

The future of Vocational education – learning from the Nordic countries

1. Project description

Purpose of the research project

The purpose of the project is to generate significant new knowledge on the strengths and weaknesses characterizing the different models of vocational education and training (VET) at higher secondary level in the Nordic countries. This knowledge will increase the opportunities for systematic policy learning in relation to key dilemmas in the development of VET in the future in these countries. The Nordic countries provide unique opportunities for comparative research in the field of initial vocational education. On the one hand they are characterized by similar societal contexts; on the other hand they exhibit significant differences in their models of VET. This situation has made the Nordic countries a fruitful living experiment of diverging forms of VET, in which a variety of significant qualities can be explored in relation to similar societies. The purpose of this project is to generate knowledge on the different Nordic ways of managing the key dilemma of providing ‘*double access*’ to the labour market and to higher education (HE) in vocational education. More specifically it seeks to determine how the different approaches in handling this dilemma have an impact on social reproduction, inclusion and the esteem of vocational education. This problem-oriented, comparative approach is expected to generate new knowledge that can be instrumental in the future development of VET in the Nordic countries.

Relevance of the project

The starting point of this project is that the Nordic countries have different models of vocational education, but share a number of dilemmas for the future development of VET. All Nordic countries have developed well-organised labour markets, consensual political cultures and universalist welfare states that have given priority to goals related to equal opportunities and social inclusion. These basic qualities are challenged by the current wave of globalisation, where outsourcing of low-skilled jobs and the increasing requirement for skills and mobility on the labour market provide critical conditions for marginalisation for young people who don’t complete any post-compulsory programme of education. In all of Nordic countries, the shift towards a knowledge society has been followed by a strong ‘academic drift’, with a significant expansion of general education and HE (Jónasson 2003; OECD 2010:57). This raises the urgent question of how to improve education for the other half of a youth group that does not aim for HE (HE). Vocational education at higher secondary level has been the main pathway to the labour market for the majority of this ‘second half’ of the youth group, and it is anticipated to remain so in the future. But in most countries VET struggles with decreasing esteem, declining participation rates, high dropout rates and a risk of evolving into an instrument for social policy, rather than an attractive pathway to high-skills employment. At the same time, VET also has an important role to play by linking school-based and work-based learning and by connecting education with the labour market. The successful development of a knowledge society depends not only on higher levels of formal and academic knowledge, but very much on the connection of this knowledge with specific and tacit knowledge in order to solve complex and ill-defined problems (Streeck 1992). The apprenticeship model – in a modernised form – is very well suited to the provision of work based learning and to connect codified knowledge to problem solving in practice (Guile

2006). Apprenticeship has also proved to be quite effective in providing access to the labour market for non-academic youths (Wolbers 2007). But weak linkages to higher education have increasingly appeared as a dead-end, and therefore the apprenticeship model is likely to suffer from a decreasing esteem and participation (Deissinger a.o. 2012). This basic dilemma and the potential solutions which have been developed is the focus of this research project.

In all the Nordic countries, initial vocational education has a variety of different, politically defined aims: to qualify for employment in a specific occupation, prepare for future mobility on the labour market, promote competitiveness and economic growth, qualify for studies at the tertiary level of education and prepare for lifelong learning, to as well as facilitate the student's development as a person and as a democratic citizen, and in order to contribute to social cohesion. Furthermore, VET is also expected to be inclusive for weak learners, retain most or preferably all young people who start on a programme and provide conditions for completion in the form of a degree or a certificate. These diverse aims are to some extent competing or even contradictory. For example, being inclusive makes it difficult for VET to also be attractive for ambitious students and for high skill companies. Giving priority to work-based learning, specific occupational skills and employability also makes it difficult to achieve HE entrance qualifications for all students. Developing VET for the future thus involves coping with inherent and recurring dilemmas, trade-offs and contradictions.

The priority given to each of the diverse set of policy aims and the ways in which they are managed differ significantly between the Nordic countries. This is mirrored in the differences in institutional architecture and the organisation of learning embedded in the national systems. The Nordic systems of VET differ with respect to their separation from or integration with general education, the amount of specific occupational qualifications offered, the balance between work-based learning and school-based learning, their governance structures, especially the involvement of the labour market partners, their links with HE on the one hand, and the labour market on the other, the balance between local-central governance and the degree of standardisation or flexibility of the programmes. The systems also differ with regard to the level of segregation in VET regarding gender and the ethnic and socio-economic background of students – and thus with respect to the role of VET in achieving equity in education, as well as on the labour market. These differences mean that the diverse Nordic systems of VET have had different experiences in the past that can be learned from. They also have different opportunities to cope with the common future challenges of providing attractive, high-quality programmes that connect school-based and work-based learning and provide access to high-skills employment and link up with HE. The aim of this project is to enhance the opportunities for learning between the Nordic countries in relation to these future challenges.

