

# Changing an award-winning system – for better or for worse?

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## SUMMARY

**This paper deals with the latest structural changes in the Danish vocational education and training system (VET), a system so far characterised by a principle of alternating between practical training and theoretical instruction. Structural changes can be described as a shift of paradigm, which might be seen as a regression compared to the Danish VET system that received the Bertelsmann prize in 1999. The shift can also to some extent be viewed as a step backwards in achieving the political programmes and goals such as the Lisbon strategy.**

## Keywords

Apprentice, qualification, labour market, VET system, policy, lifelong learning

## The principle of alternating training and education

Initial and continuing vocational education and training policy during the last decades has become a still more important political instrument within and outside the political context of labour market policy to handle problems related to global economic developments and efforts to become a more learning society. When discussing how to create special mechanisms for transitions to the labour market which benefit the individual, enterprises and society in general, attention often centres on the principle of alternating education and training.

The alternating principle can be seen as a unique example of bridging the public and private sector, and school and work (Heinz, 2002; Ryan, 2004). Vocational education and training (VET) has been the subject of increasing political and research interest in recent years (Lave and Wenger, 1991; Heikki-

nen and Sultana, 1997; Nielsen and Kvale, 2003). The reason for this growing interest is that research into the concepts such as 'qualifications', 'competences', and 'learning' have generally sought to examine and discuss these concepts in relation to work and the learning potential inherent in working life, namely something that transcends a purely institutional understanding.

In the Danish educational system in general, the construction of VET, that is the organisation of education and training for skilled labour, has often been singled out as possessing some special qualities. On the one hand they ensure that the scope of education in different trades matches the needs of the labour market. On the other the programmes, based as they are on the alternating principle, involving participation in the firms' production activities, are realistic and reflect present and future qualification needs.

It is well known that the Danish VET system belongs in the welfare state corporatist steering model, characterised by involvement of social partners at all levels in education.

Interaction between the actors in the Danish VET system and the international approval of the alternating principle of the VET programmes, among other things, led to the awarding of the prestigious German Carl Bertelsmann Prize to the Danish VET system in 1999.

The Carl Bertelsmann Prize is awarded for an innovative approach to solving problems and, in choosing Denmark, the award committee specifically emphasised the Danish VET system's ability for continuous improvement. With this prize, Denmark could congratulate itself on having 'the best vocational education and training system in the world'.

However, despite this acclaim, signs were emerging at the beginning of 2000 that a departure from the traditional way of viewing the Danish VET system and its principle of alternating training and education was underway.

In 2003, in connection with a political compromise, this departure became noticeable, and led, among others, the Danish Council of Economic Advisers to express concern in a report published in the autumn of 2003. Before considering this concern over the future development of the VET system in more detail, it is important to take a step back and present an outline of the varied and conflicting interests, to have a better understanding of how and why Denmark was able to win the Bertelsmann Prize.

## From members of the same trade to separate class-related groups

Apprenticeship education, or the tradition of serving as an apprentice under a master, has long historical roots, dating back to the Middle Ages, to the time when training and education was governed and regulated by the guilds (Jespersen, 2003).

During 1860-1880 a significant crisis occurred in the Danish apprenticeship education, sparked by the Freedom of Trade Act of 1857 and the liberalisation of apprenticeship contracts, turning them into private law contracts. This change had serious consequences for the quality of apprenticeship education. It constituted a threat to the quantitative and qualitative aspects of both apprenticeship education and the demand for skilled craftsmen. Liberalisation resulted in reproduction problems within the trades (Sørensen, 1988; Sigurjonsson, 2003).

### **The self-governance of the trades, and regulation of quantity and quality of the VET programmes**

In the early 1900s, the voice of the trade union movement began to be heard on the boards of the vocational colleges, and started focusing in earnest on training conditions in firms and making theoretical and technical instruction an obligatory addition to apprenticeship education. The door was open to turning apprentice education into a cooperative project for the social partners, as trade unions and employers looked at apprenticeship together as a common task from a quantitative and a qualitative control viewpoint. Gradually this cooperation became institutionalised, leading to the Apprenticeship Act of 1937, which spread this form of cooperation to all trades (Sørensen, 1988; Lassen, 2002).

