



AALBORG UNIVERSITY
DENMARK

Aalborg Universitet

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

Jørgensen, Anja Lindkvist V.

Published in:
ECER 2005 Papers

Publication date:
2005

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Jørgensen, A. L. V. (2005). Changing an award-winning system - for better or for worse? In *ECER 2005 Papers*
http://www.vet-research.net/ecer_2005/thu08/session3a/P20050000626

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

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

Ph.d.-fellow, Anja Lindkvist Jørgensen (Lind@socsci.aau.dk)
CARMA, Centre for Labour Market Research

Aalborg University
Department of Economics, Politics and Public Administration
Fibigerstraede 1, 9220 Aalborg
Denmark

Abstract

This paper deals with the latest structural changes in the Danish vocational education and training system (VET), a system which has so far been characterised by a principle of alternating between practical training and theoretical instruction. The 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 price 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.

The paper is divided into four Parts. Part one gives a brief outline of how the alternating principle is organised in Danish VET programmes, and goes on to present the arguments that led to an international recognition of the Danish VET system in 1999. Part Two has a short historical outline of the constellation and conflicts of interests that resulted in the establishment of this VET system. However, to clarify the reasons for the critical attitude towards the present development of the VET programmes, Part Three will describe, on the one hand, the events leading to the most recent developments in the area, and on the other, the more specific changes in content and structure of the VET system. With a starting point in international as well as national policies, the concluding Part Four will outline a discussion of whether Denmark, considering the most recent trends in the development of its VET, live up to the demands of the future labour market and facilitates the individual apprentice with the abilities essential for coping with the development of future labour market.

The paper is based on an empirical approach in the form of document analysis.

Part One:

The principle of alternating training and education

Initial and continuing vocational education and training policy has during the last decades become a still more important political instrument within and outside the political context of labour market policy in order to handle problems related to the global economic developments in trying to become a more learning society.

In political as well as research circles, some of the issues topping the agenda in recent years have been the concept of transitional labour markets focusing on concepts such as “flexicurity” ”education and training”, ”lifelong learning” and ”school-to-work”. (Schmid & Schönmann, 2004; Lassnigg, 2004, Gier & Berg, 2005) When discussing how to create special mechanisms for

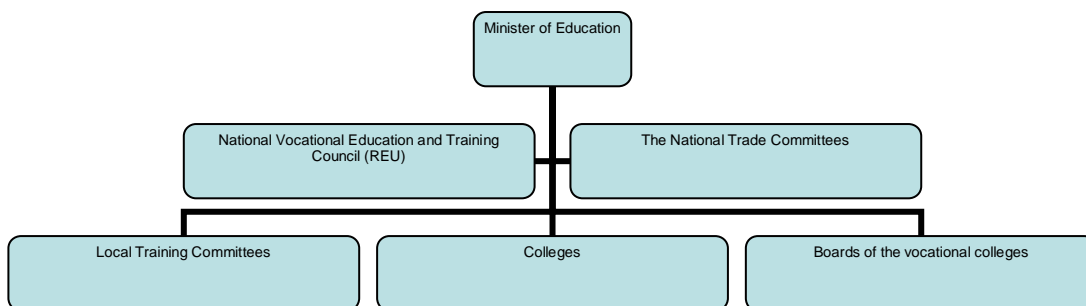
transitions to the labour market which benefit the individual as well as enterprises and society in general, attention often centres on the principle of alternating education and training.

The alternating principle can be seen as a unique example of bridging, both between the public and the private sector, and acting as an institutional bridge between school and work (Heinz, 2002; Ryan, 2004). Vocational education and training (VET) has been the object of increasing political¹ and research interest in recent years (Lave & Wenger, 1991; Heikkinen, & Sultana, 1997; Kvale & Nielsen, 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, i.e. something that transcends a purely institutional understanding.

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

It is a well-known fact that the Danish VET system belongs in the welfare state corporatist steering model, characterised by the involvement of the social partners at all levels in the education field. It has thus been characteristic of the Danish system that the employment structure bridging the gap between the qualification structure and the workplace structure. (Jánossy, 1971) These relations have traditionally also been reflected in the steering mechanisms surrounding the vocational educations, as it has been customary for the labour market organisations to be represented in all relevant bodies, thereby exercising a decisive influence on the content and scope of VET programmes.

As appears from the figure below, the institutional structure of the VET programmes can be illustrated by including five main actors:



As the figure illustrates, the Danish VET system is built up as a network of committees and advisory bodies with equal representation of parties, organised according to trades and sectors. Furthermore, the social partners also play an important role as members of the boards of the vocational colleges. In general, the social partners are responsible for taking initiatives to change

¹ In 2002 the European VET system became a focal point. Inspired by the Bologna agreement, VET programmes are now to be used as a strategic tool, one the one hand to further the visions of improved access to lifelong learning, and on the other hand as an important instrument in achieving the ambitious goals of making Europe the most competitive and dynamic knowledge-based economy in the world by 2010.

existing programmes, e.g. identifying new qualification needs in the labour market, setting up new programmes and laying down the local education plans etc.

It was among other things the interaction between the actors in the Danish VET system and the international approval of the alternating principle of the VET programmes that led to the awarding of the prestigious German Carl Bertelsmann Bertelsmann Prize² to the Danish vocational education and training system in 1999.

International acclaim for the Danish VET system

The Carl Bertelsmann Prize is awarded for an innovative approach to solving problems, and in their premises for 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".

Four criteria were listed to win the prize, so Denmark won the award on the basis of 1) the interaction of the actors in the VET system, 2) the development of qualifications and competences, 3) the structuring and organisation of the programmes, and 4) the continuous improvement of quality and financing. Among the other nominees for the prize were the Netherlands, France, the United Kingdom and the USA (Bertelsmann Stiftung, 1999).

An important element of the criteria was the special emphasis on viewing education and training as a question of the individual's position in the labour market, and on developing ideas aimed at strengthening the competences of the individual, thus securing his or her future position in the labour market.

It furthermore says in the background material for the Bertelsmann Prize on the nomination of Denmark as a suitable candidate to win the prize that the Danish way of arranging the governance of VET by means of committees with equal representation at several levels is excellent, and it is pointed out that the structure of the Danish VET system seems to have a supportive effect in furthering the competences of the individual.

However, in spite of this acclaim for the Danish VET system, 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 under way.

In 2003, in connection with a political compromise, this departure became noticeable, and made among others the Danish Council of Economic Advisers express concern in a report published in the autumn of 2003. Before accounting for this concern about the future development of the VET system in more detail, Part Two will take a step back and present an outline of the constellation and conflicts of interests, which resulted in the traditional VET system for which Denmark has been renowned, in order to create a better understanding of how and why Denmark was able to qualify for the Bertelsmann Prize.

