the supplier. The political efforts to strengthen the demand-aspect in general in the training schemes - through access to, or demand for activity covered by income, for example -involves difficulties in taking stock of both scope and finance and also content and control of training activities with the supplier.
The above overview is based upon direct continuing training costs, i.e. costs associated with development and execution of training activities. The surveys thus do not include indirect continuing training costs - pay or compensation to participants for lost pay, or providing substitutes, for example. This difference between direct and indirect costs is relevant to well-established and stable continuing training activities.

However, rapid social changes and hence changes in training needs can create difficulties in relation to accounting for the direct costs of a given training activity.

1.3 National conditions
Denmark has a very large public sector. Since the end of the 1960's Denmark together with Sweden and Norway has represented the 'Scandinavian social model', in which many activities which in other countries are under private control are in Denmark regarded as public functions - and are financed through taxation. This applies particularly to activities within the social and health administration, and within the training system.

In 1987 the public sector in Denmark accounted for about 54% of the gross national product, with reservations for difficulties of distinguishing in returns between 'private' and 'public' purposes.
Another object for the size of the public sector is the proportions of public employees in government, county and local authorities relative to the total labour force, which are shown in table 1.2.

**Table 1.2**
Employment, total and in public services in a number of countries, 1986

<table>
<thead>
<tr>
<th>Country</th>
<th>Employment total '000 persons</th>
<th>Employment in public services '000 persons</th>
<th>2 as a percent-age of 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark¹</td>
<td>2 593</td>
<td>758</td>
<td>29.2</td>
</tr>
<tr>
<td>Germany</td>
<td>25 702</td>
<td>4 138</td>
<td>16.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4 670</td>
<td>737</td>
<td>15.8</td>
</tr>
<tr>
<td>Belgium</td>
<td>3 698</td>
<td>748</td>
<td>20.2</td>
</tr>
<tr>
<td>UK</td>
<td>24 544</td>
<td>5 347</td>
<td>21.8</td>
</tr>
<tr>
<td>France</td>
<td>21 434</td>
<td>4 325⁴</td>
<td>20.2</td>
</tr>
<tr>
<td>Italy</td>
<td>22 962</td>
<td>3 417</td>
<td>14.9</td>
</tr>
<tr>
<td>Portugal²</td>
<td>3 901</td>
<td>404</td>
<td>10.4</td>
</tr>
<tr>
<td>Spain</td>
<td>11 002</td>
<td>1 508</td>
<td>13.7</td>
</tr>
<tr>
<td>Luxembourg³</td>
<td>158</td>
<td>17</td>
<td>10.8</td>
</tr>
</tbody>
</table>


2) 1981
3) 1982
The size of the public sector and the special employment areas within the public sector (e.g. social and health sector) should also be considered in the context of high occupational frequency of women, making it necessary for a number of care-functions (especially for children and old people) to be carried out outside the family. The occupational frequency for women within the age-group 25-44 years is thus almost at the same level as that for men, cf. table 1.3.

Table 1.3

Occupational frequency for men, unmarried women and married women in different age-groups. 1986.

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Unmarried women</th>
<th>Married women</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 24 years</td>
<td>80</td>
<td>73</td>
<td>....</td>
</tr>
<tr>
<td>25 - 44 years</td>
<td>94</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>45 - 64 years</td>
<td>78</td>
<td>58</td>
<td>62</td>
</tr>
<tr>
<td>65 - 74 years</td>
<td>20</td>
<td>.....</td>
<td>.....</td>
</tr>
<tr>
<td>All</td>
<td>79</td>
<td>65</td>
<td>68</td>
</tr>
</tbody>
</table>

Source: Danmarks Statistik, Institute of Sociological Research: Living conditions in Denmark, statistical summary 1988 p.139.

Remarks: Part-time working is more common for women than for men, however, since just under one-half of women in employment have less than full-time work; but in the context of continuing training the number of employed persons is of greatest interest.
In Denmark many activities are thus public; consequently, the public sector is employer for a considerable proportion of the total labour force, many of whom have a (relative to the total labour force) high standard of training, as can be seen from table 1.4.

**Table 1.4**

Composition of the labour force and distribution by public and private sectors. October 1982.

<table>
<thead>
<tr>
<th>Labour force</th>
<th>Sector distribution</th>
<th>Relative composition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>Unskilled</td>
<td>53.5</td>
<td>15</td>
</tr>
<tr>
<td>Occupational training</td>
<td>32.1</td>
<td>25</td>
</tr>
<tr>
<td>Short sandwich courses</td>
<td>5.8</td>
<td>65</td>
</tr>
<tr>
<td>Medium sandwich courses</td>
<td>5.0</td>
<td>65</td>
</tr>
<tr>
<td>Long sandwich courses</td>
<td>3.6</td>
<td>50</td>
</tr>
</tbody>
</table>

**Note.** The sector distribution-percentages are rounded off.

**Source:** 'De kommende behov for efteruddannelse' (Future requirements of continuing training), drawn up by the Institute of Futurological Research for the Ministry of Education. 1986.

**Remarks:** This table is not directly comparable with table 1.2, since the public sector is defined differently as between the two.
Updating and development of the qualifications of the 758,000 (1987) public employees therefore constitutes a substantial proportion of the total continuing training activities. And with these continuing training activities being financed mostly from taxation, the continuing training of public employees constitutes a considerable proportion of the total continuing training activities financed from taxation. The public sector is thus to a considerable extent both a producer and a consumer of continuing training.

Another essential condition in Denmark has been a tradition for adult education and training in the broad sense, namely the 'high school-model', which can be traced back more than 100 years. This tradition has perhaps not appeared clearly in actual participation in adult education; but it has been of decisive importance for the debate on educational policy, as part of the cultural heritage, and has contributed towards a generally favourable attitude in the population towards education and training at adult age.

A very important consequence of this tradition has been, in relation to the content of the training schemes, general acceptance of the close interrelationship between the occupationally-qualifying, generally qualifying and personality-developing elements of the training schemes. This tendency is particularly clear in the activities for unemployed persons, which often include musical or creative and personality-developing elements, on the basis of a fundamental assumption that the development of general
personal competence is a necessary condition for achieving the self-confidence which is needed in order to obtain a job or begin a course of training following a period of unemployment.

This tradition for adult education has also contributed towards training and adult training (both general training and vocationally-orientated training) having been regarded as a social rather than individual matter with regard to the financial aspects. For vocationally-orientated adult training, in particular, it is typical that by far the greater part takes place during working hours (during which the participant receives full pay from the employer or obtains a fund-financed (AUD-fund) allowance in lieu of pay). Vocationally-orientated continuing training for workers in free time takes place only exceptionally, or else within schemes where the participant pays more than a notional portion of the direct training costs.

(Fig.1.1 - p.19 translation)

1.4 Structure of the report
In Fig. 1.1 an attempt has been made to illustrate the relationship between source of finance, financial allocation mechanisms and suppliers of training for continuing training as a whole.
The figure illustrates the following:

- Within some continuing training areas the participant functions as a financial allocating body - for example, when workers' organizations, redundant workers' associations or trade or employers' organizations provide continuing training as part of the service and the activity for members or member-firms.

At the same time, direct participation in continuing training will most often be financed by the participants' employer. The course-fee for unemployed persons will in many instances be reduced. It is typical that the above-mentioned suppliers of training have been operating increasingly on market terms in recent years and, as such, in competition with the self-owning institutions and commercial course-suppliers - in connection with training schemes in management and personal development, for example.

- The public sector acts within the sphere of continuing training in many ways, namely
  - as a producer and financial basis for continuing training for public sector employees;
  - as a producer and financial basis for continuing training as part of trade/industry and labour market policy;
  - as a consumer and financial basis for continuing training - both 'self-produced' continuing training schemes and continuing training schemes on the open market.
Continuing training of public sector employees has been described in various places in relation to the structure of this report, which takes its starting-point in the suppliers of training (cf. Fig.1.1).

1) The centralized and institutionalized activities directed towards particular categories of public employees are described in sub-section 2.3.

2) Public employees' individual participation in qualification-conferring part-time training schemes is described in sub-section 2.2; training schemes offered by, for example, redundant workers' organizations, are described in section 4 and training schemes offered by commercial course-suppliers and self-owning institutions are described in section 5.

3) In-house courses within the public sector held by a single department for own employees in specialized or interdisciplinary subjects are described in section 6.

Since the end of the 1970's and especially since the change of government in 1982, it has been a political objective to reduce the size of the public sector within the national economy and to reduce the pressure of taxation.

In the continuing training sector these efforts have been directed towards, for example, highlighting the actual consumption of the training institutions' services through the introduction of payment by users and, at the same time,
market control (through the introduction of activity covered by income) with a view to development and adaptation of the content of the training courses.

2 Continuing training activities supplied by public resources

The vocationally-orientated adult training schemes which are described in this section are very varied in their purpose, content, target group and institutional framework. These training schemes represent 20-25% of the total in terms of turnover. However, the training schemes have the common feature that they are financed completely or mainly through taxation.

The activities fall into three main categories:

1) Training activities for unemployed, vulnerable groups on the labour market, described in sub-section 2.1, which are initiated by the central government, county authorities or local authorities.

2) Continuing training activities initiated and financed by the central government as part of general policy for trade and industry, labour market and education, described in sub-section 2.2.

3) Institutionalized or centralized continuing training of public sector employees, described in sub-section 2.3.

The bulk of these activities are defined by legislation and can be identified as separate items in the national accounts and in local and county authority accounts. The consumption of resources is generated, for some activities, in accordance with a 'taxameter system' - in relation to
the number of participants in a given activity, for example, whereas other activities are financed through grants for individual activities within a specified overall sum. The picture of the financial background to these activities is complicated further by many of the described activities being financed in a combination of direct tax-financing with other financial allocation mechanisms, such as the EC Social Fund, the EC Regional Fund and the AUD-Fund. In addition, some activities are financed through contributions from a number of disparate public sources. An example is courses planned on the basis of a specific training need which has been identified by means of a qualification-analysis and financed under the technological development programme (TUP), whereas actual course development is financed through Law 271 and the courses are organized as company-adapted courses (VTP) under labour market training schemes (AMU) and are financed with labour market training (AUD-) funds.

The activities in this section can be seen from the following chart.

2.1 Public training activities for unemployed, vulnerable groups on the labour market

Training schemes for unemployed 'vulnerable' groups are held under a variety of forms of financial control, under local authorities, county authorities and central government, and also under the labour market training schemes (AMU) (the so-called EI[introductory vocational
In this section, primarily the former category is discussed, whereas activities under AMU for unemployed persons are dealt with in sub-section 3.3.

The description in this section is based upon 'Indsatsen mod ungdomsarbejdsløshed' (The campaign against youth unemployment), 1986, issued by the Ministry of Labour, the Ministry of Education and the Ministry for Home Affairs. The financial distinction between AUD-financed and actually taxation-financed activities is, however, unclear in the material used. This is presumably connected with the fact that, until 1985, the AUD-financed activities (including activities under AMU for unemployed persons) were financed through taxation and are still administered under the Ministry of Labour. Moreover, since January 1988 county and local authorities have been able to 'purchase', out of the sums fixed by law for measures to promote employment, courses for the unemployed under AMU in accordance with the rules concerning activity covered by income.

Political deliberations are likewise in progress as to whether the financing of all activities for young unemployed persons under AMU (EIFU-activities) should be transferred to the local and county authorities.

The target group for taxation-financed activities for the unemployed is young persons and other categories with a particularly high level of unemployment - immigrants and unskilled women, for example.
2.1.1 Schemes for young persons

Up to the end of 1986 the upper age-limit for participation in the activities for young persons was 25 years. Since 1987 the upper age-limit for participation in schemes for young persons has been raised to 30 years, for the reason that the 25-29-year-olds together with the 20-24-year-olds had the highest relative unemployment among all unemployed persons.

The age-limits 25 years and 30 years, respectively, are significant for only a few of the schemes, since vocational guidance courses, day-course colleges and schemes for immigrants have in many instances embraced all age groups, but with the bulk of the participants in the 18-35 years-of-age group.

The break-down by sex of participants in the schemes is 63% women and 37% men. The percentage of women is rather higher within the training-type schemes, whereas it is slightly lower in the employment-type schemes. The differences are relatively small, however. The distribution by sex in schemes for the unemployed reflects very closely the differences as between the sexes in unemployment among the full-time unemployed under 25 years of age.