At the beginning of the 1950s, changes happened in VET as several state initiatives were launched to prepare the labour market for expected rapid technical and industrial development. On the justification that firms provided too few apprenticeships, an attempt was made in preparing the Apprenticeship Act 1956 to make it more attractive to provide apprenticeships. The most far-reaching changes of the 1956 Act were to the school-related part of apprenticeship education. The new Act stated that over an eight-year period, all trades would have to offer day-time school-education instead of evening schools. This meant that the school part gained an independent role alongside the training in firms, while still subject to the 'self-governance of the trades' (Mathiesen, 1976; Sørensen, 1977, 1988).

### **The Achilles' heel of the VET system – reproduction problems**

At the end of the 1960s, the supply of apprenticeships started to stagnate. At the same time there was criticism of the system from apprentices, which were widely supported by trade unions, and were met with some understanding among employers (Mathiesen, 1976, 1979; Sørensen, 1977, 1988).

As a result of this criticism, a reform committee was appointed, which produced a new model, called the EFG <sup>(1)</sup> system. The aim of EFG was for all apprenticeships to start with one year of full-time school education, followed by two to three years of practical training in a firm. Most political parties were very enthusiastic about the new VET model, which co-existed with the 'old' apprenticeship model throughout the 1970s. Previously it had not been clear or statistically evident how many potential apprentices looked for work placement in vain, or how many employers offered apprenticeships without success (Mathiesen, 1976, 1979; Sørensen, 1977, 1988). These problems became visible with the introduction of EFG. Gradually the numbers were registered and statistics presented. This paved the way for VET to become an important item on the political agenda.

From the late 1970s until the late 1980s, politicians tried to make VET more attractive by granting additional subsidies for firms willing to provide extra work placements. Generally, the political system and labour market organisations tried several measures to alleviate the problems, but despite these efforts the number of work placements remained insufficient (Sørensen, 1987).

### **School-based practical training scheme**

Because of the lack of work placements, many young people were left stranded in their apprenticeship after one year of school education. At the beginning of the 1990s a new Act introduced a school-based practical training scheme, which guaranteed that these young people were able to finish their apprenticeship – the so-called youth education guarantee (*Undervisningsministeriet*, 2002a). Consequently, in Denmark – besides the ordinary, dual system of apprenticeships – the possibility of participating in school-based practical training (SPT) was a 'lifebelt' for youngsters who failed to find work

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(1) *Erhvervsfaglig grunduddannelse* – translated: vocational basis programme, but in Danish terms it is shortened EFG.

(2) The Employers' Reimbursement Scheme (AER) provides more practical training agreements within the VET system. Public and private employers contribute to AER and both employers, students, schools and local training committees can get financial support for training students. The Danish parliament in 1977 established AER as an independent institution. AER is directed by a board consisting of social partners. About 90 000 employers contribute to AER. Both public and private workplaces can get some expenses of having apprentices re-funded. AER helps the government by administrating arrangements, to help provide more training agreements with the employers.

placement. The SPT system was financed by a refund mechanism for employers with apprentices, in Danish terms called AER (*Arbejdsgivernes Elevrefusion*) (2).

During school-based practical training, apprentices – and legally they are apprentices – are obliged to continue searching for a ‘normal’ work placement contract. Many succeed, and some spend half the time of their apprenticeship in ‘school-practice’ and the other half having practical training as an employee in a firm under an apprenticeship contract.

Despite establishing the school-based practical training scheme, throughout the 1990s it was necessary to apply several different policy instruments in an attempt to alleviate work placement shortages. Instruments used were primarily persuasive or motivational programmes, but not to much avail. From 1993 to 1996, ordinary work placement contracts increased from approximately 34 000 to around 38 000, but declined from then on to 31 000 in 2000. Consequently school-based practical training arrangements showed a marked upward trend over the same period, from some 3 700 in 1993 to 7 000 in 2003, as the number of ordinary contracts fell to 26 000. This happened despite a tripartite agreement made by the then Social Democrat-led coalition government and the Confederation of Danish Trade Unions and the Danish Employers’ Confederation in 2000, to secure a minimum of 36 000 ordinary work placement contracts by 2004 (*Undervisningsministeriet*, 2000). Table 1 below illustrates the problem statistically.