² The Carl Bertelsmann Prize is awarded by the Bertelsmann Stiftung, established in 1977. The foundation the Bertelsmann Stiftung owns the majority of shares in Bertelsmann AG, one of the largest media companies in the world. Since 1988 the Prize has been awarded to innovative and exemplary solutions to central social and political problems. The Prize amounts to approx. 160,000 euro.

Part Two:

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, i.e. to the time when training and education was governed and regulated by the guilds. Generally speaking, at that time there was a communality of interest between the apprentices, the skilled craftsmen and the masters - a progression in which apprentices became craftsmen, who might then in 10-15 years' time become masters themselves. This meant that everybody in a trade or craft had the same long-term interest in the economy of the trade and in avoiding too much internal competition, e.g. not taking on too many apprentices or lowering the quality as a result of bad training. Both aspects could undermine the position of a trade, and regulation of both quantity and quality was upheld by the individual guilds themselves (Sørensen, 1984, Jespersen 2003).

However, in addition to the trade or economic interests, the guilds were also characterised by communality in a social sense. The master had a patriarchal relationship with his apprentice, which took the form of a socialisation process aimed at preparing the apprentice for his future working life, but also for his role as a citizen in the community.

In the period 1860-1880 a significant crisis occurred in the Danish apprenticeship education. The crisis was sparked by the Freedom of Trade Act of 1857 and the liberalisation of apprenticeship contracts, which turned them into private law contracts. This change had serious consequences for the quality of apprenticeship education, among other things because it became difficult to impose sanctions on the contractual parties (the master and the apprentice) in case of breach of obligations. This constituted a threat to the quantitative as well as qualitative aspects of both the apprenticeship education and the demand for skilled craftsmen. Therefore liberalisation resulted in reproduction problems within the trades. This led to the mobilisation of the employers and calls for legislation to make sure that investments in education and training would not be wasted, if e.g. an apprentice left his apprenticeship before time (Sørensen, 1987, Sigurjonsson, 2003)

The first act on apprenticeships was passed in 1889. However, the main contents of this act were rules for enforcing apprenticeship contracts, which had to be registered with the police to be valid; which in turn offered the employers the possibility of using the public enforcement system to make sure certain apprentices did not abscond from serving under a master.

As for the school education part, some employers had already started schools themselves in the early 1800s, and in the second half of the century the number of such schools continued to grow, until by the late 1800s the state started subsidising education at technical and commercial colleges. However, until 1937 sending apprentices to school was optional for masters (Sørensen, 1987).

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 at the same time the trade unions started focusing in earnest on training conditions in firms and on making theoretical and technical instruction an obligatory addition to apprenticeship education. Thus the door was open to turning the education of apprentices into a cooperative project for the social partners, as the trade unions and the employers started looking

into the apprenticeship issue together as a common task from a quantitative as well as a qualitative control point of view. Gradually this cooperation became institutionalised, in particular in iron- and metal working manufacturing where trade committees with equal representation were set up. This development led to the Apprenticeship Act of 1937, which spread this form of cooperation to all trades. This emergence of cooperation on the basis of equal representation furthermore helps explain why the corporatist decision structure gained a strong position in the vocational part of the Danish educational policy (Sørensen, 1987, Lassen, 2002).

At the beginning of the 1950s, several changes happened in the VET area as a number of state initiatives were launched to prepare the labour market for an expected rapid technical and industrial development. On the justification that firms established too few apprenticeships, it was attempted in the preparation of the Apprenticeship Act of 1956 to make it more attractive to establish apprenticeships. The government tried to influence the trade committees to increase the number of apprentices in their particular areas, expressing their concern about sufficient numbers of apprenticeships for the big cohorts born in the post-war years, and the potential apprentices around 1960 (Mathiesen, 1976, Sørensen, 1977, 1987)

The most far-reaching changes of the 1956 act happened in the school-related part of the apprenticeship education. Until then schools had been primarily evening schools and apprentice had a longer working week than adults craftsmen, but the new act stated that in the course of an eight-year period all trades would have to offer day-time school-education. This meant that the school part gained an independent role alongside the training in the firms; however, still subject to the “self-governance of the trades”.

The Achilles’ heel of the VET system – the reproduction problems

At the end of the 1960s, the supply of apprenticeships started to stagnate, and at the same time a large apprentices’ movement emerged, which was highly critical of the tradition of serving under a master. Their arguments were widely supported by the trade union movement, and were even met with some understanding among employers. The points of criticism included among other things the high degree of specialisation right from the start of the apprenticeship period, combined with restrictive contracts, inadequate training, lack of civic education, and no possibilities of acquiring competences to continue in further or higher education after apprenticeship. Also, at this time the business sector needed to attract a sufficient number of young people, and the high level of employment meant that the qualifications of skilled workers needed to be broad and flexible rather than highly specialised. And finally, at this time there was an ongoing debate in society about the educational system as an instrument for creating equal opportunities, and there was a political wish to reduce the “residual group”, the share of a cohort who ended up without any post-school qualifications. (Mathiesen, 1976, 1979; Sørensen, 1977, 1987)

As a result of the criticism of the apprenticeship education, a reform committee was appointed, which produced a new model, called the EFG 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. One decisive feature shared by EFG and the old system was that in both cases the apprentice had to find a firm to secure a training contract including a work placement. 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, 1987)

These problems became visible with the introduction of EFG, and gradually the numbers were registered and statistics presented. This paved the way for VET as an important item on the political agenda. The problem that came to light was that there was a serious mismatch of supply and demand for apprenticeships; and the real problem was that a relatively large group of young people had started a vocational programme, but were unable to finish it because of the lack of work placements.

A refund mechanism for employers with apprentices, the AER, had been in existence since 1977 as a way to redistribute the wage costs of apprentices between all employers. From the late 1970s till the late 1980s politicians tried to make it more attractive by granting additional subsidies for firms willing to provide extraordinary work placements; at the beginning the subsidies were tax-financed exclusively, but in 1984 the tasks were assigned to the AER and in 1987 the subsidies were abolished completely. That the subsidies were used as an instrument in the early 1980s at all can be ascribed to the increase in youth unemployment, which meant that, in spite of an increase in the number of work placements, the queue of young people waiting for work placement grew longer and longer. The political system as well as the labour market organisations tried a number of measures to alleviate the problems, but in spite of all these efforts the number of unemployed youths in general and the queue of young people seeking work placement was not reduced, and the rise in the number of work placements turned out to be only temporary (Sørensen, 1987).