Scope of activity. In 1986 a total of 41,712 young persons started the special employment and training schemes on offer for young persons under 25. (In addition, there are a corresponding number of apprenticeship and on-job training places with support from the employers' reimbursement for
students-system (AER) within the regular vocational training system).

The content of the schemes for young persons under 25 years of age ranges from general training courses at colleges and continuation schools, through guidance courses and production schools with a general and a vocationally-orientated purpose and content, to actual employment projects and also pay supplements on employment in private firms.

The breakdown of what is offered for young persons under 25 years of age as between the various types of activities is as follows:

- approx. 28% of the places are for actual employment projects
- approx. 23% of the places are provided in the form of pay supplements on employment in private firms
- approx. 21% of the places exist within the AMU-system as EI-activities
- approx. 28% of the places are in training schemes of a more or less vocational nature.

Clear distinction between activities with a direct employment-aim and activities with a training-aim can be difficult. In relation to the purpose of this report,
however, the 28% training-type schemes are of most interest (since the EI-activities are described later in sub-section 3.3, and about one-half of the activities are employment-type schemes with a relatively limited training-type content).

Among the actual training-type schemes, the following can be mentioned, for example:

- County or local authority-financed extraordinary training activities for young persons at existing training institutions, or specially-arranged courses at colleges, day-course colleges, youth schools, guidance courses or in conjunction with job offers, for example. These activities involved about 6,000 started participants in 1986.

- Activities for unemployed persons with training of long duration, such as university graduates, primary school teachers and librarians, primarily in the form of courses within edp and also general or subject-specific pre-vocational training. These activities involved about 1,300 participants in 1986. The courses are usually of 3 months' duration.

- Production schools embracing about 2,000 full-year places with 3,500 started students in 1986. Three-quarters of the students attend for less than 6 months.

- Guidance courses, day-course colleges and immigrant projects. Between one-third and one-half of the total
volume of activity is financed with central government funds, the remaining funds being provided locally, where necessary supplemented by research funds or funds provided under the Law concerning leisure activities (fritidsloven). These activities involved in 1987\(^1\) about 3,600 participants, three-quarters of whom are women. The participants are distributed equally under and over 30 years of age. The day-course college is the biggest single activity, with a total of 2,200 participants. Day-course colleges have both cultural/social subjects and creative/musical and craft-type activities, with the main emphasis upon personal development and general education. Some day-course colleges have at the same time a directly pre-vocational content or instruction in EDP and basic school subjects.

2.1.2 Expenditure
The sums allocated for county authority and local authority activities are fixed by law, under Law 293 of 21 June 1985, by which local authorities and county authorities allocate 130 kr and 10 kr, respectively, per inhabitant - equivalent to approx. 716m kr, as a minimum sum to combat youth unemployment. Central government expenditure is fixed through the Budget.

\(^1\) Information from the Ministry for Cultural Affairs, Directorate for General Education, free primary and lower secondary schools, etc.
Total public expenditure in connection with the campaign against youth unemployment was estimated in 1986 at approx. 1.6m kr. Of this, central government spending amounts to 654m kr (incl. 146m for EI-activities, cf. sub-section 3.3) and total local authority and county authority spending 1,000m kr. The estimates cover both employment-type and training-type activities; but these sums cover both direct costs and indirect costs - e.g. remuneration while attending courses and, last but not least, actual wage costs of participation in employment projects.

The distribution of all resources between different activities for an employment- or training-purpose for young persons in 1986 is as follows.

Table 2.1

<table>
<thead>
<tr>
<th>Local authorities</th>
<th>County authorities</th>
<th>Government</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>mill.kr</td>
<td>mill.kr</td>
<td>mill.kr</td>
<td>mill.kr</td>
</tr>
<tr>
<td>Job creation and employment projects</td>
<td>454</td>
<td>39</td>
<td>257</td>
</tr>
<tr>
<td>Pay supplement for employment in private firms</td>
<td>126</td>
<td>0</td>
<td>157</td>
</tr>
<tr>
<td>Training, courses, contact and information arrangements</td>
<td>245</td>
<td>39</td>
<td>94</td>
</tr>
<tr>
<td>Extraordinary apprenticeship and on-job training places in the public sector (EI-activities)</td>
<td>81</td>
<td>16</td>
<td>-</td>
</tr>
</tbody>
</table>

*) These are described in sub-section 3.3.

Source: 'Indsætser mod ungdomsledigheden 1986' issued by the Ministry of Labour, the Ministry of Education and the Ministry for Home Affairs.
It will be seen from this table that a good one-third (37%) of total resources expenditure is used for training-type activities, namely training, courses, contact and information schemes, extraordinary apprenticeship and on-job training places and also EI-activities. In so far as only those types of activities which are financed through taxation are under consideration (i.e. excluding AUD-financed EI-activities), 31% of the resources expenditure for young persons is on actual training types of activities. Expressed as direct training costs, the proportion must be put even lower (approx. 25%), since the resources expenditure on extraordinary apprenticeship and on-job training places in the public sector is primarily upon remuneration of the students and apprentices.

Moreover, regional differences exist as between the types of activities used. For example, 68% of the resources expenditure within a region (Bornholm county authority) is on job creation and employment projects, whereas only 32% of the resources in another region (Roskilde county authority) is on these types of activities. On the other hand, the latter region spends more resources, relatively speaking, on training activities, courses and guidance schemes.

It is typical that these continuing training activities aimed at unemployed, vulnerable categories on the labour market - should be completely financed with public funds, but channelled through different financial allocation
mechanisms, different legislative arrangements and, in many
instances, in a combination of many different financial
sources. An example of this is a comprehensive research and
development project within adult education and general
education with a considerable range of content, such as
computer rooms, day-course colleges and immigrant projects
or courses. These activities will often be financed through
funds for research (e.g. under the 10-point programme),
which is a 3-year experimental programme providing a total
of 120 mill. kr. in aid for new types of activities within
general education and general adult education. The
practical results from this are included in revision of
legislation within general qualification-conferring adult
education and leisure learning).

It is typical that the continuity of these activities
should be secured through contributions from different
financial allocation mechanisms which vary through time,
such as extraordinary funds set aside for employment-type
schemes, funds for research and development work in
connection with revision of the Law concerning leisure,
regular employment funds, etc.
Some activities in this category receive, in addition,
co-financing from the EC Social Fund, which makes an annual
grant for activities within this category, amounting to
about 250 mill. kr - equivalent to approx. 1/8th of total
resources expenditure on schemes for unemployed young
persons and other vulnerable groups.
2.2 Continuing training activities

Continuing training activities in this category embrace two main groups:

- Well-established, relatively standardized activities under the Ministry of Education's Directorate for vocational training schemes aimed at employees in the private and public sectors within technical and commercial areas. These types of activity are described in sub-section 2.2.1.

- Pro-active continuing training activities which are implemented individually or integrated with other activities, with a view to strengthening general vocational development within the community. This type of activities is in many instances ad hoc and is of the nature of research and development work, resulting in inadequate description of the activities with regard to content and statistics. One example is activities under the so-called Law concerning continuing training (eftersuddannelsesloven, Law 271), described in sub-section 2.2.2.

2.2.1 Open continuing training schemes

The continuing training schemes described in this sub-section differ on two fundamental points from the bulk of continuing training activities in Denmark.

1) They take place mainly in the participants' free time over a considerable period, in the form of part-time
training courses held concurrently with the participants' (full-time) employment.

2) They are supplied and financed mainly from public sources; but a fixed fee is charged to participants, or a participants' fee calculated according to gross outlay per student.

The purpose of these continuing training activities is to provide employed persons, usually having had basic vocational training within technical or commercial/administrative areas, with actual further training, with a view to securing and improving the employment opportunities of the individual. The specialized content is selected in accordance with overriding national requirements, and all of the training courses can end with a publicly-recognized examination. The scope of activity within different areas can be seen from Table 2.2.
Table 2.2

Number of special-subject participants and number of year's students in 1988 for different continuing training courses

<table>
<thead>
<tr>
<th>Training type</th>
<th>Number of special-subject participants</th>
<th>Number of year's students</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD</td>
<td>9,594</td>
<td>4,797</td>
</tr>
<tr>
<td>ED Correspondent</td>
<td>1,824</td>
<td>912</td>
</tr>
<tr>
<td>Commercial schools' single subject-instruction</td>
<td>23,800</td>
<td>3,967</td>
</tr>
<tr>
<td>'Merkonom'</td>
<td>87,400</td>
<td>10,925</td>
</tr>
<tr>
<td>'Datanom'</td>
<td>3,000</td>
<td>375</td>
</tr>
<tr>
<td>Technical School single subject</td>
<td>2,800</td>
<td>467</td>
</tr>
<tr>
<td>'Teknonom'</td>
<td>10,100</td>
<td>1,275</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>138,518</strong></td>
<td><strong>22,718</strong></td>
</tr>
</tbody>
</table>

Note
1) It is debatable whether HD and ED-correspondent training should be included here, since these training courses can be regarded as further training courses which, for historical reasons, are organized as part-time training courses and function both as a first-time further training (concurrently with employment) and as supplementary further training. However, the training courses have been included because they form part of vocationally-orientated, regulated, continuing training schemes under the Ministry of Education.

2) 'Special-subject participants' represents the number of persons starting a course in a single subject. Several participants often take part in several subjects at the same time, so the number of participating persons will be smaller. 'Year's students' is the number of students
converted into full-time students; this conversion varies for the different training schemes, between 2 and 8 special-subject participants. The number of year's students thus indicates the capacity for the training activity concerned.

Source: The information is based upon the budget estimates for 1988 and originates from the draft commentary on the parliamentary bill for the Law concerning vocationally-orientated adult education, 29 November 1988.

The continuing training activities within this area have a complete preponderance - approx. 90% - of continuing training courses within the commercial/administrative sector.

The institutional setting of the training schemes. These training courses are held at the training institutions which hold the basic vocational training courses (technical schools and commercial schools), at special schools which occupy themselves exclusively with vocationally-orientated continuing training activities, and at continuing training institutions (schools of economics and business studies).

Political deliberations are at present in progress as to whether the number and type should be increased of training institutions which hold these types of continuing training courses for a number of the other further training institutions (universities, for example). (Parliamentary bill concerning vocationally-orientated adult training schemes).

Duration and arrangement of the training schemes. The regulated vocationally-orientated continuing training schemes have slightly varying arrangement and duration within an overall common principle that participation shall
take place in free time, side-by-side with full-time employment. The training courses can be held with 2-4 hours of instruction a week for 1-3 years. For the quantitatively predominant 'merkonom' training course, instruction can take place typically for 4 hours weekly over 3 years. For the HD-courses, the number of hours of instruction weekly is higher. In addition, a typical feature is that all of these courses assume homework of at least the same amount.

Financial matters
By far the greater proportion of these activities are financed through taxation. As mentioned in the introduction to this section, however, participants are charged a small fee for some of the courses (for 'merkonom'- and 'teknonom'-training, 16% of gross expenditure on training per student, and for the commercial schools' single-subject instruction 250 kr per special-subject participant).

The participant is charged this course fee; but owing to the individual employer's interest in his employees improving their qualifications regularly, the employer within the private sector frequently refunds the course fee for this type of continuing training.

Political deliberations are in progress at present (spring of 1989) as to whether payment for courses should be abolished or harmonized with a 20% course fee introduced for all of the above-mentioned types of training activities, financing expansion of activity within the sector as a whole.
The courses are being held as mentioned at the basic training institutions (commercial schools and technical schools) and at the advanced training institutions (primarily schools of economics and business administration), and expenditure on the different training schemes therefore reflects differences between the content of the courses - degree of machine-use, for example - but also differences in framework conditions, such as size of classes.