Key dilemmas for VET: *the double challenge*

The point of departure for this research project is a number of related challenges that VET is facing in all the Nordic countries:

- How do the systems handle ***the double challenge*** of qualifying for employment and providing access to HE? The revitalisation of modern forms of apprenticeship programmes in a number of Nordic countries has drawn attention to the risk that these programmes become '*dead-ends*' in the educational system, with weak linkages to the tertiary level of education. Comprehensive ed-

education on the other hand often suffers from weak linkages to the labour market and difficult transitions to employment. What are the experiences of programmes for double or hybrid that provide access to higher education as well as work-based learning and skilled employment?

- How do the systems provide **work-based learning** of a high quality and a sufficient number of training placements for young people in the labour market? How smooth is the transition to the labour market for VET graduates, and how are the social partners engaged in VET quality and improvement?
- How do the systems cope with problems of **esteem in** vocational education in comparison to general programmes? Which factors influence VET esteem and what is the current status of VET in the Nordic countries in relation to current trends towards 'academic drift', and what strategies have been applied to raise the attractiveness of VET?
- The task of **social inclusion** has become high on the agenda for VET, as all governments have raised their targets for completion rates in higher secondary education. Labour markets of the future will have little to offer youths with only compulsory education and, at the same time, vocational programmes face increasing problems with high dropout rates. What solutions do the existing models offer to the double challenge of including more weak learners and, at the same time, increasing their attractiveness for companies and ambitious youths?

Each of these questions represents a significant challenge for the future of VET. In addition they are interconnected: coping with one challenge involves the risk of aggravating another. In this way they constitute limits, trade-offs and dilemmas for policy and educational practice. The project's primary interest is the dilemma posed by the *double challenge* of qualifying for employment and providing access to HE. Providing access to employment through work-based learning tends to limit the attainment of qualifications that provide access to HE – and this adds to the declining esteem of VET. Giving priority to the attainment of academic qualifications by extending school-based learning tends to limit the direct access to employment – and makes VET less of an alternative for non-academic youths. The purpose of this research project is to examine the way in which four Nordic countries have managed these dilemmas and also to explore the opportunities for mutual policy learning, in order to adjust or innovate institutional designs, transition pathways and the development of new teaching/learning arrangements.

Research design and methodology

The project will take an interdisciplinarity and problem-oriented approach and apply a comparative methodology in a study of the historical trajectories of national systems of VET, a policy study of current reforms and comparative case studies of selected occupations. This will be organised in five consecutive phases:

1. **The emergence** of the key challenges for the future of VET: access to *employment* and *HE*, the role of *work-based learning*, *esteem* in relation to general education and equity/*inclusion*. Focussed comparative studies will trace the emergence of these dilemmas and their current situation in the national systems of VET in the four countries. The purpose of this part is to embed our understanding of the dilemmas in the specific historical trajectories of VET and the institutional architecture of each system. This involves analysis of the structures, institutions, pathways and social interest in VET and the institutional complementarities between VET, the labour market and the production systems in each country. These studies will rely mainly on existing literature, and will place emphasis on similarities and differences in the nature of these challenges in relation to the educational

system as a whole. This first part will establish a common framework for the specific comparative studies in the research project.

2. **The current situation** of the four challenges with a specific focus on the dilemma: *access to HE or the labour market*. This will include a combination of quantitative and qualitative studies to map the patterns of recruitment to VET, the extent of segregation in VET programmes (SES/gender/ethnicity), the transition to different forms of employment and the pathways to HE of VET-graduates. In addition, it will explore the organisation, extent and quality of work-based learning in the programmes. A special interest is to compare VET-programmes that combine work-based learning and employability with access to HE and the way these programmes have handled the dilemmas.
3. **Recent reforms and outcomes**. This section will explore the way the dilemmas have been managed through policy reforms and institutional adjustment and innovation since the mid-1990s. In addition, it will assess the outcome of the reforms with special attention on potential, unintended consequences of reforms relating to the dilemmas. The assessment of policy interventions is expected to uncover some of the basic social dynamics of each system and the scope for policy-making in relation to the balance of social interests that sustain and influence the current systems of VET.
4. **Case studies of selected occupations**. This part of the project will select two occupations to be examined in each country as comparative, multi-level case studies. The purpose is to compare the current conditions and handling of the four challenges in comparable occupational areas (a traditional male manufacturing/craft-based and a female service occupation). The empirical studies will include interviews and observations in schools and training companies in order to examine social and gender inclusion and segregation, vocational didactics, work-based learning and preparation for HE. In addition, they will include multi-level studies of the institutional architecture of each occupation at local, regional/municipal and branch/national level. This will make it possible to assess the strengths and weaknesses in the detailed working of the systems, their governance structures and the institutional complementarities of the systems - especially the coordination of education-work relations on different levels.
5. **Learning from the Nordic countries** to develop vocational education for tomorrow. The concluding part of the project aims to contextualise the empirical case studies in the institutional and policy context of each country and to systematically compare the way the basic dilemmas for VET are handled in each country. This will be used to explore the opportunities for mutual learning in policy and didactics of vocational education.

Theoretical framework

The project will build on the methodology of institutional comparative research in education that was first developed in German-French comparisons by Lutz (1976) and Maurice, et.al (1986) and in later studies by Streeck (1992) and Thelen (1999; 2004). This tradition argues that comparisons should be based on recognition of the path dependencies and institutional complementarities in specific national or occupational regimes. It means that direct comparisons between separate educational institutions and their performance in different countries are dubious, due to differences in the general institutional architecture (Lutz 1991). It has demonstrated how the development of VET-regimes can be interpreted as a result of learning processes related to basic dilemmas, critical junctures and resulting struggles and alliances between key stakeholders. The strengths and weaknesses of different educational systems can be explored by comparing their handling of common challenges.

This project will compare the Nordic VET-systems with an interest in the path dependency of these systems, but will also explore the potentials for transformation of trajectories (Antikainen 2010). The comparisons will focus on the VET-systems' response to the challenges, through a holistic examination of the institutional architecture in each country with focus on the institutional complementarities between education, labour market and production system. This will draw on a conceptualisation of the 'classic' European models of VET described by Greinert (1988, 2005) and the studies on the institutional embeddedness of school-to-work transitions (Shavit & Müller 1998; Müller & Gangl; Breen 2005; Wolbers 2007) and David Raffe's (2008) discussion of different 'transition systems'. In addition, we will draw on research of 'Varieties of Capitalism' (Hall & Soskice 2001) and different national 'training regimes' (Busemeyer & Trampusch 2012). The ambition, though, is to go beyond the static descriptions of various regimes and explore the potentials for institutional change, transformation of trajectories and policy learning (Deeg & Jackson 2007). This will be done by examining the detailed workings of the systems through social interactions and agency at the local level.

The project will apply multi-level analyses that combine macro-societal theories of diverging national 'models' or 'systems' with micro-sociological studies. This will utilise the methodology employed in comparative studies of flexible specialisation and industrial clusters (Piore & Sabel 1984) and micro-sociological studies of the institutions of labour markets (Marsden 1999) and networks and partnerships between institutions of VET and companies (Stenström & Tynjälä 2009). Micro-sociological research may help to connect analyses on the system-level to the micro-level, by investigating the challenges mentioned as they are handled in schools, workplaces and training centres throughout the Nordic countries. There are significant but largely understudied questions about the curriculum, pedagogy and assessment of VET, questions which have been subsumed under the weight of policy concerns. In order to inject further empirical reality into current debates about VET, there is a need to explore the function, purpose and lived experience of VET in different forms of educational settings, where social and institutional dilemmas and tensions are explicitly addressed (e.g. Fuller et al, 2007). However, there are few studies that have focused explicitly on how the relationship between different institutional dilemmas, as well as tensions between education and work, is negotiated and acted on by teachers and students within schools and workplaces from a comparative perspective (but see Jørgensen 2006, Hodkinson, 2005; Tanggaard, 2007; Fuller et al, 2007; Berner, 2010, Persson Thunqvist, 2012).

Micro-sociological research has contributed with new knowledge by illuminating how tensions between schooling and work are manifested and negotiated by vocational teachers, instructors and students in everyday teaching and learning (Berner, 2010; Persson Thunqvist, 2012). The ways in which teachers and students handle multiple positions and conflicting viewpoints, paradoxes and overlapping institutional and educational practices is crucial for understanding the local premises for VET. Expanding on earlier micro-sociological research, it is also important to focus on how broader institutional and political processes influence different forms of VET. Previous research shows that external 'demands' are not translated directly into training content: What is taught in vocational training is mediated, for instance, through teacher priorities, different pedagogical traditions and practices, resources, curricular demands, and student characteristics and motivation (e.g. Carlsson, 2001; Lindberg, 2003 Vähäsantanen et al, 2009). Another strand of micro-oriented research has argued for the need for a closer examination of how VET intersects with the issues of

social class, inclusion/exclusion (e.g. Sawchuck, 2003) and gender (e.g. Paechter, 2003; Salminen-Karlsson, 2006; Nielsen, 2008).

It is the intention of the project to make comparisons of the local case studies in a way that is sensitive to differences in the institutional contexts, the different VET regimes in the Nordic countries. The micro-sociological case studies of social interaction at the level of vocational colleges and workplaces will be used to gain detailed knowledge of the working of the VET system by combining them with studies of the VET system at regional, industry and national level in the selected occupations. This is expected to generate significant new knowledge of the strength and weaknesses of these systems based on an insight into the inner dynamics of the systems.

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