Table 1

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Entered agreements	34 094	36 734	39 600	38 274	31 228	34 512	31 285	31 007	28 954	27 667	26 476
**Population seeking placement	10 516	9 298	7 600	7 346	7 227	7 900	*	7 387	9 733	10 076	10 771
Population of SPT	3 700	3 880	3 304	2 957	3 265	3 444	*	5 791	6 125	6 235	7 562

Source: *Undervisningsministeriet* [Ministry of Education], 2000; *Undervisningsministeriet* [Ministry of Education], 2004a.

\* Because of diversion of register from one IT-system to another, there is no valid information about population seeking placement and population of SKP.

\*\* Population of seeking is inclusive the population of SKP.

Also from 1995 to 2003 there was a significant displacement of the distribution of the flow in the VET system:

Table 2

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Ordinary	94 %	92 %	86 %	82 %	78 %	76 %	74 %	73 %	72 %
Adult students	1 %	1 %	4 %	10 %	10 %	9 %	10 %	10 %	7 %
SPT	5 %	6 %	9 %	9 %	12 %	14 %	16 %	17 %	21 %
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Source: AER, 'Frafald på erhvervsuddannelsernes hovedforløb', 2004.

Table 2 shows that 5 % of students started their training in SPT in 1995, increasing over the period up to 21 % of the total flow in 2003. Students starting training in adult agreements also increased over the period. Earlier analyses show that the number of adult students is influenced by the conditions for participation set by labour market measures, in particular subsidies paid by the public employment service (AER, 2004).

### Individualisation in the VET policy

During the 1990s there were many VET reforms, increasingly focusing on individualisation, and in particular, Reform 2000. The aim of this reform was to make the VET system more accommodating and both the system and individual programmes less restrictive, by relying on two main principles: a simplified structure and increased programmes' flexibility (*Undervisningsministeriet*, 1999).

It was in the middle of the Reform 2000 process that Denmark was awarded the Bertelsmann Prize and its VET won international acclaim as 'the world's

best'. But already a number of circumstances gave the actors in the educational area cause for concern. Among these were a drop in the number of work placement contracts, a rise in drop-out rates, increasing numbers of students in school-based practical training, a decline in applicants for the programmes, and disappointing numbers of apprentices continuing in further education after finishing their VET programme.

Attempts had been made by means of a tripartite agreement in 2000, because of work placement shortages and drop-out rate, to set up common positive goals, but without much success. In 2002, another attempt at solving the problems was initiated by the political system. The process involved a bill to promote 'simplification and increased flexibility' in all VET programmes. The bill was the result of a deal made by the centre-right government in 2002 with the Confederation of Danish Trade Unions and the Danish Employers' Confederation on vocational education and, a budget compromise which the minority government negotiated with two smaller parties. The bill provoked concern and protests from employee organisations, teachers' associations, regional employment councils, VET institutions, trade committees and student bodies.

## Modernisation of the alternating principle of the VET programmes

The 2003 budget was agreed between the minority government and two other liberal parties on general improvements in the educational system. This agreement led to a government report in June 2002, containing an action plan for 'Better education'. Specifically on VET, the action plan says that the alternating principle should be reevaluated and rethought, and that the requirements as to the duration of the programmes and work placements should be less restrictive (*Undervisningsministeriet, 2002a*).

Prior to the official presentation of this action plan, work had started in a committee including representatives of employers, employees, teachers' associations and college bodies, and the Ministry of Education. The committee produced two reports, which both outlined proposals for changes in the structure and the content of the VET programmes. These reports came to be seen by the political system as general recommendations for the new bill (*Undervisningsministeriet, 2002b, 2003c, 2003e*). The quote below, from the first report, gives an indication of the drift of a new way of thinking in relation to the traditional Danish alternating principle:

'Today VET programmes lead to one level when completed: skilled workers. However, experience from abroad (the Netherlands) shows that VET programmes can be structured to incorporate several levels, which all in their own

right give competences in the labour market. They all lead to employment' [own translation] (*Undervisningsministeriet, 2002b*).