The school-based practical training scheme

As already mentioned, the increase in the number of work placements lasted only for a short period, and as a result a lot of young people, unable to obtain a work placement agreement, were left stranded in their apprenticeship after one year of school education. At the beginning of the 1990s a new act therefore 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 (Minister of Education, 2002). As a result, there was in Denmark - besides the ordinary, dual system of apprenticeships – as a "lifebelt" for youngsters who failed to find work placement (i.e. signing a contract with a firm) the possibility of participating in school-based practical training.

During the school-based practical training, these apprentices - and legally they are apprentices - are obliged to continue searching for a "normal" work placement contract. Many of them succeed, so that for instance for half the time of their apprenticeship they have had "school-practice" and in the other half they have had their practical training as an employee in a firm under an apprenticeship contract.

Summing up on this point: Besides the number of apprentices who have had all their practical training in a firm, there are a number who have completed only three-quarters, half or a quarter of their practical training in firms ("residual education agreements" or "combination agreements"), plus a relatively small number who have had no training at all in firms, i.e. their education consists of full-time school-based practical training.

The duration and curricula of education under the school-based practical training (SPT) is identical with the apprenticeship period under a normal contract.

The aim of school-based practical training is to compensate for the in-firm training. It is offered by vocational colleges, and very often the SPT has its own simulation firms and/or workshops on the

school premises. In the SPT, the trainees can be offered shorter periods of work placements in an enterprise in order to familiarise them with a “real” working environment (“combination agreement”), and sometimes these work placements result in the enterprise and the trainee entering into a proper training agreements (“residual education agreement”) for the rest of the training period.

In spite of the establishment of the school-based practical training scheme, up through the 1990s it was necessary to apply a number of different policy instruments in an attempt to alleviate the work placement shortages. The instruments used were primarily persuasive or motivational programmes, but not to much avail. From 1993 to 1996, the number of ordinary work placement contracts increased from approx. 34.000 to around 38.000, however declining from then on to 31.000 in 2000. Consequently the number of school-based practical training arrangements has shown a marked upward trend over the same period, from some 3,700 in 1993 to 7,000 in 2003, when the number of ordinary contracts had fallen 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, whose main target was to secure the establishment of a minimum of 36,000 ordinary work placement contracts by 2004. (Ministry of Education, 2000)

individualisation in the VET policy

In spite of the involvement of the social partners, and their agreement that the EFG system was to be the model of the future, things did not run as smoothly as had been hoped. The heart of the problem was that many of the small firms, who provided the most apprenticeships, were opposed to the EFG system; they wanted to keep the old model of apprenticeship. By the early 1980s, their opposition to the EFG system had gained so much momentum that the political system started to pay attention. This resulted in a renewed, long discussion phase on the structure of vocational education and training. This discussion ended in 1989, when the then liberal education minister, who was a supporter of the old apprenticeship model, presented a reform providing a “double entry-model” to apprenticeships, both an enterprise entry and a college entry. The social partners accepted the reform in return for maintaining their right to control the curricula of the VET programmes. (Mathiesen, 2000; Lassen, 2002)

The reform led to the passing of two new acts in the educational field, to take effect from 1991. One new initiative in particular led to fundamental changes - the financial management, whose rationale was based on the New Public Management philosophy, introducing value added funding, the taxameter principle, which especially had consequences for the vocational colleges. The reform also called for a more integrative approach to training and education and for active involvement of the students in the planning of the programmes. These demands spring from the idea that the pedagogical approach should take its starting point in relevant vocational issues and the prior qualifications of the students. And finally the act required the programmes to include different types of subjects (Basic courses, vocational courses, specialist courses and optional courses), each serving a particular purpose. The act furthermore specified the relative weighting of these types of courses in the total educational programme.

In the mid-1990s a committee was set up to look into changes and improvements of the VET programmes in the commercial industries. The main reason why this was needed was that the employers preferred taking on as apprentices young people with a three-year higher commercial certificate rather than those who had completed the first school-year of the VET programmes – a

“crowding-out effect” . The work of the committee was a forerunner for a reform of the area in 1996.

The 1996 reform changed the structure of VET so that all vocational education and training programmes were to last four years – either one year at a vocational school followed by a three-year work placement period, or two years’ education at a vocational school followed by two years’ practical training in a firm, or the old apprentice model where the apprentice alternates between practical training in a firm and school education throughout the four years. The ambition of the reform was presented as an attempt to provide a more practice-oriented and integrative approach to teaching, to break down unsuitable traditional trade demarcations, provide more differentiated teaching, make the students more responsible, and using competences as the basis for the planning of the courses. (Ministry of Education, 1997) This reform introduced a more individual-oriented approach to teaching in the VET system, which was very innovative at the time.

The focus on the individual continued and was further intensified in the next VET reform, Reform 2000, adopted by the politicians in 1999. The declared aim of the reform was to make the VET system more accommodating and less restrictive, both the system as such and the individual programmes, by relying on two main principles: a simplified structure and increased flexibility in the programmes. As to the pedagogical foundation, the reform called for more individual learning programmes tailored according to the prior qualifications, needs and goals of the individual, which makes the performance of the role as teacher closely linked to the student’s learning. As tool for this an individual educational plan must be drawn up in a close cooperation between the student, vocational college and the work placement firm (Ministry of Education, 1999).

It was thus right 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 at that time 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.

As already mentioned, attempts had been made by means of a tripartite agreement in 2000, because of the work placement shortages and the drop-out rate, to set up common positive goals, but without much success. In 2002 yet 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 educations on the one hand, and on the other, a Budget compromise which the minority government had negotiated with two smaller parties. The bill provoked concern and protests from both employee organisations, teachers’ associations, regional employment councils, the management of VET institutions, the trade committees and student bodies.

Before looking into these concerns, Part Three will give a brief outline of the events leading up to the bill, and of the changes in the content of the VET programmes.

Part Three:

Modernisation of the alternating principle of the VET programmes

As mentioned above, in connection with the negotiations on the 2003 Budget, an agreement was made 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*”. (Ministry of Education, 2002a).

About the VET system, the action plan says that it is facing major challenges from a labour market in constant change due to new production forms, technologies and ways of organising work, and the consequent demand for a more highly skilled and flexible labour force. To meet these challenges, the action plan underlines that the supply of education must be broad, flexible, transparent and innovative, and not least offer the individual an opportunity for lifelong learning and development of competences.