The differences in expenditure probably also reflect the structure of spending at the basic training and the continuing vocational training institutions, and differences in the apportionment of overhead between types of training at the institutions which hold a number of different types of courses, including continuing training courses. The table below thus displays big differences in expenditure per year's student on different courses.
### Table 2.3

Direct costs for qualification-conferring part-time training schemes under the Ministry of Education (Budget estimates 1988)

<table>
<thead>
<tr>
<th>Course</th>
<th>Annual outlay per special-subject participant (kr)</th>
<th>Annual outlay per year's student (kr)</th>
<th>Total outlay annually (mill.kr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD</td>
<td>11,750</td>
<td>23,500</td>
<td>112.7</td>
</tr>
<tr>
<td>ED/correspondent</td>
<td>13,100</td>
<td>26,200</td>
<td>23.9</td>
</tr>
<tr>
<td>Commercial schools' single subject</td>
<td>3,424</td>
<td>20,544</td>
<td>81.5</td>
</tr>
<tr>
<td>'Merkonom'</td>
<td>1,000</td>
<td>8,080</td>
<td>88.3</td>
</tr>
<tr>
<td>'Datanom'</td>
<td>3,400</td>
<td>27,200</td>
<td>10.2</td>
</tr>
<tr>
<td>Technical School, single subject</td>
<td>1,786</td>
<td>10,716</td>
<td>5.0</td>
</tr>
<tr>
<td>'Teknonom'</td>
<td>2,770</td>
<td>22,160</td>
<td>28.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,524</strong></td>
<td><strong>15,389</strong></td>
<td><strong>24.6</strong></td>
</tr>
</tbody>
</table>

**Source:** The information is based upon the budget estimates for 1988 and originates from the draft commentary on the parliamentary bill for the Law concerning vocationally-orientated adult education, 29 November 1988.

1) 'Special-subject participant' and 'Year's student' are explained in table 2.2.

### 2.2.2 The Law concerning continuing training

Since June 1985 an actual law concerning continuing training (Law 271 of 6 June 1985) has existed. This law does not - as one might be misled into believing from the name - cover all public continuing training activities in
Denmark. Thus, since 1965 rules have existed (under the ministerial order concerning continuing training of skilled workers) for the continuing training of skilled workers, and the continuing training of other groups has also been regulated through various directives laid down by public authorities. The primary purpose of the Law concerning continuing training (Lov om efteruddannelse) is to supplement the other training activities - and, not least, to help towards greater control of the training institutions' supply of training by demand.

The target group for the continuing training activities is defined as non-academic salaried employees, technicians and others who are employed primarily in the private sector, or who are unemployed and desire employment in the private sector. The target group for the activities also embraces the self-employed, entrepreneurs, assisting-spouses and certain categories of married couples working from home.

When the parliamentary bill was first tabled in 1985, it was expected that the suppliers of the actual continuing training activities would be primarily commercial schools, technical schools, schools of economics and business studies, but also other institutions for continuing education. It is also assumed in the bill that between 12,000 and 15,000 persons would in 1986 take part in vocationally-orientated adult training activities as a consequence of the legislation - i.e. equivalent to one-half per cent of the labour force.
Finance. Activities under the Law concerning continuing training are financed by Budget funds appropriated for this purpose. Actual execution of the courses is assumed in principle to be covered through payment by users (in accordance with rules concerning activity covered by income); but in addition the Law enables this finance to be supplemented by grants for development projects and for course expenses, and also adult education-aid for the participants. In 1986 a total of 125 mill.kr was set aside for continuing training, 20 mill.kr of which was to be used for development projects, while the remaining 105 mill.kr was appropriated for setting up courses.

Table 2.4

<table>
<thead>
<tr>
<th>Mill.kr</th>
<th>Budget* 1986</th>
<th>Activities** 1986</th>
<th>Activities 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply of courses (Art.4)</td>
<td>50</td>
<td>1,479,600</td>
<td>) 13 mill.</td>
</tr>
<tr>
<td>Adult education-aid (Art.7)</td>
<td>54</td>
<td>1,479,600</td>
<td>)</td>
</tr>
<tr>
<td>Registration fees</td>
<td>- 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration and information activity</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total appropriation</td>
<td>125</td>
<td>97 mill.</td>
<td></td>
</tr>
</tbody>
</table>

*) The Budget figures are based upon expectations regarding the volume of activities and their relative apportionment in the Budget estimates.

**) This summary is based upon applications May - September 1986, covering applications granted in 1986.
Source: Based upon summary of granted activities October 1986, December 1987.

As can be seen from the table, expenditure upon the execution of training activities was much lower than assumed, whereas expenditure on research and development activities was much higher than assumed when the Law was passed. Of the funds spent upon research and development activities, a good half was spent in 1986 by the vocational schools (primarily technical schools), whereas 42% was spent by continuing training institutions (one-half of which were universities and university centres).

Direct training costs in 1987 under the Law concerning continuing training are thus estimated to have amounted to approx. 6.5 mill.kr, approx. one-half of which was spent on course activities within the sphere of technological innovation. In addition, a similar sum was spent on direct aid to course participants in the form of compensation for pay.

It is not possible to estimate on the basis of existing statistics the actual number of participants in continuing training activities resulting from the Law. However, an annual number of participants of 12-15,000, as assumed in the Budget estimates, is probably greatly overestimated. But at the same time it is possible that some of the courses developed as a result of the Law have since been held under labour-market training - as part of the vocational schools' firm-adapted (VTP-) activities, for example. ('Virksomhedstilpassede kurser' - courses adapted to suit the practical current training requirements of an individual firm, partially financed by the firm concerned).
To sum up, however, this Law's most important contribution to the sphere of continuing training must be considered to have been made indirectly hitherto, through upgrading of the qualifications of the training institutions' staffs within the areas technological innovation, export and productivity development, and through a strengthening of the training institutions' demand-orientation.

2.2.3 Other development activities

Lastly, within this sphere government-initiated development measures for trade and industry can be mentioned, including the Technological Development Programme (TUP), for example. As part of the efforts to promote and facilitate the application of information technology in products and production methods, over a 4-year period starting in 1986 a total of 1,500 mill.kr has been appropriated on the Budget, under the control of the Ministry for Industry. Of this sum, 8-10% is reserved for training purposes.

It is not intended that these training funds should be spent on actual training measures, but rather on studies of training requirements connected with technological changes. It was typical that training measures in the TUP-context should both have been considered to have been induced by technological changes and regarded as independent contributions to the implementation of technology.

These training funds have been granted to various economic
sectors on application, in many instances in co-operation between different research and development institutions.

2.3 Institutionalized, centralized continuing training of public employees

As employer of 758,000 people, or 29.2% of the total labour force, the public sector acts as employer in line with private employers. Public sector development of employees' qualifications takes place in several ways, namely:
- through central continuing training institutions devoted exclusively to continuing training of public employees.
- through the individual institutions in the public sector holding in-house continuing training courses;
- through the public employee participating individually in continuing training in line with employees in the private sector.

For many of the continuing training activities at the central continuing training institutions, the financial basis has been changed as part of the Government's efforts to introduce greater cost-awareness and market control through the introduction of payment by users. Permanent, annually-adjusted grants to continuing training institutions are being gradually replaced by grants to users, i.e. the training institutions, managing boards, departments and local authorities whose employees will participate in continuing training. This change was first made for the College of Public Administration (Forvaltningshøjskolen) and subsequently came into operation for other central training institutions intended especially for public employees.
2.3.1 The College of Public Administration

The College offers continuing training for public employees within a large number of different areas relevant to public administration, for both managers and employees primarily in county and local authorities and in central government. The bulk of the activities are training courses leading to an examination, with a few hours of instruction weekly, over two terms, which account for about three-quarters of all activities (measured in course-days). In 1986 about 4,500 persons took part in the activities of the College.2

A survey3 shows that the College of Public Administration is the most frequently used single supplier of continuing training among 10 suppliers of courses for public employees; most for manager-categories and slightly less for the university-trained and for those with office training and training for the Civil Service and local government.

The College of Public Administration is thus by far the principal single supplier within specialist fields such as management, administrative subjects, administration and planning. However, the survey concerned does not furnish any information on the proportion of public continuing training provided by the College.

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3 Administration and Personnel Department: Market survey concerning continuing training for public service personnel.
Financing of the College of Public Administration's activities has undergone a number of changes since 1982 in which, from being a grant-financed training institution under the Ministry of Finance, the College became a self-owning institution. The reason was a desire for more local authority financing and influence upon the College's activities, but also for more financing from course fees.

After the change of government in 1982, new financing machinery was introduced, the operative words for which were market control of the activities and payment by users, and the College of Public Administration underwent a rearrangement in the period 1983-89. Together with an annual increase of 5-10% in the volume of activities, a reduction took place of direct and indirect public grants to about 40% of total expenditure (1987). The remaining expenditure was financed through payment by participants and by expansion of activities within the scope of requisitioned instruction. It should be noted, however, that 'payment by participants' signifies only that the continuing training is financed by the (central and local government) employers of those who attend the courses. Thus, the financial source (taxation) is not fundamentally changed; but rearrangement of the financial allocation machinery involves some changes in the activities. In the anniversary publication4 of the College of Public Administration, the following is pointed out:

that the starting-point for the rearrangement in financing was a single saving made on the Finance Ministry's budget - and on the public contribution to the local authority VAT-fund, which previously channelled portions of the public funds to the College of Public Administration;

that the reason for the introduction of payment by users was a desire to reduce consumption of the service. In fact, what has happened is that the institution's activities have expanded. It cannot be decided whether this expansion of activity was due to increased market shares or a general expansion of the market;

that the reason for the introduction of payment by users was a desire to increase cost-awareness among both producers and users of the training. It is assumed that this strengthening of cost-awareness has taken place; at the same time, however, an increase of one-quarter in the level of expenditure is recorded for the individual services. This is explained as follows: "When payment by users is introduced, expectations rise regarding quality, and since the recipient of the service (the course-participant) is not the same person as the payer (the employer), the competition parameter is quality, not price"5

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that the introduction of payment by users is motivated by a desire for more market control, enabling the individual user to choose between competing suppliers. This strengthening of the market is considered to have taken place on a limited scale.

To sum up, the financial restructuring for the College of Public Administration is considered to have had the following consequences:

- the individual participants are more motivated than before;
- continuing training is now being used more selectively than before by public employers, as part of an overall training policy;
- 'holes' are appearing in the supply of continuing training, due to lack of recognition of the need for continuing training particularly for groups who are short of money. This hits the groups who are weaker with regard to training, typically among office-workers.

2.3.2 The Local Authority College of Higher Education

For employees in the local authority and county authority sector, a number of different continuing training schemes are carried out within areas that are particularly relevant to this sector.
- In 1987 just under 11,000 took part in short courses (average duration 3 days) at the Local Authority College of Higher Education in Grena. Three-quarters of the participants were local authority and county authority employees and one-quarter popularly elected politicians.

The content of the courses (measured in course participant-days) is divided between administration (28%), management (19%), school (18%), social affairs (13%), environment (10%) and technology (6%).

The 14 regional authority associations hold courses (where necessary, in co-operation with the Local Authority College of Higher Education) at 30 different places in the country. In 1988 the total number of courses was just under 800 with 26,000 participants, 80% of whom were employees in county and local authorities, the remainder being popularly elected politicians.

- For local authority and county authority employees - primarily administrative staff - an extended training course is held, ending with an examination. These training courses (Danish council courses I and II) are carried out with 250 and 150 hours of instruction, respectively, within one year, plus homework. The courses are held within selected administrative areas, namely financial management, tax management and social administration. In 1987 about 1,600 course participants took DK I and about 1,500 DK II.
Courses are attended during working hours for the above-mentioned continuing training courses, and the direct training expenses are paid by the participants' employers.

2.3.3 National Vocational Teacher Training Institution (SEL)

Another very important area of continuing training is the continuing training of vocational school teachers which takes place in SEL's 5 departments and embraces both special-subject areas of teacher training and basic and further training of teachers. This basic training is compulsory for teachers and instructors at vocational schools. Apart from module-structured basic teacher training with a total duration of approx. 500 hours and carried out within the first two years of employment, the instruction consists typically of 1-week residential courses.

SEL's activities are financed primarily through the Budget, but a smaller proportion of them are financed as activities covered by income, including the possibility for users (the vocational schools among them) to requisition continuing training against payment (Ministry of Education, Vocational Training Directorate) from SEL or other institutions. The indirect costs of the special-subject teachers participating in training during their working hours are financed by the immediate employer, i.e. the individual vocational school, and ultimately by the Ministry of Education, Directorate for Vocational Training.
2.3.4. The Danish Post-graduate Teacher Training College
The special-subject and paedagogic continuing vocational training of the approx. 60,000 public-employee primary and lower secondary school teachers takes place at the Danish Post-graduate Teacher Training College (Danmarks Laererhøjskole), which has departments in a number of the larger Danish towns. Continuing training is likewise also open to the approx. 15,000 teachers at the private schools who constitute 10-15% of all of the course participants.