Before work started in the committee, three large employers' organisations, the Danish Commerce and Services, the Confederation of Danish Industries and the Federation of Employers for Trade, Transportation and Services drafted a joint paper, presented the same month as the committee on modernisation of the VET system started.

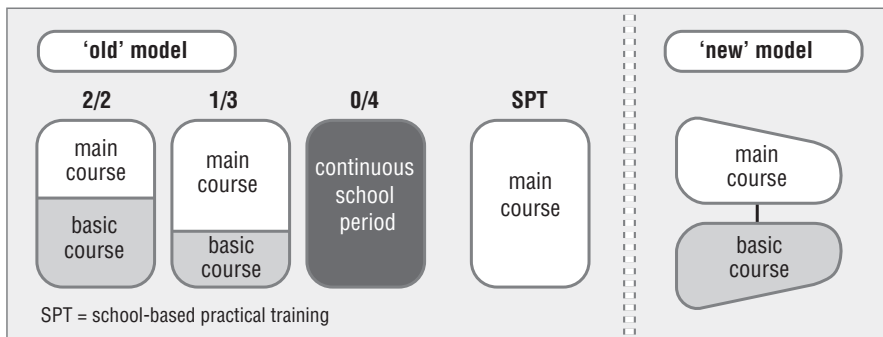
In this paper, the three organisations repeatedly emphasised the need for a VET system that focuses on the enterprise perspectives of apprenticeships, and pays close attention to the rapid changes in enterprises. According to the three organisations, this would best be realised by establishing a modular VET system in which the concept of alternating training and education would be applied in a new setting.

On the future content of the programmes, the three organisations considered it reasonable to end the tasks assigned to the trade committees in connection with providing work placement, as the organisations found that, in principle, in future it would be the sole responsibility of the student to design his or her own programme.

The major part of the content of the employers' paper can be found in the committee's reports, which indicates that in many ways it was the employers who plotted the new course for the revision of the VET system.

### From proposal to Act

In summer 2003, the Bill became an Act establishing the new model for VET programmes. Changes introduced by the new Act, generally speaking made it possible for students to complete programmes faster than the prescribed duration, and for programmes to be shorter, individually tailored and composed of parts of one or more VET programmes (technical and commercial VET programmes can be mixed) (*Undervisningsministeriet, 2003f, 2003g*). In a rough outline the changes can be illustrated as below:





In the 'old' model the average duration of VET programmes was approximately three and a half to four years. This included the basic course, which lasted an average of 20 weeks (varying from 10 to 60 weeks) for technical training and one to two years for commercial and clerical training (models 2/2 and 1/3). The in-company training constituted approximately half to two thirds of the entire programme.

The school-based part also consisted of a syllabus divided into four parts: basic subjects, area subject, special subjects and optional subjects. Once students found a training place, a training contract was concluded between them and the enterprise. The contract covered the entire course – on-the-job training periods, school periods and final examinations. Next to these models was an alternative model 0/4 (actually the oldest model). In this model, students found a training place from the beginning and could start their training in the enterprise instead of doing basic courses at school.

For those students who, after a maximum of two years, were not able to find a training place, vocational colleges offered school-based practical training.

The model above is a simplified version, but illustrates the changes in overall terms. Changes to the legal foundation of VET programmes opened up the possibility to design flexible programmes, both in terms of duration and content. The key word, in this increased flexibility is 'assessment of competences', which means that when starting a VET programme, the college evaluates each student's qualifications and competences, both those acquired in previous school education and in previous employment, to rate them for potential credit transfers. Also there are no longer any special requirements as to the weighting of basic, vocational, specialist or optional courses. According to the executive orders for some of the new programmes, the purpose is not that all students acquire the same qualifications, but instead that the students acquire competences according to the individual educational plan and the target of the programme. The executive orders point out that within the frame of a programme it is also about constructing an individual job profile for each student to improve their chances of employment.

The intention of the changes, which politically were termed 'Modernisation of the alternating principle and new initiatives to replace the school-based practical training' aimed to get to the root of the work placement problem.

