

## VII. Activities of Cedefop's network for research cooperation on 'European trends in occupations and qualifications'

---

**Chapter VII** refers to work currently being carried out by **Cedefop's thematic network, Ciretoq**, that has not already been mentioned in the articles in this volume. The network's objectives, working methods and work topics are described for readers who know little, or nothing at all, about it. In addition, there is a short interim report on work currently being undertaken by the network and findings, together with a list of publications. Then, last but not

least, is a summary of the findings of some of the projects being carried out, on various topics. Information concerning member institutes and reports published by the network is available on Cedefop's home page: **www.cedefop.eu.int**, which is updated on a regular basis: The 'Ciretoq-Newsletter', published twice-yearly, is available (only from Cedefop), free of charge. It is also available electronically, via Cedefop's home page.

## A. Aims, working methods and subjects

Stavros Stavrou <sup>(1)</sup>

### Contents

1. Preamble.....	353
2. Cedefop's aim.....	353
3. Methods.....	354
4. Conclusion.....	354

### 1. Preamble

Ciretoq was set up by Cedefop at the beginning of 1995, while the Centre was still in Berlin, and became operational in the same year.

At the heart of this initiative was the desire, which emerged after prior consultation, of the EU-wide vocational training research institutes and foundations, as well as within Cedefop itself, while taking into account the preparatory work and programmes at EU level <sup>(2)</sup>:

- to take stock of the new approaches and the questions raised in examining trends in the development of occupations and skills, in particular in relation to the development of supply of and demand for skills and qualifications;
- to aim towards the joint compilation of corresponding results from several Member States or at European level by making use of transnational and comparative studies;
- to give advice on the policy and practice of vocational training and to examine related issues more quickly and effectively, in order to find the best possible response to these issues by taking into account the above trends, or subsequently to follow them up as part of the institutes' and Cedefop's research work.

### 2. Cedefop's aim

Cedefop's aim was to establish a network which would not be competing with other EU programmes and in particular the Leonardo da Vinci programme, which was just starting up at the time, but which would instead complement and

support such programmes. Efforts were made to gather together material and methodical experiences and findings of the research institutes and institutions involved <sup>(3)</sup>. The aim was to complement Cedefop's preliminary work in the observation, representation and comparative studies of the systems for providing skills and awarding qualifications, of supply and demand for skills, the way jobs change in response to the spread of new information and communications technologies and the socioeconomic, cultural and environmental challenges. Finally, it was also to help promote the development of new job profiles and the discussion of joint standards on, *inter alia*, the structure of training levels, both within individual Member States and, as far as possible, in comparison with a number of countries and at EU level. An ongoing cooperation between research institutes with the participation of major employers and representatives of the political and social fields, including the participating institutions and bodies at European level (the European Commission, ETF, ETUC and UNICE) should aim not only to promote an exchange of interests between employees and employers, researchers and those using the research results; it should also, from the outset, prevent the duplication of work and enable European bodies to carry out studies that complement one another.

It was not and is not Cedefop's intention to set up a network for immediate research purposes. Cedefop did not, and still does not have,

<sup>(1)</sup> Deputy Director of Cedefop.

<sup>(2)</sup> Eurotecnet; studies on skills needs, DG XXII; medium-term employment forecasts and studies on instruments and methods for the analysis of vocational training policy, DG V; socioeconomic research under the fourth framework research programme, DG XII; etc.

<sup>(3)</sup> Cf. updated list of network members on Cedefop's home page: [www.cedefop.eu.int](http://www.cedefop.eu.int)

sufficient means to do this, even if its projects were grouped together in some way. Many more preliminary studies need to be initiated and supported by the assessments of more or less parallel research work, with the aim of publicising and disseminating the results obtained and increasing the chances of their having an effect on the policies of decision-makers, including the social partners. This aim also coincided with the interests of the participating research institutes (cf. Newsletter 1/96). What was new, however, was the attempt not only to foster collaboration between the research institutes, on an ad hoc basis, for specific subjects and projects, but also to ensure their inclusion in discussions of new topics and methods in the context of the overall topic, to build partnerships between them and to enable solutions to be found to certain issues within their extended autonomy.

### 3. Methods

Plenary meetings of all members of the network are held on an annual basis, and are attended by around 45 people. In addition, three working parties have been formed, referred to as groups A, B and C.