The College offers three main forms of continuing vocational training:

1) Actual post-graduate training courses for participants who have had teacher training, carried out on a part-time basis concurrently with employment. The average study-time is 7 years and about one-quarter of the students complete it within 10 years. If necessary, employment can be reduced. This training embraces about 2,000 students annually - equivalent to approx. 3% of employed teachers.

2) So-called 'year-courses', with 3-6 hours of instruction a week and totalling about 100-200 hours, within special-subject and paedagogic areas.

Together with other longer training courses, the year-courses embrace about 15,000 teachers or other relevant persons (e.g. educationists). It can therefore be estimated that these activities embrace about 20% of the total number of employed teachers. However, the
demand for continuing training is much higher than the number of available training places, since just under one-half of the applicants are not accepted.

3) The short courses typically cover 3-5 days of continuing training within relatively limited subject-areas and embrace approx. 2,500 students annually.

These activities have hitherto been government-financed through a grant on the annual Budget, with regard to direct costs. Participation in the continuing training activities of the Teacher Training College is thus always free of charge for participants. The indirect costs - pay during training (leave of absence) and any costs for substitutes during training-absence - are paid by the participants' employers, i.e. the local or county authority. As a general rule, leave of absence is granted with pay for short courses, whereas participation in post-graduate courses takes place during free time. It is estimated that local authority expenditure for teachers' leave of absence alone amounts to 3-400m kr annually. For private schools, special rules apply to participation, including reimbursement from public funds of indirect costs in the form of fees for substitutes.

2.3.5 Other continuing training institutions
Kommunedata carries out continuing training of local authority- and county authority-employees in edp as a subsidiary activity alongside the main activity of producing edp systems for the public sector.
In addition to these large, actual continuing training institutions for public employees, continuing training activities are carried out in conjunction with a number of further training institutions whose basic courses are directed towards employment in the public sector, e.g.:

- continuing vocational training for nurses
- continuing training for social sector-employees/teacher trainers
- continuing training for librarians.

3 Labour market training schemes

As can be seen from the table in section 1, labour market training schemes (AMU) in 1986 constitute more than one-third of the total continuing training activities (measured in direct costs). Of all of the continuing training activities, labour market training schemes are statistically the best described, with detailed statistics issued annually. In addition, under CEDEFOP labour market training schemes are described in 'Erhvervsuddannelses-systemet i Danmark 1986' (The vocational training system in Denmark in 1986) and - especially regarding control-aspects - in 'Arbejdsmarkedets parters rolle i voksen- og ungdomserhvervsuddannelserne' (Role of the labour market partners in adult and youth vocational training schemes), 1987. The present description is based upon these to a limited extent.
The situation regarding the financing of labour market training schemes is shown in the following chart.
Labour market training schemes as a whole have a market-adjusting purpose, namely to meet current needs on the labour market. This takes place through, on the one hand, ensuring that firms can obtain employees having the qualifications which are currently in demand by the firm and, on the other, securing for employees the qualifications that are in demand at their present workplace - or in a firm which has a demand for labour.

Labour market training schemes are intended, as a general rule, for everyone in the labour force, both employed and unemployed persons who have or are seeking employment within an industry or a trade. In the case of qualification-conferring activities (cf. below), acceptance-requirements exist regarding previous training, courses and/or occupational experience. Qualification-conferring labour market training schemes constitute three-quarters of the total volume of activities (measured in course-weeks) within labour market training schemes.

Labour market training schemes embrace two main categories of activities:

- **occupational qualification-conferring** (certifying) training activities for workers who are in employment or seeking employment - in the private sector (and in posts in the public sector which are identical with corresponding posts in the private sector) and have not had training of longer duration, i.e. unskilled workers, skilled workers, technicians and lower-ranking white-collar workers. By far the predominant activities
here are semi-skilled worker training courses for unskilled workers and continuing training for skilled workers

- non-qualification (non-certifying) activities for unemployed young persons (under 30 years of age) or adult, vulnerable groups (e.g. unskilled women and immigrants) as an introduction to training and the labour market.

In both the labour market training system as a whole and within the different types of activities in labour market training, there has thus been an objective aimed simultaneously at employment policy and industrial policy. This has been reflected in control of the labour market training schemes (where the labour market partners have considerable influence), in the target group for the schemes (unemployed and employed persons) and in content and finance.

The two main groups can be divided into 6 sub-groups, as will be seen from table 3.1. The last 3 main groups were added in 1985 (Law 237); they are of relatively limited size and will be described to only a limited extent below. However, the division into qualification-conferring and non-qualification activities is modified by the fact that activities for refugees and LAMU-courses include both qualification-conferring and non-qualification activities.
# Table 3.1

Total size of labour market training schemes in 1987

<table>
<thead>
<tr>
<th></th>
<th>Number of started course-participants</th>
<th>Number of trained persons</th>
<th>Number of course-weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Semi-skilled worker training courses</td>
<td>98,097</td>
<td>63,461</td>
<td>21,206</td>
</tr>
<tr>
<td>II Continuing training of skilled workers</td>
<td>54,271</td>
<td>31,605</td>
<td>7,210</td>
</tr>
<tr>
<td>III Re-training + vocational preparatory training courses + LAMU</td>
<td>11,370</td>
<td>7,368</td>
<td>10,410*</td>
</tr>
<tr>
<td>IV Refugees</td>
<td>925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V Technicians and foremen</td>
<td>210**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI VTP + IDV</td>
<td>565</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total volume of activity within AMU</strong></td>
<td><strong>40,368</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


*) Of this number, 138 course-weeks were carried out as activity covered by income.

**) Of this number, 20 course-weeks were carried out as activity covered by income.

**Remarks:** In the case of semi-skilled worker training schemes and continuing training schemes, the difference between 'number of started course participants' and 'number of trained course participants' is connected with the modular structure of the training courses, which means that an individual person can participate in several courses within a single calendar year and thus appear several times as a course participant, whereas the difference in the introductory vocational courses is due to dropping-out during the course.
3.1 Financing of labour market training schemes

From 1960 (establishment of semi-skilled worker training courses) to 1983, 85% of labour market training courses were financed from public funds (tax revenue) through the Budget, while the labour market partners paid 10% of the expenditure and the local or county authority for the course participants' place of residence 5% (through taxation).

Tax-financed continuing training of unskilled persons (the other groups have since been added) must be considered against the background of the decisive influence exerted by the Social Democratic Party and against the central position occupied by labour market policy in economic policy at that time. Training of the unskilled was thus considered to be both a policy which secured employment for unskilled workers and a contribution towards general industrial development.

Since 1983 the AUD-fund has been the financial basis for all labour market training. A sum of money is paid annually into the fund by all workers and employers (both within and outside the labour market-training target-group). This sum is fixed per hour of work so that the total contribution equals the total expenditure of the AMU-system.

However, the total expenditure of the AMU-system is decided by parliament in connection with the Budget debate, as is also its apportionment between the different programmes. The labour market training schemes thus appear in the
Budget as both an income and an expenditure item. The financial system known as the 'AUD-fund' thus concerns only the financial aspects of AMU-training, but neither target group, volume, content nor control, which to a substantial degree are still handled through the labour market partners, as before 1983. Administration of AMU training schemes takes place in the AMU-Directorate under the Ministry of Labour.

Matters relating to control are described in detail in the CEDEFOP-report 'Arbejdsmarkedets parters rolle i ungdoms- og voksenuddannelserne', 1987.

The total contribution to the AUD-fund is given in table 3.2:

**Table 3.2**
The total contribution to the AUD-fund

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution (mill kr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>1666</td>
</tr>
<tr>
<td>1986</td>
<td>1634</td>
</tr>
<tr>
<td>1987</td>
<td>1646</td>
</tr>
<tr>
<td>1988</td>
<td>1854</td>
</tr>
</tbody>
</table>

Remarks: The figures are based upon current prices. The figures for 1985-1987 are accounting figures, whereas 1988 is a budget figure. The figures cover operating costs, course remuneration and central administration, but not travel allowance and building/construction costs.
Participants in the qualification-conferring labour market training courses who are over 18 years of age receive wage compensation equal to the maximum daily unemployment benefit. For participants who were in employment prior to taking a course, it is possible to receive wage compensation up to 125% of the maximum daily benefit. Unemployed participants in qualification-conferring labour market training schemes receive wage compensation equal to the maximum daily benefit. In recent years, however, daily benefit has decreased relatively in comparison with average wages; consequently, training remuneration is not fair compensation for lost earnings - particularly for the highest-paid among the employed participants.

Regarding non-qualification activities, the course participant who is entitled to compensation is entitled to it during the course, whereas the participant who is not can still receive social security benefit. During course participation for participants over 18 years of age in youth schemes, a small course-remuneration is obtainable, as a motivating addition to social security benefit.

For training courses with both qualification-conferring and non-qualification training (LAMU-courses), remuneration is according to the particular types of instruction given, with the result that participants receive varying remuneration during the course.
Apportionment of the total funds between qualification-conferring and non-qualification activities, respectively, and between direct training costs and indirect training costs, can be seen from table 3.3.

Table 3.3
Apportionment of AUD-fund between activities. 1986.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central administration and co-ordination</td>
<td>3%</td>
</tr>
<tr>
<td>Operation of qualification-conferring courses</td>
<td>45%</td>
</tr>
<tr>
<td>Wage compensation for participants on qualification-conferring courses</td>
<td>38%</td>
</tr>
<tr>
<td>Operation of non-qualification activity</td>
<td>12%</td>
</tr>
<tr>
<td>Remuneration for non-qualification courses</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

1) These activities include schemes which include both qualification-conferring and non-qualification courses. These activities represent one-third of the stated 12%.

Remarks: The table is calculated on the basis of information from the AMU-Directorate. The percentage basis is stated relative to all expenditure except travel allowances and building/construction expenditure.

3.2 Semi-skilled worker training schemes
Semi-skilled worker training is the biggest single activity among labour market training schemes and in 1987 embraced a total of 63,461 persons.
The training scheme for the unskilled which started in 1960, with about 2,200 course participants annually, is the oldest of the labour market training schemes. Its establishment can be regarded as, among other things, part of the structural adaptation of the labour force to the industrial form of production.

The object of semi-skilled worker training was actually vocationally-orientated adult/continuing training intended to provide unskilled workers with a basic industrial qualification within an existing area of employment.

The target group for the activities is thus unemployed and employed persons, primarily unskilled. In practice, the admission of course participants is administered with employed applicants being accepted first, then applicants with promised employment and, lastly, the unemployed. In 1987 one-quarter of all course participants were unemployed both before and after course participation. However, within trades and industries where the number of applicants is much higher than the number of course places it can be difficult for unemployed persons to be admitted to courses.
Table 3.4

Employment status for participants in semi-skilled worker training courses, 1987

60% of the participants are employed before and after the course *)
8% of the participants are not employed before, but after*)
6% of the participants are employed before, but not after
26% of the participants are employed neither before nor after

*) Remarks: Information concerning employment is gathered from the course participants on the first day of the course and relates only to whether the participants have been promised employment after the course.


Just under one-third of the participants in semi-skilled worker courses are women, as can be seen from table 3.5.
Table 3.5
Participants started on semi-skilled worker training courses, 1987, by sex and age.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-19</td>
<td>4,612</td>
<td>2,850</td>
<td>7,462</td>
</tr>
<tr>
<td>20-24</td>
<td>17,448</td>
<td>7,638</td>
<td>25,086</td>
</tr>
<tr>
<td>25-29</td>
<td>13,690</td>
<td>5,494</td>
<td>19,184</td>
</tr>
<tr>
<td>30-34</td>
<td>9,779</td>
<td>3,999</td>
<td>13,778</td>
</tr>
<tr>
<td>35-39</td>
<td>7,282</td>
<td>3,597</td>
<td>10,879</td>
</tr>
<tr>
<td>40-44</td>
<td>6,484</td>
<td>3,310</td>
<td>9,794</td>
</tr>
<tr>
<td>45-49</td>
<td>4,020</td>
<td>2,121</td>
<td>6,141</td>
</tr>
<tr>
<td>50-</td>
<td>4,139</td>
<td>1,559</td>
<td>5,698</td>
</tr>
<tr>
<td>Not stated</td>
<td>46</td>
<td>9</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>67,500</td>
<td>30,577</td>
<td>98,077</td>
</tr>
</tbody>
</table>

Source: Calculated on the basis of training of semi-skilled workers, Statistik 1987. AMU-Direktoratet.