The figure below illustrates the present Danish VET system as a part of the overall education system.

**Danish education system**

Years of education	Basic education system	Adult education and continuing vocational training		
		Adult vocationally orientated education	General adult education	Liberal adult education
13 - 17	Long-cycle higher education	(1) Master level		
13 - 15		(1) Diploma level		
13 - 14	Bachelor Medium-cycle higher education Short-cycle higher education	(1) Further adult** education		
10 - 12	General and vocational upper secondary education Vocational education and training	(1) Basic adult education (GUV) (1) Adult vocational education and training (VEUD)	Continuing vocational training programmes (CVT) and Adult vocational training (AMU)****	Higher preparatory examination (HF)
9 - 10	Primary and lower secondary education			General adult education Preparatory adult education

Note: The figure only shows levels, not the extent of activities. The white boxes indicate the changes due to the VEU-reform.

\* Open education outside the basic education system. \*\* Introduced 2001 as part of the Adult education reform, (Danish abbreviation for further adult education is VVU). \*\*\* The level cannot be indicated precisely. \*\*\*\* Only this education programme refers to the Ministry of Labour, while the other levels of education programmes refer to Ministry of Education. \*\*\*\*\* Education designed for foreigners.  
Danish abbreviation for general adult education is AVU, Danish abbreviation for preparatory adult education is FVU.  
Source: Lassen et al., 2006.

The pivotal intention was, in short, to make more students complete a VET programme under an ordinary apprenticeship agreement, and make sure that fewer were referred to the school-based practical training. This would happen by means of, among other things, the new shorter, stage programmes, awarding schools for every new work placement agreement secured, a tightening of the rules on students' vocational and geographical mobility, reducing the financial support for students in school-based practical training, making the market for work placement more transparent and flexible, and by limiting the number of school-based training places in selected areas to reduce the total number of new students of approximately 7 000 a year (2004) to a maximum of 1 200 a year in 2005 (Ministry of Education, 2003a).

Further, in reaching the goals of phase II, the Minister for Education was given more power to set up ad-hoc committees. Such committees can be set up to take over tasks and functions normally undertaken by the national trade committees, to establish new programmes in case the minister finds that the organisations in question or relevant trade committees do not show enough initiative in the area. The minister has thus been empowered to order an ad-hoc committee to develop programmes within specified areas of employment

or lines of business. (This policy instrument was used as a tool in 2004 to present 29 new, short programmes, all ready for launch on 1 January 2005. These programmes last one and a half to two years; some are exclusively school-based, others include a brief work placement period <sup>(3)</sup>.)

From 1 January 2004, the state took over the costs of funding school-based practical training from the employers' refund system (AER). Employers now contribute to the VEU grant, which is for adult learners participating in continued vocational education and training. In other words, enterprises will take on more responsibility for continuing and further education.

The way the Danish VET system has been developing since the Bertelsmann Prize can be summed up as a development strongly marked by incentives for increased flexibility and individualisation. Apprentices or students are supposed to design their own personal VET programme and colleges, enterprises and students are encouraged to establish new, shorter (or longer) VET programmes. This development provoked both concern and protests from many of the actors in the area.

### **Concerns about the recent developments in the VET system**

Approximately 40 % of a cohort of young people every year start in a VET programme. The 2002 Bill was an attempt to alleviate the complex of problems troubling the VET system, but also to express a political intention to spur new growth and dynamism in society. In this context, Danish education and training need to live up to high international standards and quality, to keep up with competition in a globalised world.

On these changes in the VET field, The National Board of Advisers on Economic policy wrote:

'The problem of mismatch between the young people's specific vocational wishes and the number of work placements available will diminish with the agreement on school-based practical training. The reduction in the number of these practical training places can, however, have unintended negative effects, for instance that young people drop VET in favour of the general tertiary colleges – or choose no post-school education at all.' (The National Board of Advisers on Economic, 2003) (own translation)

Similar concerns came from the Confederation of Danish Trade Unions, from the Timber Industry and Construction Workers' Union. A note from the Ministry of Education following a meeting with the National Vo-

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<sup>(3)</sup> Examples of new, short VET programmes: power supply operator (short programme under the electricians' trade committee), construction fitter (short programme under the carpenters' trade committee), health clerical worker (short programme under the medical secretary programme), office worker (short programme under the administrative assistant programme).

cational Education and Training Council and the trade committees in September 2003, said that generally speaking the trade committees estimate that there is little real labour market need to establish shorter programmes, and that consequently only a few of the committees were considering this option.