Group A is primarily concerned with the study of macroeconomic developments and the interface between labour market developments and education and vocational training. It focuses in particular on the development and structure of systems with regard to the supply of and demand for skills and qualifications. Group B deals with microeconomic studies of a more qualitative socioeconomic, job-specific, regional and sectoral (or even enterprise-specific) nature. Finally, Group C examines trends from the sectoral standpoint and that of related institutional structures, illustrating its work with examples from certain employment and vocational training segments.

Each of the groups examines phenomena and issues which may give a clearer understanding of a) the advantages and disadvantages of certain structures in training and further training with regard to professional practice and employment, and b) recent developments in the labour market and in the context of work or-

ganisation, personnel policy within the enterprise, etc., against the background of present and future challenges. Such challenges may be of an economic, social, demographic, cultural or eco-technological nature.

Particular emphasis is placed on the observation of innovative practices, the analysis of new demands at the workplace and new skills requirements and their repercussions on training and vocational training systems, as well as the way in which responsible institutions at all levels of political intervention react to new challenges.

### 4. Conclusion

The work of Cedefop's thematic network has not only proved successful, as is made clear by the publication of this work, but it has also had a knock-on effect on other approaches in the development of closer cooperation between research bodies at European level, for example, in the context of the socioeconomic part of the EU-sponsored fourth framework research programme and in the extrapolation of the studies and analyses carried out under the Leonardo da Vinci programme<sup>(4)</sup>. The Cedefop network thus makes an important contribution to the development of a European research culture in the field of vocational training.

In a certain sense, the publication of this reference document marks the conclusion of the network's first period of operation. Correspondingly, it represents a review of the results achieved so far. Through a flexible adaptation of its working methods and work topics to evolving issues, and with the help of the network, Cedefop intends to continue in the coming years to make a constructive contribution to this subject at European level, and to support discussion and action in the Member States.

---

<sup>(4)</sup> Cf. the corresponding contributions in this volume by Michael Kuhn and Erhard Schulte, and by Marc Ant and Jeff Kintzele.

## B. Current activities and outcomes

Burkart Sellin <sup>(1)</sup>

### Contents

1. Preliminary observations.....	355
2. Study subjects and findings .....	355
3. Conclusions.....	356

### 1. Preliminary observations

The network has undergone a certain consolidation in the last two years and has become an important work forum for Cedefop and the participating institutions. Interest in research from the Member States of the EU and the countries of central and eastern Europe has increased. They are increasingly willing, on the basis of specific questions and in partnership with researchers and relevant institutions from other countries, to bring to their own research a transnational or European dimension.

Today, no European country can afford to ignore what is going on outside its own backyard with regard to trends in vocational training policy. In this context, research into vocational training and the labour market to some extent leads the way in terms of both policy and practice in vocational training. As the contributions to this volume make abundantly clear, the latter faces enormous challenges arising from the internationalisation and 'Europeanisation' of the problems and from the fact that work, production and life itself are changing increasingly rapidly within Europe and indeed throughout the world. Any attempt at a solution must take into account the experiences of other countries and regions if it is to be sustainable in the longer term at home.

The instruments and methods available for comparative and transnational research on vocational training have improved considerably in recent years. The tools of comparative statistics, empirical methods and qualitative methods can all be used and, with the aid of information technology, are being used with increasing accuracy and validity.

This is particularly true of research into the links between education/vocational training

and the labour market, which are the focus of attention among politicians and practitioners and therefore within the network. The members of the Cedefop Management Board representing the governments of the Member States of the EU, employers' organisations, trade unions and the European Commission devote considerable attention to this subject. For their part, researchers are keen for their findings to be used to visible effect in policy and practice in the EU and in individual Member States. Cedefop would appear to be a suitable forum for this, both for researchers and those involved on the policy/practice side.

### 2. Study subjects and findings

However, many of the challenges which come up again and again can only really be tackled if they are examined in depth on the basis of very specific questions, and this is precisely what is done in the three working parties and within the framework of the specific research partnerships of the network.

The report from spring 1997 presented the interim and final results achieved up to then <sup>(2)</sup>. An updated overview of findings and studies still under way reveals the breadth of the range of subjects and approaches of the research partnerships (cf. Annex in volume I). This overview and a number of contributions included in the present volume <sup>(3)</sup> demonstrate clearly where the

(1) Coordinator of the Cedefop network on European Trends in the Development of Occupations and Qualifications.