53% of the participants on the semi-skilled worker course are under 30 years of age. 28% of the total number of participants have had occupational training prior to the course. Of these, one-third - representing 10% of all participants - have previously undergone actual (3-4 years) vocational training within the same trade or industry.
Content. Semi-skilled worker training courses are offered within 23 different areas of trade and industry in which unskilled workers are employed. However, the bulk of the activities take place within a limited number of sectors, as will be seen from table 3.6.

Table 3.6
Distribution of course participants between different industries, by sex. In per cent

<table>
<thead>
<tr>
<th>Industry</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and other</td>
<td>31.0</td>
<td>38.6</td>
<td>33.4</td>
</tr>
<tr>
<td>metal-using industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land transport</td>
<td>29.4</td>
<td></td>
<td>22.1</td>
</tr>
<tr>
<td>Building/construction</td>
<td>17.4</td>
<td></td>
<td>12.8</td>
</tr>
<tr>
<td>Cleaning</td>
<td></td>
<td>22.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td>11.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Other industries</td>
<td>22.4</td>
<td>27.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Institutional setting for the training courses.

Semi-skilled worker courses take place at special schools which provide only training of semi-skilled workers (and, where necessary, introductory vocational schemes for unemployed persons). The instruction takes place at 28 so-called 'self-owning' semi-skilled worker schools, located all over the country, and also at 6 state schools, which are usually boarding schools at which the students live while attending the courses.

Duration. Semi-skilled worker courses are courses modular in structure within the different industries. Within most industries there are basic courses covering a wide range of subjects and lasting 4-5 weeks, which can be supplemented with further training courses usually of 1-2 weeks' duration. After the individual course has ended, it is possible to continue on following courses and thereby obtain, within some industrial sectors, training of up to two years' duration. However, in 1987 less than one-half of all course participants took part in more than two weeks (80 hours) of training.

It is typical for semi-skilled worker training - and for labour market training schemes as a whole - that the courses are provided as daytime instruction in concentrated form with 40 hours of instruction a week. Participation in semi-skilled training is therefore always alternating with employment or unemployment, and never concurrent with it.
Finance and control. As mentioned earlier, semi-skilled worker training is financed through the AUD-fund, to which all workers and firms on the labour market contribute.

Rearrangement of the financial basis for labour market training, including semi-skilled worker training-schemes, has had only limited influence upon control of the content of the courses, which is still exercised to a considerable extent by the labour market partners through, on the one hand, the Training Council for Semi-skilled Workers (Uddannelsesrådet for specialarbejdere) and, on the other, the so-called 'industry committees' (brancheudvalg), of which there is one for each industry or trade, together totalling 23. In the case of the self-owning semi-skilled worker schools, in addition a local managing board has been appointed, with representatives from the labour market partners, and public bodies.

3.3 Continuing training of skilled workers

Continuing training of skilled workers begins rather later than semi-skilled worker training, in 1965. The volume of continuing training of skilled workers is (cf. table 3.1) about one-half that of semi-skilled worker training, in number of participants, and approximately one-third of the scale of activities as measured in completed course weeks - reflecting the fact that the continuing training courses for skilled workers as a whole are of shorter duration.
The object of continuing training of skilled workers is to provide participants who have prior skilled training with updating of their training to the current standard and to provide further training for new or specialized duties. The target group is thus employed and unemployed persons with basic training in a trade, in accordance with the same priority-ranking for acceptance as that described for semi-skilled workers. In 1987, 28.8% of all course participants were unemployed both before and after participating in a course.

Table 3.7
Employment status\(^1\) for started course participants in continuing training of skilled workers, 1987.

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed both before and after</td>
<td>59%</td>
</tr>
<tr>
<td>Not employed before and after</td>
<td>3%</td>
</tr>
<tr>
<td>Employed before, not after</td>
<td>5%</td>
</tr>
<tr>
<td>Unemployed both before and after</td>
<td>29%</td>
</tr>
</tbody>
</table>


1) No information is available for 4% of the course participants.
2) See remarks to table 3.4.
Big differences of employment status exist as between the
course participants in different trades and industries, and
hence in the function of the courses for the unemployed and
for the sectors concerned. Among course participants in the
commercial and clerical sector, representing 28% of all
course participants, more than two-thirds have no promise
of employment after participating in the course. Within
engineering and other metal-using industry, representing
42% of all course participants, 72% have a promise of
employment after the course.

Table 3.8

Started course participants in continuing training of

<table>
<thead>
<tr>
<th>Age</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>-24 years</td>
<td>7,635</td>
<td>3,498</td>
<td>11,133</td>
</tr>
<tr>
<td>25-34 years</td>
<td>13,496</td>
<td>5,176</td>
<td>18,672</td>
</tr>
<tr>
<td>35-44 years</td>
<td>10,712</td>
<td>5,143</td>
<td>15,855</td>
</tr>
<tr>
<td>45-</td>
<td>5,539</td>
<td>2,859</td>
<td>8,598</td>
</tr>
<tr>
<td>Not stated</td>
<td>11</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>37,593</td>
<td>16,678</td>
<td>54,271</td>
</tr>
</tbody>
</table>

Source: Calculated on the basis of: Efteruddannelse af
faglaerte. Statistik 1987. AMU-Direktoratet

Participation by women in continuing training is
concentrated very much upon the commercial and clerical
sector, however, with 78% of all women participating in the
courses within this sector.
Content. Continuing training of skilled workers is offered within 26 different trades and industries, of which the three biggest account for 82% of all course participants, namely engineering and other metal-using industry (42%), commercial and clerical (28%) and the trade of electrician (13%).

The institutional setting for the courses is very predominantly the vocational schools (commercial schools and technical schools) at which the basic vocational training takes place.

Duration. As for semi-skilled worker training, the courses for continuing training are modular in structure; but they are shorter, on the whole. In 1987, 65% of the participants took part in courses with a total duration of less than 2 weeks = 80 hours.

Finance and control. Continuing training of skilled workers is financed as is semi-skilled worker training, by the AUD-fund, and control of continuing training is exercised here also with considerable influence from the labour market partners. Overall control is exercised through the Training Committee for the Continuing Training of Skilled Workers (Uddannelsesudvalget for faglaertes efteruddannelse). For most trades and industries an independent continuing training committee exists, while for a few there is a joint committee for the basic vocational training courses and continuing training courses.
3.4 Re-training

In addition, qualification-conferring activity of limited quality exists.

Re-training embraces groups of unemployed or persons under threat of unemployment and usually comprises courses of 1-2 months' duration, two-thirds of which cover productive work. In 1987 the total number of participants was 230.

3.5 Non-qualification AMU-training courses

The introductory vocational activities discussed in this section are the introductory vocational activities for young persons and other disadvantaged groups under the labour market training schemes. These training courses thus supplement the activities for unemployed persons, financed from taxation, which are mentioned in section 2.1.

The overriding object of introductory vocational, or preparatory vocational, training courses is to make it more possible for the participants to enter into training or employment through a broad introduction to the training sector and a number of trades or industries.
Through a narrower introduction to an individual trade or industry, it is possible for the courses also to include instruction preparatory to training. In youth schemes the primary aim is to motivate the participants to start one of the youth training courses. The shorter training system within AMU or actual employment is aimed more at courses for slightly older unemployed persons.

**Target group and participants.** The introductory vocational activities are carried out as courses for young persons (EIFU), i.e. for persons under 30 years of age. The activities are carried out also for unemployed persons over 30 (EIFL). In addition, introductory vocational courses are held for groups consisting only of women and for groups consisting only of immigrants. On courses for immigrants, Danish is taught side-by-side with the special-subject instruction. Courses for women and for immigrants are carried out as both EIFU- and EIFL-courses. The breakdown as between the different activity types can be seen from table 3.9.
Table 3.9
Breakdown of started course participants, by course type and sex. 1987.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses for youth</td>
<td>1,999</td>
<td>4,874</td>
<td>6,873</td>
</tr>
<tr>
<td>Courses for women</td>
<td>51</td>
<td>1,743</td>
<td>1,794</td>
</tr>
<tr>
<td>Courses for immigrants</td>
<td>659</td>
<td>258</td>
<td>917</td>
</tr>
<tr>
<td>Courses for long-term unemployed persons</td>
<td>389</td>
<td>1,167</td>
<td>1,556</td>
</tr>
<tr>
<td>All courses</td>
<td>3,098</td>
<td>8,042</td>
<td>11,140</td>
</tr>
</tbody>
</table>


As can be seen from the table, just under three-quarters of the course participants are women - reflecting the fact, among other things, that women experience unemployment more than men. Only on courses for immigrants are there more men than women - which can presumably be attributed to a combination of conditions of admission regarding language skills and socio-cultural circumstances in the immigrant group.

Content. The introductory vocational courses are arranged with a view to giving the individual course participant an actual feeling of working within a particular trade or industry and, at the same time, to providing knowledge of training opportunities within these trades and industries.
The individual course consists of several instruction modules and 4 weeks of on-job training, with the instruction alternating between theory and practice. Some modules include introduction to special subject areas - for example, building and construction, textiles and clothing, engineering and other metal-using industry, and also foodstuffs. Other modules deal with subjects of a general nature, such as 'job seeking and vocational training', 'women, training and employment' and also 'training and employment'.

**Institutional setting.** Introductory vocational instruction is given in collaboration with the AMU-centres which hold semi-skilled worker training courses, or at special EI-centres where only introductory vocational activities are carried out.

**Duration.** The courses usually consist of 3-4 special-subject modules and 2 general modules with an aggregate course duration of 7-10 weeks. The courses for immigrants are about twice as long, owing to the additional instruction in the Danish language.

**Finance and control.** Introductory vocational activities are normally financed through the AUD-fund (cf. introduction to this section).

In the last few years the question has been discussed as to whether the financing of introductory vocational activities should be transferred to county and local authorities. A
change of this kind would presumably facilitate a co-ordinated effort between activities for young unemployed persons. In conjunction with the efforts to decentralize schemes of labour-market policy, it has likewise been possible to carry out EI-courses against payment from county and local authorities and 'A-kasser' (unemployment benefit schemes), and EI-activities have been held which were financed with funds at the disposal of the regional labour-market boards. Lastly, for some development-type EI-activities there are also contributions from the EC social fund.

The control-situation regarding EI-activities reflects the broader labour market policy-aim of the activities, in that the advisory 'Training committee for preparatory vocational training' (Uddannelsesudvalg for erhvervsforberedende uddannelse) includes representatives not only of the labour market partners, but also from county and local authorities and the Ministry of Education.

3.6 Training activities under the AMU with both qualification-conferring and non-qualification elements

The need for training activities which both provided formal occupational qualification (semi-skilled worker training courses) and took account of the special problems of the unemployed without knowledge of a trade, led to a number of research and development activities. As a result of these, since 1985 the so-called LAMU-courses have been held, which are for unemployed persons who have completed the first
job-offer and reached the age 24 years and 3 months on completing their last job-offer.

**Content.** The courses are arranged as qualification-conferring courses supplemented by introductory vocational modules with a view to securing motivation of participants and assistance for the ensuing active job-seeking.

**Duration.** The courses are arranged with an aggregate duration of 15-26 weeks (average 20 weeks), of which about one-fifth of the time will be spent on the introductory vocational courses, whereas four-fifths will be spent on qualification-conferring courses.

Lastly, the fact will be mentioned that activities have also been started for refugees under the AMU. These activities are carried out with an average duration of 25 weeks and embrace both EI-activities, semi-skilled worker courses, extended practical exercises and special language courses. The activities for refugees are budgetted to cover about 1,000 course participants annually.

**3.6. Current changes**

In connection with the budget estimates for 1988, it has been decided to initiate an extraordinary campaign on behalf of the unemployed which will extend over a 4-year period. This campaign concerns particularly training-type
schemes and, out of the total of 4,500m kr which has been appropriated to combat unemployment, 1,800m kr has been reserved for training-type schemes.

The content and institutional frameworks for these schemes have not yet been finalized; but there are strong indications at present that some of these offers of training for the unemployed will be carried out at AMU-centres. Among other settings for the training, special mention will be made of the vocational schools and some of the training institutions which are described in sub-section 2.1 as suppliers of activities especially for the unemployed.