Specifically on VET, it says that the alternating principle should be re-evaluated and re-thought, and that the requirements as to the duration of the programmes and work placement should be less restrictive. (Ministry of Education, 2002a)

Prior to the official presentation of this action plan; work had started in a committee including representatives of both employers, employees, teachers’ associations and college bodies, and the Ministry of Education. The work in this committee resulted in two reports, which both outlined proposals for changes in the structure and the content of the VET programmes, and these reports came to be seen by the political system as general recommendations for the new bill (Ministry of Education, 2002b, 2003c, 2003e). The quote below is from the first report and 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) show 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.” (The Ministry of Education, 2002b)

That the Netherlands was singled out as a source of inspiration for the future structure of VET was no coincidence. Before work started in the committee, three large employers’ organisations had together made a draft paper, in which the Dutch system is mentioned as a potential source of inspiration.

The three employers’ organisations in question were Danish Commerce and Services, the Confederation of Danish Industries and the Federation of Employers for Trade, Transportation and Services. Their joint draft paper, “The start of lifelong learning”, was presented the same month as work in the committee on modernisation of the VET system was set to start.

In this draft paper, the three organisations repeatedly emphasise the need for a VET system that to a larger extent focuses on the enterprise perspectives of apprenticeships, and pays close attention to the rapid changes happening 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.

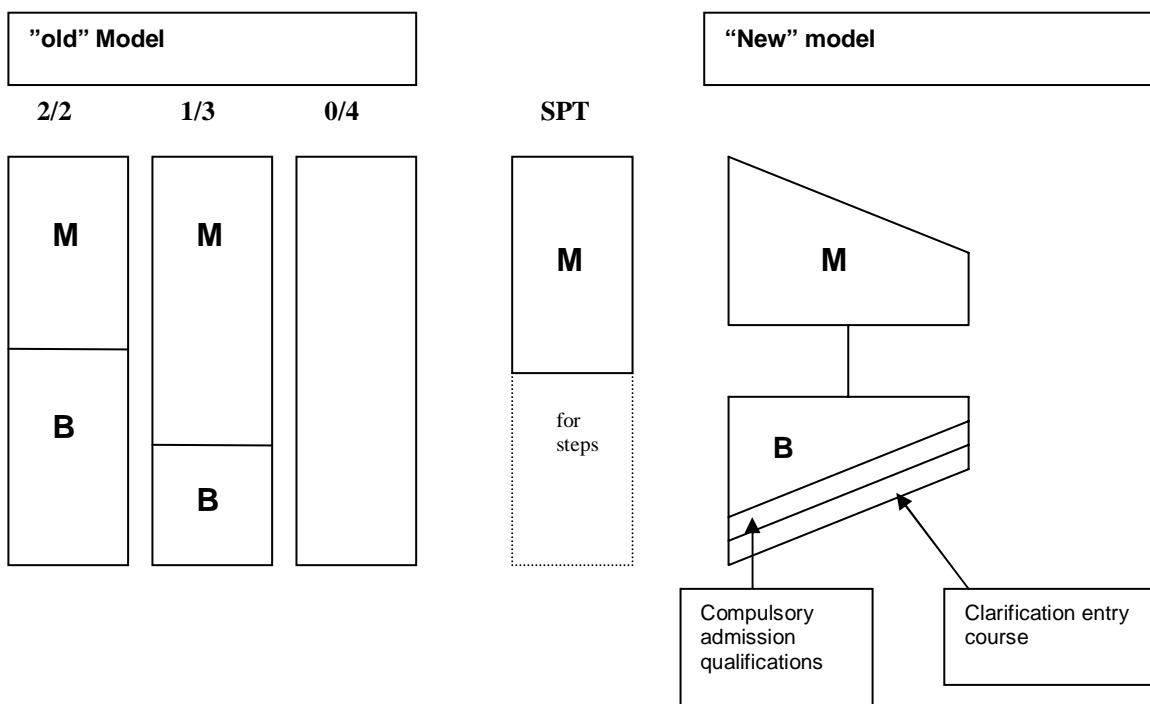
On the future content of the programmes, the three organisations suggested to abolish the then VET act’s provisions as to basic, vocational, specialist and optional courses. Furthermore they considered it reasonable to end the tasks assigned to the trade committees in connection with providing work placement, 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 draft paper concludes with the following comment:

”With the possibilities of shorter programmes involving work placement in one or more firms, the establishment of workshop training and the rights of the students to design their own programme, the special obligations of the enterprises in relation to programme progression, provision of work placements and the present school-based practical training scheme should be terminated”. (Draft paper for revision of the VET Act –”The start of lifelong learning”, 12 January 2002)

The major part of the content of the employers’ draft paper can be found in the committee’s reports, so it seems safe to conclude 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 the summer of 2003, this course of development - which as stated above began in 2002 - with the passing to the bill into an act came to be the new model for VET programmes. The changes in the new act thus imply that generally speaking it is now possible for students to complete the programmes faster than the prescribed duration, and that programmes can be shorter, individually tailored and composed of parts of one or more VET programmes. Thirdly, there are no longer any special requirements as to the weighting of basic, vocational, specialist or optional courses (Ministry of Education, 2003f, 2003g). In a rough outline the changes can be illustrated as below:



This model is a simple version of a model, which at a meeting in 2002 in the local Training Committee, was drawn by the representative respectively from the Union of Commercial and Clerical Employees and the employer organisation Danish Commerce and Services.

B = basic course

M = main course

SPT = school-based practical training

The changes to the legal foundation of the VET programmes thus open up for designing flexible programmes, both as to the duration and the content of the programmes. The key word in this increased flexibility is supposed to be “assessment of competences”, which means that when starting a VET programme, the college in question must evaluate each student’s qualifications and competences, both those acquired in previous school education and in previous employment, in order to rate them for potential credit transfers. According to the executive orders for some of the new programmes it is established that 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 program. In the executive orders it is pointed out that within the frame of a program it is also about construction an individual job profile for each student in order to improve the student’s following possibility of employment.

Summing up the intention behind the introduction of real competence assessment it is from political side to establish a stronger transfer value from school to work and by this setting focus on creating new and better basis for improving competences and to increase mobility at the labour market. Furthermore the intention is to make real competence assessment an extended and integrated part of the pedagogical practice at the vocational colleges.