(2) Cf. Cedefop, Burkart Sellin, 1998, Interim report on research cooperation on trends in occupations and qualifications in the European Union (trilingual, i.e. also in DE and FR).

(3) Cf. the following contributions in the present volume: Borghans, L. and de Grip, A.; Brugia, M.; Gatti, M. and Tagli-ferro, C.; Gay, C.; González, L.

emphasis lies in the network's work. Important results were also evaluated in Volume I.

Taken as a whole, these findings constitute a puzzle to which a few more pieces can be added thanks to the present publication. The most important subjects covered and for the most part resolved thereby are the following:

*European and transnational labour market development with regard to qualifications, skills and occupational structures;*

*The possibility of substitution in respect of certain qualifications in the labour market and the productivity and/or flexibility of certain education and training system structures and/or architectures;*

*New occupations and occupational profiles in the face of changes in production and services, on the basis of certain sectors and occupational groups;*

*Sectoral and regional support in the development of forward-looking economic, competition and employment policies;*

*Development of occupations and skills in the context of the expanded use of new information and communication technologies;*

*Job, occupation and/or skills development in the field of environmental protection;*

*Methods and instruments for the classification of occupations and training, the establishment and further development of training and qualification stages in the European context;*

*New and/or additional qualifications at the interface between initial training and further training;*

*Technical economic qualifications at senior secondary level;*

*New techniques and skills requirements in the banking and insurance industries.*

There is also a series of studies and findings concerning institutional and methodological issues.

The findings and partial results of the network are all available and are disseminated using Cedefop's own print media or electronic means<sup>(4)</sup>. The response received from researchers and those in the field is highly promising.

### 3. Conclusions

The systems and institutions in the field of education and vocational training suffer on many fronts from a structural deficit of flexibility and adaptability. The research findings are clear and the consequences of the trends are generally predictable. Admittedly, it is difficult in the short term to change established institutions and rapidly bring them round so that they can face up to the new challenges, particularly in the field of education and vocational training, where structures are by their nature conservative.

The Cedefop network would like to play its part in this exercise of persuasion as to the need for innovation in an objective and empirical manner, with built-in quality assurance, that is to say in a scientific manner. All those individuals and institutions involved must be open to the new challenges, though there should be no rigid insistence that the individual must adapt; rather, all concerned should be included in the process of change. The pressure for change should not be borne solely by individuals, as is so often the case today. Where change is required, it is society's institutions that should change first. The attitudes and patterns of behaviour of individuals can then also change in their turn.

Nor should short-term demands be allowed to obscure medium and long-term trends. Contradictory trends must also be accounted for, just as instant analysis should be resisted. The development of new education and vocational training opportunities, occupations and occupational profiles must be sustainable in the long term but that does not mean that we can continue 'as before'. The current symptoms of socio-economic and cultural crisis cause politicians to look for areas where they can act effectively. Education and vocational training undoubtedly fit

---

<sup>(4)</sup> Using the Cedefop Internet homepage and the Electronic Training Village opened in 1998.

the bill. However, these areas should not be asked to do too much, which lies outside their traditional remit. Social policy, employment policy, economic policy, policy on young people, adults, families and women, to name but a few – all of these lay down important preconditions which must be observed by policy on education and vocational training. It should also be remembered that not all the problems associated with these areas of policy can be solved through education and vocational training policies, even if the latter can, under certain circumstances, make a significant contribution.

Because by their very nature the effects of policies on education and vocational training, be they positive or negative, can only be felt in the medium to long term, such policies have the disadvantage that they cannot have short-term objectives. Politics, however, relies on short-term results, the next election is always just around the corner. On the other hand, however, a policy on education and vocational training which stresses social and cultural integration and social reproduction and innovation can have a preventive effect in that it can help to avoid problems which would be bound to occur in the above-mentioned over-ordered areas of policy if investments were not made at the right time, and with an eye to the future, in education and vocational training; indeed, this would appear to be what has happened recently in many EU Member States.