It is typical that the contemplated training activities for unemployed persons in this connection embrace both preparatory vocational and qualification-conferring elements.

4 Training activities of industry- and labour market-organizations

The various continuing training schemes described in this section together represent 12-15% of the total turnover and are established institutionally with the labour market partners (worker- and employer-organizations), trade and industrial organizations or professional organizations.
As pointed out in the CEDEFOP-report cited earlier concerning 'The role of the labour market partners in youth and adult training in Denmark', the labour market partners have a considerable role in both the development, execution and control of continuing training schemes in Denmark, particularly within the sphere of the Danish Federation of Trade Unions (LO).

Besides the influence exerted by the labour market partners upon the AMU training schemes mentioned in section 3, within several industrial sectors – especially engineering and other metal-using industry – traditions exist for development of training measures for the employees of the sector concerned. These activities are in many instances financed by means of contributions from the labour market organizations involved, and any firms involved in the development of the actual training projects. In these projects the intentions are often to stimulate, through development work of this kind, development in the qualification-conferring training schemes, continuing training schemes such as the AMU training schemes described in section 3.

The institutional basis with the labour market partners therefore determines, in varying degrees, the object, content and target group of the training schemes.

Financially, some of these activities are operating (increasingly) under market conditions as alternatives to offers on the commercial market for courses, and
participation in the training is mostly financed (except for the trade-union political courses of the workers' organizations) by the participants' employers. The union political courses (FiU) are financed by the trade union movement.

4.1 Employer- and industry-organizations' continuing training activities

These activities represent 3-4% of all continuing training activities, measured in turnover. The object of these training activities is to develop co-operation between management and workers, and to strengthen the management function in member-firms.

The target group for these continuing training schemes is the owners of firms, managers and white-collar workers such as foremen.

Content. The training courses cover subjects such as business management, labour management, personnel management, personnel administration, production and industrial management, marketing, finance and accounts.

The duration and institutional setting of the courses can range from half-day meetings through residential courses lasting several days and up to courses of several weeks' duration, divided into small modules.

Finance. These training activities will often be developed and planned as part of the employer- and industry-organizations' service to member-firms.
Development costs of these training activities will thus in many instances be included in the other general operating costs of the organizations. However, the execution itself of the courses will usually be user-financed, so that the participants' employers cover the costs of course participation.

4.2 Continuing training activities of the workers' organizations

The worker organizations' continuing training activities have the primary object of qualifying members' representatives within a number of different trade-union political subjects and fields.

Some trade-union organizations also work with actual occupationally-qualifying continuing training schemes, with a view to strengthening the position of their members' on the labour market. These continuing training schemes embrace both unemployed and employed members. The following are examples of these activities.

The Union of Commercial and Clerical Employees in Denmark (Handels- og Kontorfunktionaerernes Forbund i Danmark, HK) is a trade-union organization for employees in commercial and administrative jobs. In connection with the introduction of information technology in these areas of work, HK found it necessary to supplement the continuing training activities offered by the suppliers of computer hardware with courses having a broader content which not
only train the users in administrative information processing, but also strengthen members' understanding of, and critical insight into, administrative information processing. The training course (HK-Moduldata) is also set up as a critical supplement to the continuing training courses which exist under AMU (cf. section 3) for employees within the field of edp. The training courses have been carried out since 1987.

The training activities are on a relatively large scale and take place at 22 training centres located all over the country. About 30,000 course participants take part annually in HK-Moduldata. 10-15% of the participants are unemployed. The courses are modular in structure and mainly of 5 days' duration.

The content of the training courses is thus orientated more towards comprehension than narrowly towards machine operation, and it usually arranged on a case-basis around problem fields from the course participants' own areas of practical work (e.g. laboratory, shop, local government).

The training activities have been planned, executed and financed under HK from the beginning and the current budget-limit is 55m kr. However, it was the intention from the outset that the form and content of the courses should be such that they both met the needs of members and employers and also could be sold on the open market for courses. It is expected that in 1989 20-25% of the total volume of courses will be purchased by employers (both
private firms and public administrations such as local authorities) and the proportion of these employer-financed courses is expected to increase. Within some sectors such as engineering and other metal-using industry and the water, heating and sanitation sector, in collective-bargaining wage settlements an agreement has been concluded that a sum of money per hour of work should be set aside for research and development of continuing training within the sector concerned.

4.3 Continuing training activities of 'dimittend'-organizations

'Dimittendforeninger' can be described as professional associations which look after both the trade-union and the professional interests for a given profession, typically with provision of continuing training. As the largest of the professional associations which arrange continuing training, Danske Ingeniørers Efteruddannelse (DIEU), Danmarks Jurist og Økonomforbund, Den almindelige danske lægeforening and Dansk Tandlægeforening can be mentioned. The continuing training courses under the 'dimittend'-associations are often offered in the form of courses (residential or non-residential) of 2-5 days' duration.

The content of the courses thus originates from the professional organizations' interest in maintaining and increasing their members' 'market value' within their professional spheres. It is typical, however, that both
employees and owners of firms within the profession concerned participate.

The continuing training courses are arranged in such a way that in form and content they are based upon the professional needs of the different professions, and the participants in the continuing training courses will usually be members of the professional organization concerned.

Also, in more recent years a development has taken place in that, besides the narrowly professional continuing training activities, continuing training in general subjects is being offered, such as personal development, project management, etc., without any specific connection with the profession concerned. As a result, these suppliers of continuing training, having initially handled the individual profession's narrowly professional continuing training, are functioning increasingly under market conditions, in line with commercial suppliers of continuing training.

This trend is reflected also in the financial framework for the continuing training activities of the 'dimittend'-associations. Administration, development and marketing expenses are covered in some of the associations partially by members' contributions, whereas direct training costs (tuition fees, board and lodging) are generally covered by a course fee paid in conjunction with participation in the course.
The course fee is normally paid by the participants' employer, regardless of whether the employer is private or public, and course participation is with remuneration during the period of the course. Unemployed members can in several associations participate with some price reduction, but must themselves pay this reduced course fee.

5 Continuing training courses offered on the open market

The activities in this section cover about 10% of the total supply of vocationally-orientated adult education, measured in direct costs. The activities are set up in many instances as short (1-3 days) open courses, arranged and executed on the basis of market considerations. There are two main categories of training suppliers within this area.

1) Private, commercial course suppliers, representing about 5% of total turnover, offer continuing training on the basis of commercial principles, as a main activity or as a subsidiary activity concurrently with consultancy, for example.

Private arrangers of courses offer especially courses within communication, personal development, management and co-operation, sales and marketing. The courses are often held as residential courses on properties which provide rooms, tuition facilities and board. The courses are in many instances intended for white-collar workers - in both private and public
enterprises. The courses can be supplied as open courses with many different enterprises participating, or as company courses with a single company's employees as participants. In the latter cases the line of division from in-house courses (discussed in section 6) is fluid; but the line can presumably be fixed in relation to who is responsible for adaptation and execution of the course.

The financing of course participation is almost always done by the participants' employers, through the course fee which covers both course development, course execution, materials and board and lodging.

One special area is practice and training in conjunction with deliveries of equipment, machines and industrial plant. However, these activities are very difficult to calculate regarding both their volume and finance for them, as they are often included as part of a combined delivery and are not calculated separately as a training activity.

2) Self-owning institutions, associations, companies and funds represent about 5% of total turnover and function as course suppliers, also under market conditions. These course suppliers often have, in addition, an idealistic social purpose behind their continuing training activities - development and updating of the occupational qualifications of the labour force, for example. Institutions under the technological service
network can be mentioned as typical suppliers of training within this area.

The target group for training activities is both blue-collar and white-collar workers within the public and private sectors, and the content of the activities will usually be technical and specialized in nature, as a direct extension of, and in conjunction with, course suppliers' other technical and specialized activities.

Continuing training courses are often held in the form of short, non-residential courses; but longer courses exist also - licensing-courses within the energy sector, for example.

These continuing training courses operate under market conditions, as mentioned earlier; but in connection with the additional social goals there is in many cases a public grant for the courses. This grant varies in amount between 0 and 40% of course costs, depending upon the subject of the course. The course fee reduced in this way is paid by the participants' employers.

6 In-house continuing training

The continuing training activities described in this section represent 10-15% of all continuing training activities, measured in turnover. In-house training courses are activities carried out within the individual enterprise
exclusively for its own employees and financed by the enterprise. In-house continuing training can take place with use of the enterprise's own employees or managers as instructors, or by bringing in outside instructors - commercial course suppliers, for example.

As mentioned in section 1, 'in-house courses' covers two categories which differ from each other financially.

A Private enterprises' in-house continuing training of their own employees
B Public enterprises' in-house continuing training of their own employees - within a single management or department, for example.

6.1 In-house continuing training in the private sector

Information on this area is very poor regarding statistical data and scope (with respect to both time and number of participants) and consumption of financial resources (direct and indirect costs).

A few enterprises sometimes report expenditure in connection with the total training activities of the enterprise; but the methods and what is calculated as training expenditure vary from enterprise to enterprise. Some operate with centralized training budgets, whereas others set aside funds for training as consequential expenditure in connection with investment in machines or equipment. Data concerning scope and expenditure for the
individual enterprises cannot, therefore, be used as the basis for assessing total scope and expenditure.

In-house training will nearly always be financed completely by the individual enterprise. However, examples exist of courses held at an individual enterprise being exclusively for its own employees, financed in some cases partly with public money or by funds - either through the AUD-fund for the so-called 'enterprise-adapted' courses (VTP-courses, cf. section 3) or in connection with Law No. 271 (cf. section 4). These examples are exceptions, however.

In fairly recent years, in-house training courses have been held particularly within the service sector, as part of major organizational changes.

In-house training assumes many different forms, ranging from job-like training and instruction in conjunction with the daily work or with the introduction of new technology (both production technology and administrative technology) to what is definitely instruction within the enterprise, in special classrooms or instruction workshops.

Many of the larger nation-wide enterprises, particularly within the commercial or the financial sector, have separate course-centres which carry out continuing training activities for employees in the different branches or departments.
To illustrate the position of in-house training among the combined training activities of the enterprises, we can refer to a survey\(^1\) carried out in 1983 in firms within two selected industries, namely industrial machinery manufacturers and data processing firms. The two industries were selected with a view to obtaining a broad description of how two very different industries handle the question of continuing training. The survey is a complete survey within the two industries, but cannot be said to provide a representative description of all private enterprises' policy and practice within the sphere of continuing training.

Two-thirds of the data processing firms have used in-house instruction in the last couple of years, whereas only one-quarter of the industrial machinery firms have used it. This difference between the industries becomes even clearer if we consider the proportion of total training resources represented by in-house instruction, with one-half of the data processing firms which have in-house instruction spending more than 25% of the total training resources on in-house instruction. Of the industrial machinery firms, only one-quarter spend 25% or more of the total training resources on instruction.


The teachers used for in-house instruction can be seen from table 6.1 below.
Table 6.1
Use of teachers in in-house instruction

<table>
<thead>
<tr>
<th></th>
<th>Industrial machinery firms</th>
<th>Data processing firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use own employees as teachers</td>
<td>41%</td>
<td>87%</td>
</tr>
<tr>
<td>Use 'outside people' as teachers</td>
<td>71%</td>
<td>45%</td>
</tr>
<tr>
<td>Purchase 'tailor-made courses'</td>
<td>35%</td>
<td>27%</td>
</tr>
</tbody>
</table>


Data processing firms use their own employees as teachers far more than do industrial machinery firms, whereas industrial machinery firms use outside people more. The tendency to purchase tailor-made courses is more or less the same for the two industries, with a good one-third of the industrial machinery firms and just under one-third of the data processing firms using 'complete courses' from course organizers.

6.2 In-house continuing training in the public sector

No complete figures are available on the scope of, or expenditure on, in-house continuing training in the public sector. However, a survey\(^2\) of continuing training in the public sector shows that in-house training is used especially in subjects such as management, communication, communication,

\(^2\) Administration and personnel department: Market survey on continuing training for public employees. 1988.
foreign languages, teaching and procurement. This in-house continuing training takes place with use of own teachers or with outside lecturers brought in for the purpose, but organized under control of the individual institution.

7 Summary and conclusion

In the above sections the different areas of continuing training, their financing and various financial allocation systems are described.

In this section the different continuing training areas will be compared with the position, on the labour market, of the target group and participants. This is done with a view to elucidating the opportunities available to the various groups to participate in continuing training and the actual breakdown of continuing training as between the different subsidiary markets for labour.