Despite these concerns and protests, the four political parties behind the deal went ahead with their plans, and on 1 January 2005, the short and graduated VET programmes became a reality.

From a policy-analytical point of view, Phase I and Phase II of the multi-annual compromise deal signify a paradigm shift, in steering VET and the traditional Danish alternating principle of the programmes. In relation to steering, the position of the Ministry of Education, now able to set up ad hoc committees, has been strengthened vis-à-vis the social partners. In principle it will be possible to change the VET programmes to leave out the work placement and make them predominantly school based. This is, however, not presented as a political goal, as the parties behind the compromise emphasise that they wish to maintain and strengthen the alternating principle and involvement of social partners in the programmes.

Before debating what kind of problems this development of the Danish VET system might produce, the next section will describe the political programmes and goals from both international and national levels to try to link the content of this paper to the European debate about employment and education.

## Better education and better jobs

At the summit meeting in Lisbon in 2000, the EU's Heads of State and Government agreed on a common objective of turning Europe into the most competitive knowledge-based economy in the world with more and better jobs and greater social cohesion. The European Council further emphasised that this goal, in addition to demanding a radical transformation of the overall European economy, would also require an ambitious programme for modernisation of the social welfare and education systems (European Council, Lisbon, March 2000).

At a subsequent meeting of ministers in autumn 2002, under the Danish EU presidency, 30 European ministers of education signed the Copenhagen declaration 'On enhanced European cooperation in vocational education and training'. The Copenhagen declaration, as well as other political programme statements on how to fulfil the objectives set out, emphasises the vision of creating better access for all to lifelong learning and to acquiring the competences needed.

The concepts ‘competence’ and ‘lifelong learning’ have been defined in several reports from both the EU and the OECD. A common characteristic in these definitions is that competence has a wider meaning than just knowledge, and that skills are context-bound and can therefore not be determined once and for all.

Generally, the political documents attach a lot of importance to ‘competence’ and ‘lifelong learning’, but emphasise that they also, in addition to their employment-related aspects, include aspects such as active citizenship, personal satisfaction and social inclusion.

The OECD’s and the EU’s preoccupation with ‘lifelong learning’ and ‘competence’, along with the Lisbon and the Copenhagen declarations, indicate that education in general, and VET in particular, in the 20th century and even more so in the 21st century has come to play a pivotal role in society.

It is often said in the political debate that it is extremely important that the labour force, the employees, become able to take on more responsibility, be creative, willing and able to share their knowledge in cross-functional teams, plus that they must be prepared to update their knowledge and competences throughout life.

On the background of the policy statements and objectives at both international and national levels, the next section will discuss and question whether the Danish development of the VET system to some extent can be viewed as a step backwards to achieving these political programmes and goals.

## Two distinct markets of demand and supply of apprentices

In the mid-1800s, the Freedom of Trade Act in Denmark eroded the foundation of the sociological and political mechanisms for regulating apprenticeships. It had immediate repercussions for the quantity and quality of the skilled workforce. In the ensuing political struggle to, among other things, safeguard the interests of apprentices as employees, a rough sketch of the Danish steering model for VET was developed. Skilled workers’ unions and their opposite numbers from the employers at national level together formulated their demands as to which technical and professional qualifications the state was to provide apprentices. These demands were mostly accepted by the state.

Generally speaking the role of schools, and the state, had been expanding throughout the early 1900s, due to pressure from the labour market parties. That the state chose to meet the demands from the organisations as a matter of course is no surprise. The reason is that in reality the market for VET is not one market, in the sense that the supply of apprenticeships equals the firms’ demand for skilled workers. Rather, the situation is one of two

co-existing markets, and the supply of a certain number of apprenticeships is not identical with the real demand for skilled workers from the enterprises.