Of course, a *cultural revolution* imposed from above is impossible in a democratic society. Instead, work must be done to persuade people, change must be promoted; that change must not only be comprehensible to those affected, they must also have a direct interest in it, so that they are then prepared to make their own contribution, to play a part in the design of innovations in connection with and complementary to existing institutions, rather than simply having to put up with 'imposed reforms'. Only rarely will new institutions be required; what is more likely to be needed is the renewal of existing institutions, something which is much more difficult to bring about. However, as regards the continuous monitoring, analysis and evaluation of supply and demand in respect of occupations and qualifications, against a background of proactive economic and employment policies as regards careers information and guidance at all political levels, new or at least complementary structures do need to be created. These are particularly important at regional and sectoral level, as a number of the contributions to this volume underline. The mechanisms which allow theoretical understanding or practical knowledge concerning new occupations and occupational profiles or qualification requirements to be more quickly put into practice in Member States or regions also need to be improved or safeguarded.

## C. Impact of information and communication technologies on occupational competences and VET <sup>(1)</sup>

Mara Brugia <sup>(2)</sup>

### Contents

1. Technological development and changes in vocational skills.....	359
2. Impact of change on vocational macro-characteristics.....	360
3. Future changes in vocations.....	360
4. Impact of technology on vocational training.....	360
5. Recommendations for the improvement of vocational training.....	360

This survey – conducted in three countries, France, Italy and Spain – is the second phase in the survey conducted last year on the development of vocational competences associated with new information technologies in the telecommunications and administrative sectors.

The objectives of the second survey may be summarised as follows:

- verification of the findings of the previous survey
- forecasting future changes in the scenario for organisational arrangements and occupations
- identification of the main competences, present and future
- compilation and presentation of training typologies and actions.

The logic adopted in conducting the research was an attempt to find sequential replies to the following questions:

- what are the market trends, and how do they affect enterprises?
- what strategies do enterprises implement in meeting external challenges?
- what are the policies of enterprises on the adoption of technologies, and which do they choose?
- what organisational changes are entailed?
- what vocational changes are generated in terms of competences?
- what vocational training initiatives are set up in response to the new vocational needs?

Based on this logic, the work groups agreed to adopt a common questionnaire in gathering information on each of the aspects listed above.

The national surveys were conducted by taking typical case studies, chosen in the light of their importance at national level and the degree of technological innovation adopted.

The synthesis report sets out and compares the main findings from the three national surveys. For a clearer understanding and presentation of trends in the factors under observation, the findings were divided into five blocks.

### 1. Technological development and changes in vocational skills

Trends were analysed in the two sectors, both in companies' markets and strategies and in organisational changes and the technological options adopted.

The salient findings that emerge refer to the organisation of enterprises, especially in the telecommunications sector, where the ending of monopolies is leading to large concerns being broken up into product-specialist companies with a high level of flexibility and far more attention to the customer. The impact on organisations is taking the form of a greater demand for flexibility, promoted by setting up work groups and networking the information handled.

(1) Summary of findings of M. Gatti, L. González and C. Tagli-  
aferro, 'Impact of information and communication technologies on vocational competences and on training' (provisional title). Synthesis report (not yet available).

(2) Cedefop project coordinator.

## **2. Impact of change on vocational macro-characteristics**

Vocational changes occurring in the two sectors were identified, with special reference to emerging roles. The changes were analysed through a study of developments in competences, which were classified as two types: technical/specialist, and horizontal.

The main findings are set out in summary tables, which include interviewees' assessments of the competences currently required and their prediction as to the competences that will be needed in the future. The key horizontal competences were also identified, from which the vital importance of personal competences is apparent. Another important finding is on the new vocational roles emerging in the two sectors.

## **3. Future changes in vocations**

Predictions are also included as to future changes in vocations in the two sectors as they are likely to develop in the light of current trends.

In particular, the need for new competences is highlighted, as is the integration of 'doing', 'being' and 'relating' in the formation of future skills.

## **4. Impact of technology on vocational training**

Training requirements associated with the development of vocations and the role of new

technological opportunities in training measures 'tailor-made' to the needs of enterprises and users are presented.

Of particular interest are the 'training spheres' favoured by enterprises in the measures they adopt, although of equal importance are the variety and inventiveness of new methods of providing training, for example 'action learning'.

## **5. Recommendations for the improvement of vocational training**

Certain recommendations have been made, directed at the providers of vocational training (in other words those responsible for the planning of training), regarding more effective ways of developing training measures:

- to include the acquisition of key competences among the training objectives;
- to incorporate as an integral part of training the technologies with which the users will be working;
- to structure the provision of training bearing in mind that continuing training should be compatible with the differing status of beneficiaries: the employed and the unemployed.