Concurrently with the work on changing the act, the Ministry of Education also tried to influence and persuade the national trade committees to come up with concrete proposals for revision of their programmes. Specifically, the Ministry of Education was very interested in proposals to establish short and stages programmes, of which some would still be modelled on the alternating principle whereas others would be school-based only. In the multi-annual political deal, this step was named “Phase I”. (Ministry of Education, 2003a, 2003b, 2003c, 2003f, 2003g, 2004g)

“Phase II” was announced in a press release on 5 November 2003. Phase II, which was given the more specific headline *“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 pivotal intention of Phase II 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. The overall aim of the deal was presented as a modernisation of the alternating principle of VET, in order to bring supply and demand for work placements more in line. 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 approx. 7,000 a year (2004) to a maximum of 1,200 a year in 2005. (Ministry of Education, 2003a)

Furthermore in reaching the goals of phase II the Minister of Education has been given more powers 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 “threat” to some of the national trade committees in 2004. The threat was used because the minister had been asking the trade committees in question for some time, in vain, to come up with concrete proposals for new, short programmes. After this reminder, the trade committees chose to develop the programmes very quickly, and in autumn 2004 they were thus able to present 29 new, short programmes, all ready for launch on 1 January 2005. These programmes have duration of 1½ to 2 years; some are exclusively school-based, others include a brief work placement period³. When presenting these new, short programmes, two of the trade committees made it very clear to the Minister of Education that they had no evidence whatsoever for the employment potential of these programmes).

As of 1, January 2004, the state also took over the costs of funding the school-based practical training from the employers’ refund system (AER). In future employers will instead contribute towards the VEU grant, which is a grant for adult learners participating in continued vocational education and training. In other words, enterprises will take over a bigger part of the responsibility for continuing and further education.

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

Concerns about the recent developments in the VET system

Approx. 45% of a cohort of young people every year start in a VET programme, and the 2002 bill was presented as a political attempt to alleviate the complex of problems troubling the VET system, but also as an expression of a political intention to spur new growth and dynamism in society. In this context Danish education and training need to be able 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 in its report from 2003:

”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 flexibility may make it more manageable for

³ 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).

some non-academic students to finish a vocational programme. There is no doubt that a large group of young people have had an increasingly tough time in recent decades, as the demands for formal qualifications have been on the increase....The problems of this group can only be expected to intensify in future, in line with globalisation and rising demands for formal qualifications". (The National Board of Advisers on Economic, 2003)

Similar concern can be found in the Confederation of Danish Trade Unions, whose general secretary said as follows (own translation):

"If this leads to a situation of skilled workers only being half-skilled in future, then both the individual employee and the enterprises are going to find it very difficult to stay competitive. Our strength lies in the very fact that our workers have a solid, basic vocational foundation, which makes it easy for them to adjust to new demands and thus secures a high degree of flexibility in Danish enterprises". (Harald Børsting, general secretary, November 2002, quotation from article on www.lo.dk)

From the Timber Industry and Construction Workers' Union, the chairman of the construction group had the following comment (own translation):

"Today, the school-based practical training makes sure that the students can continue their apprenticeship in times of e.g. a recession in the construction industry. It is this safety net that the political parties behind the deal are planning to tear to pieces. Ruining this guarantee for young people's chances to complete their education is simply outrageous, and it does the labour market no good whatsoever". (Peter Hougård Nielsen, chairman, October 2003, quotation from article on www.sid.dk)

In a questionnaire sent to 12 regional labour market councils⁴ in 2003 by the weekly magazine Ugebrevet A4, they too expressed their scepticism about introducing shorter VET programmes. Their scepticism centred on the uncertainty surrounding the employment potential of the short programmes, just as there was general agreement that the short VET programmes would primarily be a sensible offer to adult unskilled workers, but not an attractive alternative for young people.

In a note from the Ministry of Education it says, following a meeting with the National Vocational Education and Training Council and the trade committees in September 2003, 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.

However, in spite of these concerns and protests, the four political parties behind the deal went ahead with their plans, and as a result, as of 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, both as to the steering of VET but also as to the traditional Danish alternating principle of the programmes. In relation to the steering, the position of the Ministry of

⁴ Denmark is divided into 14 counties and in each county there is set up a labour market committee, which consist of representatives of employers, employees and county and local government. The main task of the labour market committee is to modify the regional labour market policy.

Education, with the possibility of setting up ad-hoc committees, has been strengthened vis-à-vis the social partners, and 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 the involvement of the social partners in the programmes.

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

Part Four:

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, called the Lisbon Strategy:

"The Union must, by 2010, become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth, with more and better jobs and greater social cohesion". (European Council, Lisbon, March 2000)

So, the year 2000 saw the formulation at the international level of a common economic goal, aiming to create more and better jobs and more social cohesion. The European Council furthermore 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 educational systems. Therefore a detailed policy programme for the education and training systems was adopted in spring 2002. In addition, the Council declared in 2002 that by 2010 the European education system must become a world quality reference for education and training.

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 declaration was a follow-up on a number of preceding international policy plans on improvements in the education policy area to realise the Lisbon Strategy, and by signing the declaration each country committed itself to working towards strengthening the European cooperation specifically in relation to education.

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 the concept of competence has a wider meaning than just knowledge, and that skills are considered to be context-bound and can therefore not be determined once and for all.

In 1996 *"The International Commission for Education in the 21st Century"* published a report in which "learning throughout life" was referred to as the *"beat of society's pulse"*. In addition to this

thematization of lifelong learning, the report also had a description of the concept of competence. Competences, according to the report, should be seen in continuation of the demands from employers for so-called “higher skills”, which were then defined as demand for competences, which is a mix unique to each individual, of both skills in the narrow sense of the word, gained through technical and vocational education, of social behaviour, capability for teamwork, initiative and enterprise. (Winther-Jensen, 2004)

The Lisbon Declaration adopted the concept “lifelong learning” in particular and connected it with the development of an active employment policy. However, the declaration has been followed by a number of EU measures which have all encouraged a broader interpretation of the concept, in order not to narrow it down to a purely economic view on learning, but to let it include the whole spectrum of formal, non-formal and informal learning as well.

Generally speaking, the political documents tend to attach a lot of importance to the concepts “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 Danish response

The OECD’s and the EU’s preoccupation with the concepts “lifelong learning” and “competence”, along with the Lisbon Strategy and the Copenhagen Declaration, indicate that education in general, and vocational education and training in particular, in the course of the 20th 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 and 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. The present Danish government thus wrote in its action plan “*Better education*” in 2002:

“A well-functioning education system of the highest standard is an all-important prerequisite to secure growth and prosperity, for both the individual and for the Danish society as a whole. At the general level, everybody must possess a number of individual competences and skills, and be prepared to be a part of society and know its fundamental values. Society is undergoing rapid changes, technologically and culturally. It is therefore essential to maintain basic values such as freedom of speech, equality, tolerance and democracy. Knowing our past and fundamental values is essential in order to be able to face the challenges of the future...In the global economy, production and application of new knowledge is the key to increased economic growth, jobs and prosperity. Denmark’s competitiveness will to a large extent depend on the ability of our education and training system to live up to the demands to continuously improve professional standards, quality and progression – measured by international and not least EU yardsticks. Society and enterprises depend on employees who are able to apply and communicate knowledge and transform new knowledge into innovation.” (The Government, 2002)

On the same note, the Board of Economic Advisers wrote in their semi-annual report in autumn 2003:

”Education is important for both the individual and for society. For the individual, education offers an opportunity to acquire knowledge, which can give a higher quality of life in the form of insight and access to information, more challenging work, higher income and lower risk of unemployment. Education is also important for the individual’s opinion formation and cognitive development. Education furthermore ensures that the common principles, beliefs and traditions that society is based on are incorporated and disseminated to the coming generations; just as it is education that makes social and scientific progress possible.” (The Board of Economic Advisers, 2003)

These quotes provide an understanding of education as being, on the one hand, related to the individual’s personal development, but also related to the individual’s attachment to the labour market. An understanding that by and large is in line with the EU’s and the OECD’s definition of the concepts “competence” and “lifelong learning”, and an understanding that supports the political objectives within employment and education.