The basis of this two-market logic is that many, often large firms, which in fact have a great need for skills and qualifications, are unable to educate and train the skilled workers themselves, for example because of a high degree of specialisation, technology, rapid changes, fluctuating employment, etc. Conditions of either internal or external character make it impossible or difficult to live up to the training requirements – these firms can be described as apprentice-recruiting enterprises. Vice versa, some often smaller, craftsman-like firms may be able to meet the requirements inherent in the VET rules and regulations and also have some financial benefits from training apprentices, but have neither the need nor the financial resources to employ them when qualified. These firms can then be described as apprentice-producing enterprises. In other words, some firms have the means and resources to produce the qualifications, whereas others do not, but instead they have the means and resources, and a need, to employ the qualified workers.

These are in essence the two markets: 1) the first market relates to the demand for apprenticeships from young people, and supply of apprenticeships, or work placements, from the enterprises; 2) the second market relates to the supply of newly educated skilled workers on the one hand, and the demand for qualified employees on the other. (For clarification of this two-market logic, see Sørensen et al., 1984; Lassen and Sørensen, 2004).

The overall pattern is that the majority of apprentices are trained in small and medium-sized firms, but these only account for a relatively modest part of employment, whereas the big firms, who account for the major part of employment, only produce a small number of the apprentices (Ministry of Education, 2000). The ratio of producers to recruiters can vary across industries and trades, but in general this pattern can be found to some extent within all categories.

### **Recruiters and producers of skilled labour power**

This division of firms into producers and recruiters is important, given the increasing reliance on the school part of vocational education and training. It is worth bearing in mind that, historically, when insisting on comprehensive professional and pedagogical objectives for in-firm training, the result has often turned out to be a fall in the number of firms able and willing to offer work placement. In practice, this has usually meant that any increasing or changing qualification requirements were transferred to the colleges. It has thus been possible to increase the level of qualifications, without increasing the demands on the firms too much and risk a drop in the number of apprenticeships. Over the years, as firms have had difficulties in meeting the rules and regulations concerning the breadth and depth of the qualifications

of the programmes, colleges have taken over more and more of the qualification responsibilities.

In the light of the new initiatives involving shortened programmes and the significant reduction in school-based practical training, together with the introduction of real competence assessment, individual education plans and individual job profiles it might be argued that the dominant discourse seems to be the one-market perception. This can be described as a more demand-led system. Some worrying perspectives begin to emerge as to the development of the qualifications of skilled workers.

If the new, short and graduated programmes become more attractive for many apprentice-producing firms, this may first of all lead to a much narrower set of qualifications, which will not increase the young people's possibilities of mobility in finding a job elsewhere in the trade. Length of education is of great importance in getting access to certain jobs and the subsequent level of payment. The lack of workplaces in most cases affects those with relatively minimum education and it is the rank of each individual in the labour market, which is decisive for the individual's income opportunities (Hansen, 2003; Andersen and Sommer, 2003).

Second, it will also cause problems for the recruiting firms, who need skilled workers with broad and up-to-date qualifications. The spread of real competence assessment and individual job profiles brings no guarantee that the workforce acquires competences embracing both work capabilities and work willingness, which are the core of the definitions of competence made by EU and OECD. Despite enterprises having almost identical technology/productions facilities there are very often different types of job profiles and work organisation – and very diverse qualification demands. This is often referred to as the elasticity thesis, which means that the same technology is compatible with different forms of work organisation, and thus also different qualification demands. This perspective makes it important to understand that education must embrace both the breadth and depth of a trade (Sørensen, 1988; Jørgensen et al., 2004).

## Conclusion – for better or for worse?

The increasing focus in recent years on education and training in relation to economic and employment policy cannot be ascribed solely to the rhetoric presently in vogue about the type of economy emerging and the accompanying demands for transformation of the qualification structure within the workforce. At issue in the Danish context is also the fact that more than a third of the workforce have no vocational or other qualifications at all, and that about a fifth of a cohort of school-leavers still fail to acquire any kind of formal qualifica-

tions. Further, there is the problem that many young people who start in a vocational or other programme drop out of the system without completing their education. (Økonomiske Råd [The Board of Economic Advisers], 2003.)