The new role of training depends in practice on the ability to interpret new needs for vocational skills in production contexts and to translate them into fresh educational content. This should be done via a constant interchange between the working world and the training world, in which each one will have something to learn from and to teach the other.

## D. Learning in microenterprises, some sectoral aspects <sup>(1)</sup>

Tina Bertzeletou <sup>(2)</sup>

### Contents

1. Different learning situations within the sectors studied.....	361
2. Intermediate level instances .....	363
3. Conclusion .....	364

### 1. Different learning situations within the sectors studied

Enterprises are confronted nowadays with fast and important changes to which they have to respond at a certain stage of their development. One of the means to govern the permanent process of change is through innovation of the qualifications of personnel.

It is commonplace in research literature that most training takes place in large and medium-sized firms, which practice an adequate personnel policy and even have a human resources' department. Contrary to this, however, only a small percentage of the 17.5 million SMEs in the EU are adapting their staff's skills by offering sufficient training.

Although training does not reach SMEs to the extent wished for by public training providers and the economic sectors they belong to, this does not mean that qualifications are not constantly acquired in these firms. This is even the case in the very smallest ones with fewer than 10 employees.

Cedefop's project on 'Work organisation and learning in micros' in three sectors, namely retail, car repair and printing, has confirmed that qualification development is located on the job and takes place at the workplace. Thus, opportunities for qualifications depend strongly on the organisation of work and the development of its structure.

Our study of a total of 57 micros has shown that a lot of learning is done by using possibilities available within normal daily work. This may contain formal and/or informal parts and take place in a structured and/or unstructured way.

Twenty-five different methods have been defined, ranging from learning new things under the responsibility of the chef or an experienced worker to learning by installing technical modifications on existing cars, in the case of the car repair sector or learning by doing jobs for yourself in your own time, in the printing sector.

In the car repair sector the five most common methods are, according to the employees, learning by solving problems oneself; learning solving problems together with colleagues; learning by rotating tasks regularly in order to keep skills up to date; learning new things under the responsibility of the manager or an experienced mechanic and learning new things by helping others.

In the printing sector, the first two ways of learning are most common, followed by learning by asking help/advice from an experienced colleague; learning by direct employee participation and learning new things under the responsibility of the manager or an experienced worker.

An important question is the learning potential of the various methods applied. The outcome of the surveys shows that the opportunities for updating and developing new skills are closely related to the way the work is organised within the firm.

In the car repair sector, the 60 mechanics who have been interviewed signalled that the most

---

(1) The present article is based on the findings of Cedefop's project 'Work and learning in micros, the case of some sectors', under the scientific coordination of ITS Nijmegen, The Netherlands. The synthesis reports in English are in the process of publication.

(2) Project Coordinator, Cedefop.

effective ways are, in order of importance: learning by performing non-routine repairs; learning by doing work with a growing degree of difficulty; learning by asking help or advice from the first mechanic and learning by explanation of experts or experienced people.

In the printing sector, learning by using handbooks/manuals etc.; learning by asking help or advice from the immediate superior; learning by solving problems alone; learning by doing work with a growing degree of difficulty and learning new things through the help of experienced colleagues, are the ways offering the best opportunities for skill improvement according to the printers interviewed. In the printing sector, employees can be divided into three categories: printers, desktop publishing (DTP) and after-press. Their work situation and functions within the firms allow for very different on-the-job learning opportunities. DTP employees have more opportunities than the other two categories, as they prepare their products in negotiation with the client on the one side and as they have to explore the different possibilities of hardware and software newly launched on the market on the other side.

In both sectors, employees with a formal initial vocational training participate more often in informal training than their colleagues with no initial training. There is also a noticeable difference between the methods of informal training used most frequently by those two categories of employees.

In the car repair sector the learning methods by coaching under the supervision/assistance of the manager or an experienced colleague are much preferred by mechanics without initial training to those based on problem solving alone, on regular rotation of tasks, on direct participation and on learning from complaints of clients, methods preferred by those with initial education.

In the printing sector, the situation is somewhat different, which has to do with the structure of the sector itself. The printer's profession is a very old occupation with a long education and training tradition of its members. In such professions, sectoral professional organisations and peer-groups play an important role for their

development and for keeping their members up to date and it is the profession itself, which sets its quality standards. This is the reason for signalling as most frequent methods of learning the advice/assistance of the supplier as well as visits to similar enterprises.