On the background of the policy statements and objectives at both the international and national level, 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 in achieving these political programmes and goals.

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 qualifications. On top, 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. (The Board of Economic Advisers, 2003)

The pivot in the way the alternating principle works is that an employer must be willing to take on a young person as an apprentice; at the same time employ him or her, and also plan and design the tasks in such a way that the person gradually learns the trade.

In the mid-1800s, when the Freedom of Trade Act was introduced in Denmark, this eroded the foundation of the sociological and political mechanisms for regulating apprenticeships, and this 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 vocational education and training was developed; the skilled workers’ unions and their opposite numbers from the employers at the national level together formulated their demands as to which technical and professional qualifications the state was to provide apprentices with and these demands were by the state mostly accepted. (see part two)

Generally speaking the role of schools, and thus the role of the state, had been expanding throughout the early 1900s and, as it is worth noting, due to pressure from the labour market parties. So that the state chose to meet the demands from the organisations as a matter of course is no surprise. The reason for this acceptance is to be found in the fact that in reality the market for vocational education and training 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.

Two distinct markets of demand and supply of apprentices

The basis of this two-market logic is that many, often large firms, which do in fact have a great need for skills and qualifications, are unable to educate and train the skilled workers themselves, for instance because of a high degree of specialisation, technology, rapid changes, fluctuating employment etc – these firms can be described as apprentice-recruiting enterprises. And 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 the qualified apprentices – 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.

This is in essence the two markets: 1) the first market that 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, Commission report, 1987, Sørensen & Lassen, 2004)

The overall pattern is that the majority of apprentices are trained in small and medium-sized firms, but these firms 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 being producers and recruiters is not unimportant regarding 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 responsibilities undertaken by the colleges; it has thus been possible to increase the level of qualifications, without increasing the demands on the firms too much and thus risking a drop in the volume of apprenticeships. Over the years, as firms have had difficulties in living up to the rules and regulations concerning the breadth and depth of the qualifications of the programmes, the 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 jobprofiles it might be argued that the dominant discourse seems to be the one-market perception, which also can be described as a more demand-led system,

and then some worrying perspectives begin to emerge as to the development of the qualifications of the skilled workers.

If the new, short and graduated programmes or the “light varieties” of programmes become more attractive for many apprentice-producing firms, this may first of all lead to an education with 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. The length of an education is of great importance in getting access to certain jobs and the following level of payment. The lack of workplaces in most cases strikes the ones with the relatively minimum of education and it is the rank of each individual at the labour market, which above all is decisive for the individual’s chances of life in the form of income. (For clarification of this see Hansen, 2003; Andersen & Sommer, 2003)

Second, it will also cause problems for the recruiting firms, who need skilled workers with broad and up-to-date qualifications. By the spread of real competence assessment and individual job profiles there is 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. In spite of enterprises having almost identical technology/productions facilities there is very often different types of job profiles and work organisation – and thus also 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. Such perspective makes it important to understand that an education must embrace both the breadth and depth of a trade. (For clarification of this see Sørensen, 1989; Jørgensen et al., 2004)

In Denmark the school-based practical training scheme was a guarantee that a young person would be able to complete his or her VET programme, but 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 EUD+; but this initiative is only one step of a full vocational education. Both the new short and stage programmes may succeed in increasing the number of young people who complete a vocational programme, but if the price is a quality of the programme so low that it cannot be expected to develop the students’ ability to act independently or to 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, and in that case the political objectives of furthering social inclusion and cohesion do indeed seem doubtful. (For clarification of this see Hansen, 2003; Sørensen & Lassen, 2004) Furthermore 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 a person’s chances of finding a job, it could be argued that it is crucial that he or she has acquired a suitable breadth of technical and vocational qualifications to be able to gain a foothold in a certain sub-labour market.

Persons who have such 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. (For clarification of this see Rasmussen, 1990; Juul, 2004; Smistrup, 2004; Sørensen & Lassen, 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 the VET area 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 his 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. (For clarification of this see Jørgensen, 2001)

A professional identity implies having real opportunities to choose jobs in an open labour market, and having acquired 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.

Furthermore, the new ways of structuring the VET programmes outline a perspective that vocational education and training 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, which might make it difficult to achieve the political objectives of giving everybody the opportunity to achieve a number of personal competences and skills, and the wish to maintain values such as freedom of speech, equality, tolerance and democracy. (For clarification of this see Sørensen & Lassen, 2004; Andersen & sommer, 2003)

The Danish apprenticeship system is a part of the initial vocational education and training system and by this it is a professional basic education which beside from meeting 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 paper has tried to explain the dynamics in the development of reforms in the vocational education system by enumerating a discussion of the outcome of the implementation of these reforms. The core of the discussion is the big question whether or not the developments in the system live up to the demands of the future labour market in general and might facilitate the individual apprentice with the abilities essential to acquire a vocational education which can support the struggle of a better life at the labour market?

Referencer

AHTS (Arbejdsgiverforeningen for Handel, transport og serviceerhvervene)[The Federation of Employers for Trade, Transportation and Services], DHS (Dansk Handel & Service)[The Federation of Danish Commerce and Services] og DI (Dansk Industri)[The Confederation of Danish Industries], (2002, 12. januar): ”Oplæg til revision af Erhvervsuddannelsesloven – Start på livslang læring” [Diskussion document for revision of the act of VET – the beginning of lifelong learning] lokaliseret marts 2002 på World Wide Web: www.dhs.dk.

Andersen, Anders Siig & Sommer, Finn, (Red.), (2003): ”Uddannelsesreformer og levende mennesker” [Reforms of educations and living people], Roskilde Universitets Forlag, Roskilde.

Bertelsmann Stiftung, (1999). „*Hintergrundsinformation – Carl Bertelsmann-Preis 1999 – Berufliche Bildung der Zukunft*“ lokaliseret den 21. oktober 2003 på World Wide Web: http://www.carl-bertelsmann-preis.de/deutsch/archiv/archiv_1999.html.

Betænkning nr. 1112, (1986): ”Betænkning om grundlæggende erhvervsuddannelser” [Report about initial vocational education], Undervisningsministeriet, København.

Commission of the European communities (2005): ”*Progress towards the Lisbon objectives in education and training*”, Commission staff working paper, lokaliseret den 14. april 2005 på World Wide Web: <http://www.europa.eu.int/comm/education/policies/2010/doc/progressreport05.pdf>

Crouch, Colin, Finegold, David & Sako, Mari (1999): “*Are skills the answer?*”, The political economy of skills creation in advanced industrial countries, Oxford University Press, UK.

Det Økonomiske Råd [The National Board of advisers on economic policy] - formandskabet, (2003): ”*Dansk økonomi efteråret 2003 – konjunkturvurdering - uddannelse*” [Autumn 2003 – education], København.

Finansministeriet, (2002, november). ”*Aftale om finansloven for 2003*” lokaliseret den 14. januar 2005 på World Wide Web: <http://www.fm.dk/db/filarkiv/6321/samlet.pdf>.

Gier, Erik de & Berg, Alex van den, (2005):”*Making transitions pay!*”, a policy analysis based on the EU-project Managing Social Risks through Transitional Labour Markets (TLM.NET), SISWO/Social Policy Research & Amsterdam School for Social Science Research, McGill University Montreal.

Hansen, Erik Jørgen, (2003): ”*Uddannelsessystemerne i sociologisk perspektiv*” [Education systems in a sociological perspective], Hans Reitzels Forlag, København.

Heikkinen, Anja & Sultana, Ronald G.,(EDS), (1997): “*Vocational Education and Apprenticeships in Europe*”, University of Tampere, Finland.

Heinz, Walter, (2002): “*Transition Discontinuities and the Biographical Shaping of Early Work Careers*”, Journal of Vocational Behavior 60, University of Bremen, Germany.

Jespersen, Ejgil, (2003): ”*Lavvælde og statsmagt – træk af mesterlærens historie*” [Guilds and the Government] i ”*Praktikkens Læringslandskab – at lære gennem arbejdet*” af Klaus Nielsen og Steinar Kvale (red.), København, Akademisk Forlag.

Juul, Ida, (2004): ”*Læringsmuligheder i skole og praktik*” [Learning possibilities in school and in practice], artikel i Tidsskrift for Arbejdsliv, 6. årg. Nr. 1, Roskilde.

Jørgensen, Anja Lindkvist, Sørensen, John Houman, Lassen, Morten, (2004): “*The elasticity thesis – how a CVT system can serve the diversified skills needs of industry as well as promote mobility*”

and re-integration of the unemployed”, Paper for the 7th European Congress of the International Industrial Relations Association in Lisbon, September 2004,

Jørgensen, Henning, (2001): “*Kvalificering, kompetencer og læring – og problemerne med at sætte de menneskelige ressourcer I centrum*” [Qualification, competences and learning], artikel i “uddannelse, læring og demokratisering” publikation i Uddannelsesstyrelsens temahæfteserie nr. 16-2001, København.

Sørensen, John Houman, (1989): “*Det teoretiske grundlag for den industrisociologiske forskningstradition*” i “Kvalifikations Forskning – som bas för utbildning”, af Matti Kyrö (red.) Carlsson Bokförlag, Stockholm.

Janossy, FÉrenc, (1971): “*The end of the economic Miracle*”, White Plains, New York.

Larsen, Ib & Olsen, Kim Ove, (1984): “*Forandringer i erhvervsuddannelserne*” [Changes in vocational educations] i Arne Jacobsens “Erhvervsuddannelse – Krise? – Fornyelse?”, Erhvervsskolernes Forlag.

Lassen, Morten & Sørensen, John Houman, (2004): “*Mere frisk luft og et fugleperspektiv også, tak!*”, artikel i dansk Pædagogisk tidsskrift, København.

Lassen, Morten, (1986): “*Leverandørforholdet og styring af grunduddannelserne*” i Undervisningsministeriet, “Betænkning om grundlæggende erhvervsuddannelser”, nr. 1112, juni, København.

Lassen, Morten, (2002): “*Educational policy*”, i Henning Jørgensens “Consensus, Cooperation and Conflict – the policy making process in Denmark”, Edward Elgar Publishing Limited, Cheltenham.

Lassnigg, Lorenz, (2004): “*Lifelong learning, school to work and labour market transitions*”, position paper for the TLM.NET conference in Amsterdam in November 2004, Institute for Advanced Studies, Austria.

Lauglo, Jon, (1992): “*Yrkesuddanningens organisasjonsformer, med eksemplene Sverige, Tyskland og Japan*” i “Det kvalifiserte samfunn?” af Tor Halvorsen og Ole Johnny Olsen (red.). Oslo: Ad Notam Gyldendal A/S.

Lave, Jean & Wenger, Etienne, (1991): “*Situated Learning – Legitimate peripheral participation*”, Cambridge University Press, New York.

Mathiesen, Anders, (1976): “*Uddannelse og produktion*”, Munksgaard, København.

Mathiesen, Anders, (1979): “*Uddannelsespolitikken, Uddannelsesfordelingen og Arbejdsmarkedet*”, Arbejdsnotat 4, Lavindkomstkommissionen, sekretariatet, København.

Mathiesen, Anders, (2000): “*Uddannelsernes sociologi*”, Christian Ejlers Forlag, Århus.

Nielsen, Klaus & Kvale, Steinar, (2003): “*Praktikkens læringslandskab*”, Akademisk Forlag, København.

Rasmussen, Preben Horsholt, (1990): “*Erhvervsuddannelsernes betydning for differentiering i kvalifikations- og interesseudvikling blandt faglærte*”, artikel i “Kvalificering – til hvad? – for hvem?” red. af Palle Rasmussen, Aalborg Universitetsforlag, Aalborg.

Rasmussen, Preben, (1996): “*Erhvervsuddannelserne i Danmark*”, LEO-gruppen, serie nr. 5.

Regeringen, (1997): “*Danmark som foregangsland – uddannelse, omkostninger og resultater*”, J.H. Schultz Grafisk A/S.

Ryan, Paul, (2004): "*Institutional Requirements of Apprenticeship Training*", speech at ITAC Third Conference on Apprenticeship Cork Institute of Technology, King's college London, UK.

Schmid, Günther and Schönmann, (2004): "*Managing Social Risks Through transitional Labour Markets*", working paper, Social science Research Centre Berlin (WZB), Germany.

Sigurjonsson, Gudmundur, (2003): "*Fra mesterlære til skolastisk læring*" i "Praktikkens Læringslandskab – at lære gennem arbejdet" af Klaus Nielsen og Steinar Kvale (red.), København, Akademisk Forlag.

Smistrup, Morten (red.), (2004): "*Samfundsborger – Medarbejder – debat om de erhvervsrelaterede uddannelser*", Erhvervsskolernes Forlag, Odense

Smistrup, Morten, (2004): "*Fag og fagidentitet – en fantastisk og problematisk ramme for at blive dygtig*", artikel i Tidsskrift for Arbejdsliv, 6. årg. Nr. 4, Roskilde.

Sørensen, John Houman, (1977): "*Dansk Uddannelsespolitik – staten og klasserne*", Munksgaard, København.

Sørensen, John Houman, (1984): "*Erhvervsuddannelserne i et historisk perspektiv*" i Arne Jacobsens "Erhvervsuddannelse – Krise? – Fornyelse?", Erhvervsskolernes Forlag.

Sørensen, John Houman, (1988): "*Arbejdsmarkedets partners rolle i ungdoms- og vokserhvervsuddannelserne*", Aalborg Universitet.

Sørensen, John Houman, Morten Lassen, Ole Zinck Nielsen og Preben Rasmussen (1984): "*Lærlinge - uddannelse og udbytning. Om lærlinguddannelsernes økonomiske, politiske og ideologiske funktioner*", bind I-IV, (2.opl.) Aalborg Universitetsforlag.

Telhaug, Alfred O. & Tønnessen, Rolf Th., (1992): "*Dansk utdanningspolitikk under Bertel Haarder 1982-1992*", Universitetsforlaget Oslo, Oslo.

The Copenhagen Declaration (2002): "*Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training*", lokaliseret den 14. april 2005 på World Wide Web: http://europa.eu.int/comm/education/copenhagen/copenahagen_declaration_en.pdf

Uddannelsesrådet, (14. juni, 2002): "*Detaljeret arbejdsprogram for opfølgning af uddannelsessystemernes mål i Europa*", Meddelelse i De Europæiske Fællesskabers Tidende, lokaliseret den 14. april 2005 på World Wide Web: http://europa.eu.int/eur-lex/pri/da/oj/dat/2002/c_142/c_14220020614da00010022.pdf

Uddannelsesrådet, (3. marts 2004): "*Uddannelse og erhvervsuddannelse 2010 – Lissabonstrategiens succes afhænger af gennemførelsen af hastende reformer*", Fælles midtvejsrapport fra Rådet og Kommissionen om gennemførelsen af det detaljerede arbejdsprogram for opfølgning af uddannelsessystemernes mål i Europa, lokaliseret den 14. april 2005 på World Wide Web: http://www.europa.eu.int/comm/education/policies/2010/doc/jir_council_da.pdf

Undervisningsministeriet [Minister of Education] m.fl., (1998): "*Kvalitet i uddannelsesystemet*", København.

Undervisningsministeriet [Minister of Education], (1997): "*Nye merkantile erhvervsuddannelser*", temahæfte nr. 1, København.

Undervisningsministeriet [Minister of Education], (1998): "*Status på hg – 1998*", temahæfte nr. 9, København.

Undervisningsministeriet [Minister of Education], (1999): "*Fakta om erhvervsuddannelsesreform 2000*", temaseriehæfte nr. 20, København.

Undervisningsministeriet [Minister of Education], (2000): "*Rapport om praktikpladsproblematikken*", København.

Undervisningsministeriet [Minister of Education], (2002a, juni). "*Bedre uddannelse – handlingsplan*", København.

Undervisningsministeriet [Minister of Education], (2002b, 14. august). "*Rapporten fra Udvalget Om De Merkantile uddannelser*", København.

Undervisningsministeriet [Minister of Education], (2002c, 30. november). "*Enigt Europa bag styrkelse af erhvervsuddannelser*" lokaliseret den 15. oktober 2003 på World Wide Web: <http://www.uvm.dk/nyt/pm/deklaration.htm?menuid=0515>

Undervisningsministeriet [Minister of Education], (2002d): "*Enigt Europa bag styrkelse af erhvervsuddannelser*", pressemeddelelse den 30. november, København.

Undervisningsministeriet [Minister of Education], (2003a): "*Aftale om fase II – fornyelse af vekseluddannelsesprincippet og nye løsninger i stedet for skolepraktik*", lokaliseret den på WorldWide Web: http://us.uvm.dk/erhverv/fase_II/index.htm?menuid=200505

Undervisningsministeriet [Minister of Education], (2003b): "*Brev til erhvervsskolerne om opfølgning på lov nr. 448 og på flerårsaftalen*", København den 2. juli.

Undervisningsministeriet [Minister of Education], (2003c): "*På vej mod bedre erhvervsuddannelser*", den 10. juni, København.

Undervisningsministeriet [Minister of Education], (2003d): „*Tal der taler – uddannelsesnøgletal 2003*“. København

Undervisningsministeriet [Minister of Education], (2003e): "*Rapport fra Udvalg om fornyelse af vekseluddannelsesprincippet mv. for visse tekniske erhvervsuddannelser*", Uddannelsesstyrelsens temahæfteserie nr. 3-2003, København

Undervisningsministeriet [Minister of Education], (2003f): "*Opfølgning af lov 448*", den 1. juli 2003, København.

Undervisningsministeriet [Minister of Education], (2003g): "*Brev til de faglige udvalg – opfølgning på lov 448*", den 23. december 2003, København.

Undervisningsministeriet [Minister of Education], (2004a): "*Uddannelse på kryds og tværs*", København.

Undervisningsministeriet [Minister of Education], (2004b): "*Orientering om ny bekendtgørelse om erhvervsuddannelser (hovedbekendtgørelse)*", København, den 29. marts 2004.

Undervisningsministeriet [Minister of Education], (2004c): "*Anmodning om indstilling vedr. nye, korte erhvervsuddannelser*", København, den 5. august 2004.

Winther-Jensen, Thyge, (2004): "*Kompetence og livslang læring om begrebernes oprindelse og udvikling i internationale organisationer og dokumenter*", arbejdspapir, Danmarks Pædagogiske Universitet, København.

Artikler:

”LO bekymret over forlig om erhvervsskoler” lokaliseret den 8. november 2002 på World Wide Web: http://www.lo.dk/smcms/Nyheder/LO_mener/3618/index.htm?ID=3618&tID=48

”Protester mod korte uddannelser”, Ugebrevet A4, nr. 36, 20. oktober 2003.

”TIB: Bevar skolepraktikken”, printet fra www.sid.dk den 22. oktober 2003.