7.1 Partial labour markets and continuing training

The following is based upon the fact that, depending upon the sex, job (determined by, among other factors, any previous training) and employment sector of the individual worker, quite diverse job functions exist, and hence quite diverse continuing training requirements - and continuing training possibilities.
Within some job functions there are no differences in content as between private and public employment (e.g. within certain administrative jobs) or between the job functions carried out by men and women, respectively (e.g. primary and lower secondary school teachers).

However, such great quantitative differences exist between the employment structures for the two sexes, between employment structures in the public and private sectors and between the production sector and commerce/service within the private sector, that these differences should be taken into account when assessing continuing training requirements and opportunities for the various groups.

Remarks:

1. Including building/construction firms, extraction of raw materials and electric power stations, gasworks, waterworks and district heating plants.
2. Including transport firms, hotel and catering firms, banks, insurance companies, business services and personal services.
3. Includes education, health and social services, public administration, defence, etc.
4. The sub-division of groups of white-collar employees is based upon the following:
   - Higher-ranking employees: Superiors, e.g. university-trained staff, managers, heads of department
   - Middle-ranking employees: E.g. shop foremen, teachers, nurses, technicians
   - Lower-ranking employees: Office staff, postmen, policemen
5. Including assisting spouses

Discrepancies in percentages can be attributed to rounding-errors.
Source: The table was drawn up on the basis of table 3.14 and table 3.15 in Danmarks Statistik og Socialforskningsinstituttet: 'Levevilkår i Danmark' (Living conditions in Denmark), statistical survey 1988.

On the basis of table 7.1 the following partial labour markets can be distinguished, representing 64% of the total labour market for men and 73% of the total labour market for women, respectively.

Partial labour market A
Embraces about 330,000 skilled and unskilled men in production enterprises, representing just under one-quarter of the total male labour market. The group typically includes workers within engineering and other metal-using industry and within building/construction.

With respect to training, the group ranges from 'no previous training', through previous participation in, for example, semi-skilled worker courses, to previous skill training within handicraft and industrial sectors.

Partial labour market B
Embraces about 240,000 male white-collar workers within private commerce and services, representing approx. 17% of the total male labour market. This group is divided almost equally between the three different white-collar worker-rankings and embraces male employees within commercial, financial and administrative areas, such as edp.

With respect to training, this group ranges from previous university training to 'no previous training'.
Partial labour market C
Embraces about 165,000 skilled and unskilled men, representing approx. 11% of the male labour market within commerce and services, including a relatively large transport sector.

With respect to training, this group ranges from 'no previous training, through previous participation in semi-skilled worker courses, to previous trade training.

Partial labour market D
Embraces about 185,000 male white-collar workers in public employment, representing 13% of the male labour force and divided almost equally between the three white-collar worker-rankings. The group embraces employees in all public employments, administrations, government, education and public service.

With respect to training, the group ranges from university-trained staff in management-, training-, research and administration-functions, through all teachers and trainers, and administrative staff with previous skill training, to employees without previous training.

Partial labour market E
Embraces a total of about 285,000 unskilled women in both production, commerce and services and the public sector; but the public sector represents a good one-half of this. Unskilled women represent one-quarter of all women on the
labour market and include untrained women in industry, shops, services (e.g. cleaning) and offices, as well as in a number of unskilled jobs within the social and health sector.

Partial labour market F
Embraces approx. 240,000 female, lower-ranking white-collar workers within production, commerce and services, representing approx. 20% of all women on the labour market. This group typically includes women in services such as shop assistants and in administrative jobs such as office and bank clerks. With respect to training, this group comprises both women with no vocational training and women with skill training or equivalent training within the commerce and clerical sector, for example.

Partial labour market G
Embraces approx. 340,000 female white-collar workers in public employment within the public sector, representing approx. 29% of all women on the labour market. Of this group, the lower-ranking white-collar workers (typically nurses, office workers, trainers) represent more than one-half, whereas the group of middle-ranking white-collar workers (e.g. teachers, nurses and similar workers) constitute the bulk of the others.

With respect to training, the group typically comprises skill training courses within the HK-sector, a number of intermediate courses mainly directed towards public
employment, and - as outer-extremes - university-trained persons and women without vocational training.

In addition to these seven partial labour markets for employed paid workers, there are about 315,000 self-employed persons with assisting spouses, representing 15% of the employment volume for all men and 9% for all women.

There is also a non-employed group of unemployed persons who in the continuing training-context differ greatly in some areas from the employed (e.g. regarding admission to, and financing of, continuing training), and in other areas resemble the currently employed with the same work- and training-background.

When this sub-division into 7 partial labour markets for employed workers and also the group of self-employed persons and the unemployed are compared with the various types of continuing training in sections 1-6 and also the financial basis of these continuing training schemes, the following picture emerges, which owing its very nature shows only the most frequent and most relevant continuing training activities.
<table>
<thead>
<tr>
<th>Partial labour market</th>
<th>Relevant continuing training</th>
<th>Financial basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Unskilled and skilled male workers in production</td>
<td>Semi-skilled worker training</td>
<td>AUD-Fund</td>
</tr>
<tr>
<td></td>
<td>Continuing training of skilled workers</td>
<td>AUD-Fund</td>
</tr>
<tr>
<td></td>
<td>(Workers' organizations' continuing training activities)</td>
<td>Members' contributions</td>
</tr>
<tr>
<td></td>
<td>In-house training</td>
<td>Private firms</td>
</tr>
<tr>
<td></td>
<td>Suppliers' courses</td>
<td>(Private firms)</td>
</tr>
<tr>
<td></td>
<td>(Open public continuing training)</td>
<td>(Participants' fees)(employer-financed)+taxes</td>
</tr>
<tr>
<td>B. Male white-collar workers within commerce and services</td>
<td>Open public continuing training</td>
<td>Participants' fees (employer-financed) + taxes</td>
</tr>
<tr>
<td></td>
<td>Continuing training of skilled workers</td>
<td>AUD-Fund</td>
</tr>
<tr>
<td></td>
<td>Workers' organizations,'dimittend'-associations' and employer organizations' continuing training activities</td>
<td>(Members' contributions) + participants' fees (employer-financed)</td>
</tr>
<tr>
<td></td>
<td>Short courses on the open market</td>
<td>Participants' fees (employer-financed)</td>
</tr>
<tr>
<td></td>
<td>Company in-house training</td>
<td>Private firms</td>
</tr>
<tr>
<td></td>
<td>Suppliers' courses</td>
<td>(Private firms)</td>
</tr>
<tr>
<td>C. Unskilled and skilled male workers in commerce and services</td>
<td>(Open public continuing training)</td>
<td>(Participants' fees) (employer-financed) + taxes</td>
</tr>
<tr>
<td></td>
<td>Semi-skilled worker training</td>
<td>AUD-Fund</td>
</tr>
<tr>
<td></td>
<td>Continuing training of skilled workers</td>
<td>AUD-Fund</td>
</tr>
<tr>
<td></td>
<td>Workers' organizations' continuing training</td>
<td>Members' contributions + participants' fees (employer-financed)</td>
</tr>
<tr>
<td></td>
<td>In-house training</td>
<td>Private firms</td>
</tr>
<tr>
<td></td>
<td>Suppliers' courses</td>
<td>(Private firms)</td>
</tr>
</tbody>
</table>

<p>| D. Male white-collar workers in public employment | Open public continuing training | (Participants' fees) + taxes |
| | Central public continuing training institutions | Participants' fees = taxes |
| | Workers' organizations' and 'dimittend'-associations' continuing training | Members' contributions + participants' fees (employer financed = taxes) |
| | Short courses on the open market | Participants' fees = taxes |
| | In-house training | Employer financed = taxes |</p>
<table>
<thead>
<tr>
<th>E. Unskilled women within production, commerce, services and public sector</th>
<th>Semi-skilled worker training (primarily for employees in production firms)</th>
<th>AUD-Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Workers' organizations' continuing training</td>
<td>Members' contributions + participants' fees (employer-financed)</td>
</tr>
<tr>
<td></td>
<td>In-house training</td>
<td>Private firms + public employers (= taxes)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Low-ranking female white-collar workers in production, commerce and services</th>
<th>Open public continuing training (Continuing training of skilled workers)</th>
<th>(Participants' fees) + taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Workers' organizations' continuing training</td>
<td>Members' contributions + any participants' fees (employer-financed)</td>
</tr>
<tr>
<td></td>
<td>Suppliers' courses</td>
<td>Private firms</td>
</tr>
<tr>
<td></td>
<td>Short courses on the open market</td>
<td>Participants' fees = private firms</td>
</tr>
<tr>
<td></td>
<td>In-house training</td>
<td>Private firms</td>
</tr>
</tbody>
</table>
The table shows which continuing training opportunities are relevant to different groups on the labour market. It must be emphasized, however, that the table does not say anything about the frequency of the continuing training activities utilized, and the above-mentioned forms of continuing training within a given partial labour market are not relevant to all on the particular partial labour market concerned.

For some groups there is a wide range of continuing training opportunities - for white-collar workers in public employment, for example, with both especially-arranged training courses, continuing training schemes on the open market and workers' organizations' continuing training, and also the public open training schemes. For other groups - unskilled workers, for example - there is more limitation or uniformity in the continuing training opportunities.
The financial basis for unskilled and skilled workers' (partial labour markets A + C + E) participation in continuing training consists mainly of the AUD-Fund, of firms (in the form of in-house training) and of trade-union organizations.

Participation in continuing training by white-collar workers in the private sector (partial labour markets B + F) is financed very predominantly by their employers in the form of participants' fees for a number of different continuing training schemes and also in-house training courses.

Continuing training of public employees is always financed - regardless of any market-like systems of allocation which might exist - through taxation or participants' fees, or as in-house training.

7.2 Distribution of continuing training
Survey studies of participation in continuing training are often very defective and problematical from the standpoint of method, particularly with regard to determining the great differences in structure of both the labour market and continuing training.

- Some training schemes are offered in the form of short concentrated courses, e.g. AMU-courses of 1-3 weeks full-time, whereas others are offered as longer courses with a few hours of instruction a week - open public courses, for example. Determining the total duration of
continuing training and its distribution between different categories of employment is, therefore, a problem if these differences are not taken into account.

- The standard of the continuing training schemes can be difficult to record if no specified requirements exist for the participants' qualifications and precise aim of the content of the continuing training.
- Most survey studies use only one-dimensional distributions, with the result that any differences which exist between, for example, men's and women's employment structure - and participation in continuing training - are recorded only exceptionally.

In spite of these reservations, reports are given below from various survey studies to elucidate the distribution of continuing training in Denmark.
### Table 7.2
Proportion of various worker-categories having participated in continuing training. Per cent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>23</td>
</tr>
<tr>
<td>Unskilled</td>
<td>6</td>
<td>9</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Skilled, technical</td>
<td>7-9</td>
<td>20</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Office workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and subordinates</td>
<td>7</td>
<td>30</td>
<td>31</td>
<td>)</td>
</tr>
<tr>
<td>Salaried employees in</td>
<td></td>
<td></td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>sales, product</td>
<td>20</td>
<td>44</td>
<td>43</td>
<td>)</td>
</tr>
<tr>
<td>development,</td>
<td></td>
<td></td>
<td></td>
<td>)</td>
</tr>
<tr>
<td>management, etc.</td>
<td></td>
<td></td>
<td></td>
<td>)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td>Average</td>
<td>-</td>
<td>33</td>
<td>28</td>
<td>39</td>
</tr>
</tbody>
</table>
Survey 1983: Source: Industriens behov. Uddannelse og efteruddannelse. (Industry's needs. Training and continuing training). Federation of Danish Industries (Industrirådet) 1984. The Federation carried out a questionnaire survey among member-firms concerning training and continuing training. Replies are from more than 1,000 firms representing more than 200,000 employees. The percentages stated in table 7.2 are the breakdown of replies to the question: What proportion of the firm's employees in the named categories took part in continuing training in 1983? It is not stated whether weighting was carried out in relation to the size and work-force composition of the firms.

Survey 1981: Source: Survey of hours of work 1982. The survey is an interview survey with just under 9,000 interviewees, selected representatively from the population aged 16-65 years.