Competence of the owners plays a dominant role in small enterprises. Our findings have confirmed this long-standing conclusion. A strong connection exists between the skills of the entrepreneur and his effort to promote the training of his staff and to modernise his firm.

Both entrepreneurial skills geared towards the external environment and managerial skills oriented to the internal functioning of the firm are necessary for the survival and especially for the growth and/or the modernisation of the enterprise. However, depending on the sector, we have noticed a varying importance of the skills of the entrepreneur. Whereas entrepreneurship of the owner was dominant in the microfirms we studied in the retail sector, in the printing sector there is evidence that managerial skills alongside qualifications help maintaining the position on the market.

In sectors which are subject to fast technological changes, as is the case with printing, it is crucial that qualifications of both owner and staff maintain a high standard of quality and low cost in order to remain competitive.

The design of an adequate personnel and training policy is part of the managerial skills of the entrepreneur. There is evidence that entrepreneurial skills dominate compared with managerial skills.

Among the three sectors in question the latter applies especially to retail, where the owner has to accomplish both management and administrative tasks. In times of stiff competition, as at present, there is a need for performance improvement both on the product-sales/service side and on the management/administrative side of the retail firms.

This implies that the traditional vertical separation of the two sides must be overcome and another work division and organisation should be adopted, permitting connections between

the 'technical-commercial' and the administrative/management sides.

At present, the European debate on new job profiles follows the strict separation between the technical/vocational and the commercial/management fields. This separation may still be valid for large-scale retail firms, it does not necessarily correspond to the realities of the micros.

Results have shown that the internal processes of management and the development and use of craftsmanship depend to a large extent on the sector these micros belong to.

Among all important factors at sectoral level there is evidence that the degree of the sector dynamics and linked technological developments; the homogeneity or heterogeneity of firms, products and production processes as well as the sectoral training tradition and provisions, play a decisive role in those sectors and firms where employees' participation in training is concerned.

For instance, there is a relatively high percentage of participation in continuing vocational training in the car repair sector and a relatively low one in retail. The car repair sector is confronted with important technological changes. The same applies to the printing industry, especially to the pre-press and press phases which are changing due to the new electronic devices. Both sectors are relatively homogeneous, they often have their own training funds and institutions, and training is quite often an important part of respective collective agreements.

Contrary to this, the retail sector offers a different picture, as it does not have a great training tradition and is of a rather heterogeneous nature. Needless to say, this sector too has undergone important technological change, but this had more influence on back office employees in the large retail than on front office personnel in the small retail trade.

## 2. Intermediate level instances

Training and transfer of innovation at shop level is also provided by the intermediate instances which operate in the sector.

If one looks at the training provisions at an intermediate level, the picture in retail is somewhat changing, because with the voluntary chains formula, the wholesalers offer training to their retail members. And even if this form of cooperation was rather exceptional in the early 1990s, it now tends to develop into a more solid business relationship embracing all important aspects of operating a retail business, from product range and promotion to automation and more recently, to personnel policy as part of its marketing strategies.

Training provisions at an intermediate level can be found in the car repair sector too, even at an earlier stage than in retail. Car importers have their own training provisions specific to the brand and franchised car repair firms often get a lot of support in these matters. This is one of the reasons for which owners of microfirms in the car sector chose to become franchised.

Car sales are the main focus but car repair is still a relevant service and an increasingly important means to customer retention. Training of the mechanics is costly but it is considered a necessary factor for business growth, as people buy cars on the basis of the extras and the price quality relationship of the after-sales service.

However, although training is largely available in the sector, this does not mean that everybody has access to it. Indeed, training is geared to the mechanics of the franchised car workshops only.

Manufacturers and importers sell the high-tech make-specific diagnostic equipment exclusively to their own franchised dealers and only mechanics and technicians of the authorised workshops are entitled to participate in respective training courses.

In brief, skill organisation in this sector is strictly controlled. Besides, there is evidence that this type of training is tailor-made on the specific brand name and too operational to allow mechanics to work in workshops of different car makes.

In general, mechanics in franchised workshops have better possibilities to participate in continuing vocational training as they have an early access to the continuing vocational training CVT provisions of the manufacturer or the importer.