Political documents from the EU and OECD attach a lot of importance to 'competence' and 'lifelong learning', but emphasise that they also, in addition to their employment-related aspects, include aspects such as active citizenship, personal satisfaction and social inclusion. Looking specifically at documents such as the Lisbon strategy and the Copenhagen declaration, goals such as creating more and better jobs and greater social cohesion, creating better access for all to lifelong learning are also emphasised.

In the light of the new initiatives involving shorter and *stage* programmes and the introduction of assessment of competences, individual education plans and individual job profiles, it might be argued that the changes in the Danish VET system is for the better because more students have a chance of completing a VET programme. The system is now organised to the concept of lifelong learning. In that sense the goals of social inclusion and access for all to lifelong learning can be reached.

In Denmark the school-based practical training scheme was a guarantee that a young person could complete their VET programme. At the same time, it could also have been used as an instrument to differentiate the duration of the practical training element of the programmes, depending on the needs in different trades. Instead of expanding the SPT, it was decided politically to introduce new VET programmes with a shorter duration. These new programmes may succeed in increasing the number of young people who complete a vocational programme, but if the price is a programme quality so low that it cannot be expected to develop the students' ability to act independently, reflect, to be able to use tools interactively, or to work or function in teams or social groups, then the result might be increased polarisation and elitist orientation. In that case the political objectives of furthering social inclusion and cohesion seem doubtful (Hansen, 2003; Lassen and Sørensen, 2004). Further, this perspective according to the Lisbon goal might in the short run lead to more jobs, but at the same time raising the questions of which kind of jobs. In other words will it lead to better jobs and fit future needs and changes of the workplace structure?

In relation to people's chances of finding a job, it could be argued that it is crucial that they have acquired a suitable breadth of technical and vocational qualifications to gain a foothold in a certain sub-labour market.

People having broad vocational competences will often develop a professional identity – a perception of oneself as a professional, possessing all the qualifications required by one's trade. Such a person is probably less likely to make do with continuing education that is narrowly focused on the present needs of a single firm. It can be argued that the alternating principle, with



its combination of college instruction and on-the-job practical training, helps develop a professional identity in the young people, based on an understanding of the breadth and depth of the trade. (Rasmussen, 1990; Juul, 2004; Smistrup, 2004; Lassen and Sørensen, 2004.)

Without a professional identity and an understanding of trade-related qualifications, a basis may be established for interpreting the need for continuing education as a need to serve the specific interests of an individual or a single firm, totally ignoring the societal interpretation of the needs for continuing and further education. The way VET is developing at the moment, the requirements on the breadth and depth of the programme will, in principle, depend on whatever the young person and their employer and/or college end up choosing as relevant modules. Development of competences may turn into a highly differentiated matter, and not necessarily something that leads to a deep-rooted professional identity (Jørgensen, 2001).

A professional identity implies having real opportunities to choose jobs in an open labour market, and having the ability and self-confidence to want and be able to take part in continuous and further education. Lack of development of a deep-rooted professional identity can thus work against the political objectives of improved access to lifelong learning.

Further, the new ways of structuring the VET programmes outline a perspective that VET in Denmark will in practice in future be narrowed down to a matter of producing a flexible and so-called competent workforce, at the expense of relegating the more democratic goals of general and civic competences to a lesser status. This may make it difficult to achieve the political objectives of giving everybody the opportunity to achieve several personal competences and skills, and the wish to maintain values such as freedom of speech, equality, tolerance and democracy (Sørensen and Lassen, 2004; Andersen and Sommer, 2003).

The Danish apprenticeship system is a part of the initial VET system. It is a professional basic education which, beside from aiming to qualify each individual to perform well in working life, also has to qualify the individual to participate in society, everyday life and to further education.

This article has tried to explain the dynamics in the development of reforms in the VET system through a discussion of the outcomes of these reforms. The core of the discussion is whether or not the developments in the system live up to the demands of the future labour market in general and provide the individual apprentice with the abilities essential to have a vocational education that supports the struggle for a better life and a labour market higher value. Regarding changing the system for better or for worse the author of this article finds the perspective very worrying.

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