The three different surveys show very diverse levels of participation in continuing training - which is connected with the fact that the selection is varied and that the
reporting methods vary; but they display the same tendencies, namely:
- 25-40% of the gainfully-employed participated in one or other form of continuing training within one year (whereas 60-75% did not take part in continuing training at all within one year)

- The category 'salaried employees' takes part far more frequently in continuing training than do skilled and unskilled workers

- subordinate office workers take part much less in continuing training than do the other categories of salaried employees

- the unemployed and self-employed take part in continuing training on a scale equal to that of skilled and unskilled workers.

To elucidate further the participation by various groups in continuing training, the proportion of participants within various professional organizations is shown in table 7.3.
Table 7.3

Proportions within the different professional associations having taken part in courses, 1981. Per cent

<table>
<thead>
<tr>
<th>Association</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danske Bankfunktionærers Landsforening (private-sector salaried employees in banks and savings banks)</td>
<td>56</td>
</tr>
<tr>
<td>Danmarks Lærerforening (primary and lower secondary school teachers employed in the public sector)</td>
<td>54</td>
</tr>
<tr>
<td>Akademikernes Centralorganisation (university graduates employed in public and private sectors)</td>
<td>47</td>
</tr>
<tr>
<td>Børne- og Ungdomspædagogernes Landsforening (trained employees in public institutions for children and young persons)</td>
<td>45</td>
</tr>
<tr>
<td>Statstjenestemaendenes Centralorganisation II (public employees such as policemen, nurses, vocational school teachers)</td>
<td>39</td>
</tr>
<tr>
<td>Handels- og Kontorfunktionærernes Forbund (salaried employees with or without occupational training, in private and public sectors)</td>
<td>24</td>
</tr>
</tbody>
</table>

contd./
<table>
<thead>
<tr>
<th>Organization</th>
<th>Hours of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dansk Metalarbejderforbund (skilled workers, mainly in industry)</td>
<td>24</td>
</tr>
<tr>
<td>Dansk El-Forbund (skilled workers mainly in the private sector)</td>
<td>23</td>
</tr>
<tr>
<td>Husligh Arbejder Forbund (female unskilled workers in the private and public sectors)</td>
<td>18</td>
</tr>
<tr>
<td>Dansk Kommunal Arbejderforbund (unskilled workers in the public sector)</td>
<td>14</td>
</tr>
<tr>
<td>Dansk Beklaednings- og Textilarbejder-forbund (unskilled and semi-skilled workers, mainly women in manufacturing)</td>
<td>13</td>
</tr>
<tr>
<td>Specialarbejderforbundet i Danmark (unskilled workers, primarily men, mainly in the private sector, manufacturing industry, building/ construction and transport)</td>
<td>11</td>
</tr>
<tr>
<td>Kvidneligt Arbejderforbund (female unskilled workers primarily in manufacturing industry)</td>
<td>9</td>
</tr>
<tr>
<td>Paedagogisk Medhjaelper Forbund (unskilled public employees in public institutions)</td>
<td>8</td>
</tr>
<tr>
<td>Snedker- og Tømrerforbundet i Danmark (skilled and unskilled workers in manufacturing and craft industry)</td>
<td>7</td>
</tr>
<tr>
<td>Naerings- og Nydelsesmiddelarbejder Forbundet (unskilled workers in the food industry)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

**Source:** Compiled on the basis of table 3.46 in the Survey of hours of work 1982 issued by the Ministry of Labour finance and statistics consultant. The survey states the duration of continuing training and also non-participation. The above
Table was compiled as a residual of 'non-participant', with the stated duration in the Survey of hours of work seeming to pose a methodological problem.

Table 7.3 shows that almost one-half of all white-collar workers in the public sector with previous long or medium-length theoretical training took part in continuing training within one year. This category is exceeded only by white-collar workers within the private financial sector. Not unexpectedly, the smallest numerical participation in continuing training was within the unskilled workers' organizations.

To clarify further this 'Matthew-effect' ("to him that hath shall be given"), participation in continuing training is shown in table 7.4 for groups with different training backgrounds.

**Table 7.4**

Participation in continuing training, 1981. Per cent

<table>
<thead>
<tr>
<th>Training background</th>
<th>Proportion having participated in cont. training</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>14</td>
</tr>
<tr>
<td>AMU-training</td>
<td>21</td>
</tr>
<tr>
<td>Apprentice training</td>
<td>26</td>
</tr>
<tr>
<td>Brief training</td>
<td></td>
</tr>
<tr>
<td>less than 1 year</td>
<td>25</td>
</tr>
<tr>
<td>Theoretical training</td>
<td></td>
</tr>
<tr>
<td>lasting 1-3 years</td>
<td>31</td>
</tr>
</tbody>
</table>

contd./
Technician-/trainer-training of less than 3 years' duration 40
Continuing theoretical training (teachers, journalists) 49
University training 45

Source: Compiled on the basis of table 3.45 in Survey of hours of work 1982, issued by Ministry of Labour finance and statistics consultant.

It must be emphasized again, however, that the above information concerning the distribution of continuing training shows only the proportion within any given group which has participated at all in continuing training within the year concerned.

The above table thus does not distinguish between participation in a 1-day continuing training course and participation in, for example, 5 hours of continuing training a week plus a lot of home-work, within one year.

Therefore, the only conclusion - not particularly sensational - which can be drawn concerning the distribution of continuing training is that 80-90% of the worst previously trained participants (no vocational training), usually employed as unskilled workers, participated in some form of continuing training within one year. By comparison, this applies to only about one-half of those with previous theoretical continuing training of 3-7 years' duration.
7.3 Financing of continuing training

As mentioned in section 1, a long tradition exists in Denmark of

- continuing training taking place primarily during working hours, with pay or pay compensation;

- continuing training frequently being financed by the participants' employers or through taxation/charging of fees.

To clarify this, a survey study carried out in 1986 will be used as a basis.

The survey was carried out among a representatively selected random sample of the Danish population, numbering 4956 and aged 16-74 years, as a combined postal questionnaire- and telephone interview-survey. Questions concerning financial circumstances were put additionally to those who participated in continuing training or courses. The following table is based upon this.
Table 7.5

Payers for board and accommodation and course fees, by job categories, 1986. Per cent

<table>
<thead>
<tr>
<th>Payer</th>
<th>Self-employed</th>
<th>Unskilled workers</th>
<th>Skilled workers</th>
<th>White-collar w.</th>
<th>All 1 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
<td>48</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Employer</td>
<td>18</td>
<td>41</td>
<td>56</td>
<td>78</td>
<td>68</td>
</tr>
<tr>
<td>Trade union benefit-fund</td>
<td>1</td>
<td>32</td>
<td>27</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Other *</td>
<td>22</td>
<td>15</td>
<td>11</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Payment not relevant</td>
<td>13</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total number</td>
<td>67</td>
<td>71</td>
<td>45</td>
<td>609</td>
<td>792</td>
</tr>
</tbody>
</table>

* "Other" covers various combinations of payers.

Source: The table was compiled on the basis of Henning Bjerregaard Bach: Deltagelse i efteruddannelse - omfang og fordeling (Participation in continuing training - volume and distribution). 1986

The table should be read with caution, since the specification of payers is based upon the respondents' own conception of the payer. The participants in continuing training will not always have knowledge of the financial situation and will therefore not be able to distinguish between the immediate payer and the ultimate payer, owing to various reimbursement-arrangements. In spite of these reservations, however, table 7.5 can be used to show that:
- the participants pay for their own board and accommodation and course fees only to a limited extent, except for the self-employed. However, the latter will in many instances be able to count training expenses as a business expense of their business and not as personal expenditure;

- the employer is cited more as the payer for his salaried employees' training, whereas the trade-union or unemployment benefit fund together with the employer are shown as the payers for continuing training of unskilled and skilled workers. This is presumably connected with the fact that participation in AMU-training schemes for the employed in these categories often takes place on the employers' initiative. For the unemployed, participation takes place on the initiative of the trade-union or benefit fund; for both employed and unemployed with the AUD-Fund as the ultimate payer.
Corresponding differences in specification of the financial sources as between hourly-paid workers and salaried employees/civil servants can be seen in the replies to the question as to who pays any remuneration payable during course participation.

Table 7.6
Payers of remuneration during training/course participation for hourly-paid workers, by job category 1986. Per cent

<table>
<thead>
<tr>
<th>Payer</th>
<th>Unskilled workers</th>
<th>Skilled workers</th>
<th>Salaried workers/civil serv.</th>
<th>All 1 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>49</td>
<td>58</td>
<td>79</td>
<td>74</td>
</tr>
<tr>
<td>Trade union benefit funds</td>
<td>25</td>
<td>18</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Other*</td>
<td>13</td>
<td>16</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Pay not relevant (training during free time)</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total number</td>
<td>67</td>
<td>45</td>
<td>574</td>
<td>686</td>
</tr>
</tbody>
</table>

* "Other" covers various combinations of payers.


With the reservations mentioned earlier regarding the validity of the replies, the table can be read as showing that 80-90% of the participants receive remuneration or course compensation during participation in continuing training/courses.
Here also, however, differences exist between the job categories, since the employer is more often shown as the payer for salaried employees/civil servants than for skilled and unskilled hourly-paid workers. But it can come as a surprise that the employer is so often mentioned as the payer of remuneration for skilled and unskilled workers since, as mentioned earlier, the AUD-Fund pays wage compensation. However, the replies may conceal the facts:

- that the training schemes mentioned are not AMU-schemes, but other schemes under which the participant receives full pay;

- that these employees receive full pay and AUD-compensation is paid to the employer;

- that the participant is unaware of the systems of financial reimbursement.

Skilled and unskilled workers mention more frequently the unemployment benefit fund and trade union as the payers of wages or wage compensation - which can presumably be interpreted as wage compensation through the AUD-Fund.

Table 7.6 presumably also reflects the fact that participation in continuing training for salaried workers is directly connected with an existing employment, whereas participation in continuing training within the AMU-system for skilled and unskilled workers also takes place during unemployment.
7.4 Conclusion

For salaried employees (white-collar workers) and public employees, continuing training opportunities depend upon the individual's job function and position within the job hierarchy - and, as such, are very diverse.

As a general rule, salaried employees in the private sector participate primarily in continuing training schemes which are financed mainly by their employers, through participants' fees. However, a good 80% of open public training schemes are financed through taxation. In addition to these continuing training schemes, there are continuing training facilities particularly on the commercial training market, in the professional organizations (including the 'dimittend'-associations), or as in-house courses.

The continuing training of salaried employees in the public sector is financed very predominantly through taxation - through participants' fees paid to commercial course suppliers, professional associations (including 'dimittend'-associations); also as participants' fees paid to the special public continuing training-institutions, which are operating under market conditions on a limited scale, but increasingly.

Finally, salaried employees in the public sector participate in in-house training schemes - which are likewise financed through taxation.
For the industrial part of the skilled and unskilled labour market, labour-market training schemes are of paramount importance.

The financial structure of the labour market training courses (a sort of tax finance until 1983 and thereafter fund-financed [but this was in reality a tax on wage-earning]) their administration - as part of the Ministry of Labour's sphere - and their control, in which the labour market partners have decisive influence upon the qualification-conferring areas, have probably resulted in the individual firms not finding it necessary to undertake the development and financing of continuing training of their skilled and unskilled workers to the same extent as in other countries.

A contributory cause of this is that the structure of Danish industry (many small firms, few large ones) makes it less appropriate to introduce actual continuing training at the level of the individual firm. Only in-house training courses in very few of the biggest firms therefore exist - and then in close co-operation with the local AMU-centres, in many instances. In the case of these firms, AMU-training can thus take place at the actual firm concerned, using the AMU-centre's teachers and the firm's machine capacity.

On the basis of these considerations the financial arrangements for the AMU-training schemes can therefore be said to have replaced the structure of one-firm-based and one-firm-financed continuing training, as far as the industrial sector is concerned.
Compared with a purely firm-based continuing training system for skilled and - particularly - unskilled workers, the Danish AMU-system has two clear advantages. The training courses confer a broad qualification within the industry concerned, which is not directed only towards the form of production of one particular firm and provides, at the same time, an opportunity for qualification-conferring upgrading, not only for the employed, but also for the unemployed. This structure in the continuing training schemes in the industrial labour market thereby counteracts any polarization of continuing training opportunities (and presumably also of participation in continuing training) as between the unemployed and the employed in the categories of skilled and unskilled workers, within the private industrial sector.
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Birthe Hedegaard

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