And if one takes into consideration that qualified car mechanics with initial vocational training are hired by franchised workshops, whereas mechanics without this type of training end up in non-franchised ones which tend to specialise only in certain types of repair as they are unable to keep up with the developments in all car makes, one can easily understand that the further learning opportunities of the car mechanics depend on the situation of the work and the labour market they enter in originally.

To remedy this, the profile of the mechanics should be reshaped to have a broader horizontal function as mechanics in the microfirms in the repair sector should be all-round.

The strategies of non-franchised workshops are typical of the sector and have consequences for the skill development. Increasingly, workshops opt for specialising either in mechanical or electrical repairs, competing only in price.

This strategy, however, is not in line with recent developments and more sophisticated training provisions, which tend to integrate mechanical and electrical/electronic skills. A new occupational profile for car repairers has recently been developed at the European scale: the 'mechatronic' car repairer and service mechanic, which tends to become more independent from individual car producers. Respective training provisions are being developed in a number of Member States. This profile could replace the traditional car repair mechanic in due course.

Others become more or less specialised in one specific car make and through contacts with local dealers or personal contacts they manage to keep up with the evolution of the equipment and tools and with training.

Finally, there are the workshops which have chosen deliberately to remain independent, because they have a large and stable clientele and wish to respond to all its needs, including the sales of various car makes. They develop a personal contact with their clients and offer a very flexible service. They hire qualified mechanics, who are in a position to update their skills easily by participating in courses and informal learning.

Obviously, a large clientele and sales number gives them a strong position in the area they operate in and the franchised dealers are more than willing to support them with help and advice, if they can deliver the cars which the non-franchised firms sell.

### 3. Conclusion

In the present article we have briefly referred to the interaction between the organisation of the work in the microfirms and the way skills and qualifications are acquired. We have highlighted some specific characteristics proper to the sector those firms are operating in and tried to see how they are influencing both the organisation of the work and the acquisition of skills. But this is by no means a one-way relationship. It is not only the entrepreneur/owner and the way work is structured in the firm that allow for learning.

Also the skills of employees, their creativity and readiness to explore new possibilities, is what can make a firm dynamic, especially in sectors undergoing fast change, as is the case with the printing sector.

CEDEFOP – European Centre for the Development of Vocational Training

**European trends in the development of occupations and qualifications  
Findings of research, studies and analyses for policy and practice**

**Volume II**

***Burkart Sellin (ed.)***  
**CEDEFOP**

CEDEFOP Reference Document

Luxembourg: Office for Official Publications of the European Communities

2000 – 364 pp. – 21.0 x 29.7 cm

ISBN 92-828-7414-1

Cat.-No: HX-22-99-749-EN-C

Price (excluding VAT) in Luxembourg: EUR 19

No of publication: 3004 EN

## European trends in the development of occupations and qualifications

### Findings of research, studies and analyses for policy and practice

#### Volume II

This volume is a kind of academic manual and provides a forum for experts from diverse disciplines to explain where the emphasis lies in their research. This broad-based approach provides a clear overview of the questions which arise in connection with the debate on trends, and numerous persuasive responses to urgent issues: the polarisation of certain qualifications and/or the marginalisation of certain occupational groups/sections of the population, new skills and key qualifications and their characteristics, regional and sector-specific aspects, system development in the face of these challenges, etc.

Volume I, which was published simultaneously, is intended for a wide range of readers who wish to keep up to date with the most important trends in the development of occupations and qualifications in the face of current demographic, social, economic, technical, environmental and cultural challenges.

In addition to these two volumes, a working glossary, an annotated, selective bibliography and an index and the German and French versions of Volume II, can be downloaded from the Internet ([www.cedefop.eu.int](http://www.cedefop.eu.int)).

**Burkart Sellin**

3004 EN



# CEDEFOP

European Centre for the Development of Vocational Training

Europe 123, GR-57001 THESSALONIKI (Pylea)

Postal address:

PO Box 22427, GR-55102 THESSALONIKI

Tel. (30-31) 490 111 Fax (30-31) 490 020 E-mail: [info@cedefop.eu.int](mailto:info@cedefop.eu.int)

Homepage: [www.cedefop.eu.int](http://www.cedefop.eu.int) Interactive website: [www.trainingvillage.gr](http://www.trainingvillage.gr)

Price (excluding VAT) in Luxembourg: EUR 19



OFFICE FOR OFFICIAL PUBLICATIONS  
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg