



Nord-VET – The future of VET in the Nordic Countries

Bridging the gaps: Recent reforms and innovations in Swedish VET to handle the current challenges

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Nord-VET – The future of Vocational Education in the Nordic countries

The purpose of the Nordic research project, Nord-VET, is to generate new knowledge on the strengths and weaknesses of the different models of vocational education and training (VET) at upper secondary level in the four Nordic countries. This research is expected to strengthen the knowledge base required for developing VET for the future.

The main purpose of this project is to shed light on the different Nordic ways of handling the key dilemma of providing double access to the labour market and to higher education in vocational education. More specifically it seeks to determine how the different ways of handling this dilemma have an impact on social equality, inclusion and the esteem of vocational education.

The project is publishing three sets of country studies on Finland, Denmark, Norway and Sweden. The first set of reports is on the historical emergence of vocational education (VET) in the four countries. The second set of reports is on the current challenges for VET in the four Nordic countries. This is the Danish report. The third report to be published February 2015 is on innovations in VET.

For more information visit the homepage: www.nord-vet.dk

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1. Introduction and aim

In this report we discuss the recent reforms and other innovations within Swedish initial VET since the mid of 1990s. Using a descriptive approach, we will analyse the current state of play for initial VET in relation to what we in the Nord-VET project address as key challenges for the Nordic VET systems. One of the challenges concerns the double challenge of creating and maintaining strong links between education and the labour market while at the same time securing young people's pathways to further studies and higher education. Related to this double challenge is the associated policy-goal for achieving parity of esteem between general and vocational upper secondary education respective social inclusive goals. However, the different policy-goals of initial VET can sometimes come in conflict. That is, something that is intended as an improvement in one area can have negative side effects in another area, thus leading to a numbers of dilemmas for policy-makers.

Regarding the sources or agency for *innovations* in the field of initial VET one may distinguish a range of various sources, such as: politically initiated innovations; internal initiation of education change (e.g. the initiatives of education personnel); external transactions where groups outside education impose new demands and pressures on schools (Lundahl, 2011; Billett, 2014). The first part of the report illuminates governmental reforms and innovations that might indicate more or less profound changes within the school-based VET-system in Sweden. Here, the latest educational reform of upper secondary school and the political movement to create a stronger fit between initial VET and working life, including the reintroduction of regular apprenticeship programmes in the gymnasium, is a case in point.

Such politically driven reforms and innovations can in turn be analysed in relation to the institutional preparedness of school institutions and labour market organisations to make the indented education changes to happen in reality. Even if school institutions are influenced by educational policies, they enjoy a relative autonomy vis-à-vis governmental politics. In consequence, adjustments and different interpretations of political reforms are made in school settings in accordance with the values, norms, and conditions that constitute and reproduce the institutions (Streek & Thelen, 2005). Besides changes initiated by governmental politics, the report will also point at the recent innovations emerging from different labour market sectors that need skills provisions from upper secondary schools.

2. Recent reforms and the movement toward the world of work

In recent years vocational education and training has been subject to reforms in Sweden, and several innovations have been made as attempts to handle current challenges in the field of initial VET. While school-based VET still dominates the scene of initial VET, the most recent 2011-reform of upper secondary school has been given an upgraded priority for strengthening the vocational side of the gymnasium as well as increasing the quality of workplace learning and apprenticeship. The reform comprised at least two significant changes compared to the previous reform cycle in the early 1990s, characterised by strong integration between vocational programs and higher educational programs.

Since 1994, all programs have been organized to provide better general education as well as basic eligibility for higher education. This integrated system was replaced by a modified system (comprising 18 national programs, 12 of which are vocational) with three broad orientations: (a) general education, mainly for those intending to pursue higher education; (b) school-based vocational programs; (c) workplace-based apprenticeship. All programs lead to a diploma. Second, the new system aims to ensure that VET students acquire more specific vocational training (Olofsson & Persson Thunqvist, 2014). While the vocational content and subjects increased in the VET-programs at the expense of general education, the links to higher education became weaker.

The latest 2011-reform (henceforth GY-11) of upper secondary school can be seen as part of a broader policy-trend and political movement toward the world of work. Looking at the national educational system as a whole, several political reforms have been conducted since the mid 1990ies. In 1996, the government launched the reform of Advanced Vocational Education (AVE) in order to meet the demands from domestic industry and commerce, but also to counteract youth unemployment (Lindell & Stenström, 2005). Since early 2000, regular programs provide tailored education in close cooperation with working life. A common characteristic of these programs from different parts of the educational system is the effort to bridge the existing gaps between the world of education and the world of work. The reforms also respond to the difficulties, experienced in various sectors of the educational system, including the gymnasium and adult education. Difficulties are experienced regarding a mismatch between what schools can supply and what the labour market demands (Nilsson, 2008). By bringing educators and representatives or working life together, the political intentions behind the reforms were to develop frameworks for cooperation and new innovative forms of workplace learning.

The mismatch between school and labour market needs for skills provisions in different sectors have also been a decisive factor for the rise of innovative forms of organizing networks and partnerships between schools, companies and labour market partners. Technical Colleges and Healthcare Colleges have been established (Andershed & Ljungzell, 2009). Here, working life representatives have initiated far-reaching cooperation with each other and with schools. These non-profit organizations have been recognized by the government as innovative in contributing to strengthen the quality of different vocational programs (SOU, 2010). In particular, these organizations have gained an important role for increasing the status of schools and programs that qualify for branch-specific certificates by fulfilling certain quality-standards (Persson-Thunqvist & Hallqvist, 2014).

Apprenticeship has become an important question on the educational agenda as well. Inspired by an ongoing educational debate on whether the dual systems of Denmark, Germany and Austria are better at dealing with youth unemployment and fostering skills for modern economies, the former government (since returning to power in 2006) has pushed for a re-introduction of apprenticeship. Although the opposition parties and large trade unions (particularly LO) have been critical to many parts of the reform (see below), they have gradually acquiesced with the former government's ambitions to expand the apprenticeship-component in upper secondary school.

The upper secondary report (SOU, 2008) that preceded the launch of GY-11, concluded that extensive improvement in vocational tracks had to be made regarding the generally weak links to the labour market. First, initial VET in Sweden shares the disadvantage of all school-based VET in terms of preparing students for working life ("job ready"), and in keeping up with technological development in advanced industry-settings and workplaces. In the well-regulated Swedish labour market, these characteristics of school-based VET also contribute to youth unemployment. Second, high drop-out rates from the vocational programs during the 1990s were regarded as connected with the strong theoretical and higher education preparatory orientations in the vocational programs. These were also the main arguments in the policy-text for need of developing a modernised form of apprenticeship as a regular feature of upper secondary VET (SOU, 2008).

2.1 Emergent tensions and dilemmas in the initial VET reforms

Since the launch of GY-11, one of the major issues within educational policy concerns the decline of students in the vocational programmes. Since 2007 there is a decline from approximately 39 per cent to 27 per cent 2013 (Table 1). The decline is largest among females (from 36 % 2007 to 22 % 2013). It is lower among men (from 42 % 2007 to 32 % 2013). The decrease of students in the vocational programs coincides with decreased pupil cohorts, affecting the gymnasium as a whole. Table 1 below also indicates some other recent changes. Since 2006/2007 it is possible for municipalities and school companies to provide individual programs for students who are not eligible for national upper secondary programs. These programs cover different forms of education, including apprenticeship and vocational training (see Figure 2 for the distribution of students to the new apprenticeship programs). Moreover, since GY-11, the former Media vocational program is integrated into the general programs.

Table 1. Distribution of upper secondary students (year 1) by program (General, Vocational and Individual programs)

Educational Programs	1999/2000	2007/2008	2009/2010	2012/2013
General	51,2	46,7	53,3	58,7
Vocational	48,8	39,4	33,6	27,5
Individual		13,8	13,2	13,7

Notes: Adopted from Statistical Sweden, 2013 and Skolverket, 2013: 21. It should be noted that individual programs earlier (before 2000) often were included in the vocational programs in public statistics.

The political movement (driven by the former government) toward creating stronger ties between school and working life, implicates weaker connections to higher education. In the current educational debates the weaker links between initial VET and higher education are generally discussed as a decisive factor for the decline of applicants to vocational programs. The strength of the school-based initial VET system has for a long period of time been associated with strong integration between different educational tracks. Internationally, it is widely recognized that early tracking in educational systems creates initial VET as a route for the less fortunate with respect to general education (Bourdieu & Passerson, 1997). By bridging the gaps between school-based vocational education and higher education, the Swedish model of VET has also aimed at increasing the parity of esteem between vocational programs and general programs. Even if transitions from vocational programs to higher education programs in reality have varied considerably over time, the mere possibility for young people to keep doors open to different imagined futures has been a core value (Lundahl & Olofsson, 2014).

GY-11 has also been met with opposition. Within the educational policy, the left wing political parties (Social Democrats, Left Party) and the Green party have criticized the reform for creating dead alleys in relation to higher education. Criticism has also been directed at the social stratification. The opponents argued that differences related to class, gender and ethnicity will increase because young people are forced to make carrier decisions at a very early state of their educational and vocational carriers (Lundahl et al, 2010). The Gy-11 reform has also been criticised for lacking a long-term perspective on future demands in the labour market and economy, and for pursuing the interests of local firms at the expense of national interests (Lundahl et al, 2010).

However, there is also a more fundamental criticism directed at GY-11. It describes the reform as a historical break in the modern history of initial VET. Educational research (Fejes & Nicoll, 2008, Nylund, 2012) have pointed out that previous core values in the educational system in terms of citizenship, democracy and equality have been largely replaced by another grand narrative concerning employability and efficiency (e.g. smooth transitions from school to work). According to the critics (Nylund, 2012), the notion of employability shifts attention and responsibility away from the structure of the labour market to the individual's ability to acquire the skills necessary. One main criticism concerning GY-11 is that the stronger division between different educational programs will enhance the social division of labour between the work of the hands and the work of the minds. These different positions in the ongoing discussion in Sweden might point at some genuine dilemmas for initial VET. One the other hand, the need to improve the school-work ties is generally recognized as a key within VET-policy and there seems to be a broad political consensus of the value of a larger apprenticeship component within upper secondary school (Olofsson, 2014). If a modernized apprenticeship had the capacity to secure employment for young people in skilled occupational work, while at the same time contribute to good working conditions and individual development, this could perhaps increase the general esteem of apprenticeship.

The following sections will explore the ways in which key challenges and dilemmas have manifested themselves and how they were managed through the initiation of the new vocational programs and the apprenticeship track within the gymnasium. The focus will particularly be on the main challenges for apprenticeship when trying to bridge the existing gaps between the world of education and the world of work.

First, we will deal with the challenges when bridging existing gaps between apprenticeship, school-based VET and higher education. Given that initial VET in Sweden has followed a path-dependency at least since Second World War toward a state-regulated school-based system (Olofsson & Persson Thunqvist, 2014), and given the strong institutional and cultural traditions that have been established and intertwined during this historical trajectory, it is not likely that the political intention to radically expand apprenticeship within the gymnasium will come easy or become a “quick fix”. In addition, before the 2011-reform, apprenticeship has mainly been used by previous governments as a social-political measure within the field of youth politics to deal with youth unemployment and other social problems (Olofsson, 2014). In fact, since the initiation of the pilot apprenticeship scheme in 2008, the apprenticeship track in the gymnasium is still characterized as a rather small track (Figure 2, Appendix) in progress and not yet fully established in the secondary school system. Hence, *the initiation phase* can be analyzed as a dynamic process marked by gradual institutional adjustments and innovations in relation to the four challenges.

3. Bridging the gap between apprenticeship, school-based VET and Higher Education

3.1 Situating apprenticeship within school-based VET

Since the 2011-reform of upper secondary school, apprenticeship comprises a regular part of the gymnasium as one of three educational pathways. Upper secondary schools are responsible for providing apprenticeship education along with school-based vocational programs. Goals and syllabi for these two pathways are formally the same, but students in apprenticeship education spend at least half of their time at one or more workplaces. Since 2013, the apprenticeship track also formally qualifies for higher education (Skolverket, 2013).

As Sweden lacks well-established traditions of apprenticeship in the gymnasium, some interesting questions arise: What is the actual role of apprenticeship within the upper secondary educational system as a whole? Do the new apprenticeship programs first and foremost work as a supplement or an alternative to the other educational pathways? The following section will focus on these significant questions, which are largely under-researched in the Swedish educational context.

Firstly, therefore, we will briefly situate the apprenticeship track in relation to previous research on initial VET in Sweden. Significant part of research on apprenticeship in Sweden has been based on comparative approaches examining how different VET-systems and transition regimes support young people's transitions from school to work (e.g. Arnell Gustavsson, 2007; Olofsson & Panican, 2008; Olofsson, 2014). In an international perspective, similar to Finland (Virolainen & Stenström, 2014), apprenticeship in Sweden has mainly been developed outside the upper secondary school system. Hence, upper secondary apprenticeship in Sweden has to be contextualised in relation to the historical development of the school-based VET-system (Olofsson & Persson Thunqvist, 2014). Within this system, apprenticeship has retained a rather marginal role.

Recently, qualitative research has also examined the functions of vocational training in relation to other educational programs within the gymnasium (for a brief overview see Olofsson & Persson Thunqvist, 2014). Within school-based VET, vocational training and apprenticeship can be situated in the midst of two different but overlapping cultures: the vocational and the academic. This also applies to vocational teachers, who stand with one foot in each culture. In particular, research on vocational training has focused on the boundary work between school-based VET and working life (Berner, 2010; Fejes & Köpsén, 2012), demonstrating both similarities and differences between school-based vocational training and workplace-based training. Some similarities are striking since vocational training in both schools and at workplaces often are geared toward a clearly defined vocational labour market. Therefore, they are both part of a similar and wider culture with many linking attributes (e.g. Hodkinson, 2005; Berner, 2010). In addition, even in a school-based system, vocational training differs significantly from the so called core-subjects (e.g. Swedish, Mathematics). While the former consists of intense interactions between students and vocational training teachers, tools and machines, the latter are more academically oriented.

A few Swedish studies have compared company-based apprenticeship-training with school-

based vocational training for industry work (Berner, 1989; Carlsson, 2001) and work in the service sector (Arnell Gustavsson, 2007). In contrast to school-based vocational training, industry-based schools can select its students and thus get students with “better” educational background. Furthermore, industry-based schools generally have more advanced machines and many more weeks of factory-based training of an apprenticeship character. Also in the service sector, employers generally prefer to recruit committed students even if they are formally over-qualified for the unskilled job at hand (Arnell Gustavsson, 2007). The major advantage of school-based training, however, is that schools are more oriented to social inclusive goals. Students with low grades are given possibilities to gain competences and self-esteem, partly because of the support of their teachers and inclusive working methods (Berner, 2010).

Apprenticeship in the technically oriented programs differs from other school-based VET-programs in Sweden as they have been under considerable influence by labour market sectorial conditions during a considerable amount of time. There is a long tradition of apprenticeship outside the school system in the sectors that are closely linked to the school-based vocational programs. The path vocational students have to follow to become a certified and fully paid construction worker follows a standardized model consisting of seven steps: a completed upper secondary construction program (3 years; step 1-4) plus apprenticeship in the construction sector (2-3 years; step 4-7). While this standardized model for school-to-work transition and occupational socialization is well-recognized, research on the construction programme (Härdig, 19954; Berglund, 2009; 2014) also reveals a recurrent tendency that this model contributes to preserve traditional forms of apprenticeship (e.g. strong power asymmetry between apprentices as “novices” and experienced workers as “masters”), social structures (e.g. working class masculinity cultures), and distinctions between “work of the hands” and “work of the minds”. At present, this particular model (i.e. school-based VET complemented with final apprenticeship) is also under debate within the construction sector. One issue concerns the extent to which the model is flexible enough to accommodate innovations in work organisation and in keeping up to date with technological development within the construction trades (Berglund et al, 2014).

Other studies have focused on hybrid forms of vocational training and workplace-based learning in school-based VET (e.g. Persson Thunqvist & Axelsson, 2012a; Persson Thunqvist, 2012). Workplace-based learning (APL) is mediated by different educational traditions with roots both in school and working life and, in addition, youth cultures in school. This results in multi-functional educational practices but also inbuilt contradictions between different logics and functions (e.g. school-based individual grading of pupils vs. cooperating as a team in “real” production work). In addition, in the intersection between school and working life, hybrid educational practices (e.g. project-based work) occur in cases where different categories of teachers and professionals from working life cooperate and integrate different traditions of knowledge and competencies. Potentially such local initiated innovations might also transgress historically rooted distinctions between “theory” and “practice” in initial VET, but also challenge gender-distinctions. For example, in the former Media vocational program, close cooperation between professional film-producers and TV-producers respective vocational teachers, created opportunities for female students to participate in vocational training aimed for technically oriented, and conventionally male-dominated, occupations within the media and culture sectors (Persson Thunqvist & Axelsson, 2012b).

However, from an institutional perspective, the vocational programs and the apprenticeship programs are also part of upper secondary school system and its particular goals. One point of interest then becomes the institutional connections between the new apprenticeship program and the vocational programs.

3.2 Connecting school-based VET and apprenticeship: towards a hybrid model?

The initiators of the GY-11 reform put considerable emphasis upon the new character of apprenticeship as an alternative track for youth, thereby making the workplace in enterprises or public institutions (e.g. hospitals) into a learning site that is equivalent to school (SOU, 2008; 2010: 75). At the same time, according to the educational goals, school-based vocational education, core subjects and workplace training in the apprenticeship programs should be joined together to form a whole (Skolverket, 2013). This also implicates strong institutional connections between different parts of the upper secondary system. In policy texts, the differences between school-based vocational training and workplace-based training are also emphasized. The central goal for workplace training is that students become part of the vocational culture and community at a workplace, and develop vocational identities (Skolverket, 2011: 2). Such professional socialization is difficult to achieve in school-based training only.

Recent comparative research on the development of initial VET in Denmark and Sweden (Dobbins & Busemeyer, 2014) has characterized the current apprenticeship track in Sweden as “a hybrid model in which school-based vocational education is complemented with school-organized apprenticeship” (p. 22). In contrast to the dual system in Denmark with apprenticeship as a parallel system and with strong links to the labour market, in the Swedish school-based system, there is yet not so much trust in the capacity of firms and workplaces to create pedagogical milieus without the support of schools (e.g. experienced supervisors and teachers).

It could be discussed, however, if the current apprenticeship program has yet taken the form as a distinct “model”. Compared to Norway with more established traditions of apprenticeship integrated in the upper secondary school system, the coupling between school-based VET and apprenticeship are still under progress in Sweden. In the Norwegian so called 2 + 2 model, the linkages between school-based and firm-based-VET are (since the 1994-reform) structured in a fixed, statutory sequence consisting of two years of education in school followed by two years of training in the firm as an apprentice (Michelsen, Olsen, Høst, 2014: 69). At present, the Swedish apprenticeship programs lack a fixed structure between school-based VET and workplace-based learning. This has created organizational problems that are currently on the educational agenda.

Evaluations of the apprenticeship programs reveal that school-based training and workplace-based training in many schools are organized as separate tracks (School Inspection, 2013). That is to say, in practice, the work that the students conduct at workplaces is seldom related to what they learn in the school settings, and vice versa. Core subjects, vocational subjects and workplace training tend to be treated as separate units and blocks, with weak connections to each other.

A related issue is at what point in the educational career it is advisable for students to begin

apprenticeship training. In the trial with apprenticeship, students mostly started apprenticeship directly after primary school (16 years old). Since the launch of GY 11, many schools have chosen to gradually assume students to apprenticeships first to grade 2 (Skolverket, 2013). This gives the students a greater opportunity to assess what an apprenticeship track means and also to get more information about different occupations that the vocational programs are directed to. Given the weak connection between primary school and working life, pupils in primary school might have difficulties in making informed decisions about their future occupations and carriers during their last year in primary school. Industry organizations and companies involved in the apprenticeship program generally prefer that students receive a basic year of vocational education in school before starting work-based-training (Skolverket, 2013). Students are then supposed to become better equipped for vocational training in a workplace.

Yet, there are institutional conditions in the school settings that work against the postponement of apprenticeship until the second year. Formal requirements that half of the apprenticeship takes place in a workplace and the fact that the state grant is to search already the first semester are factors that pushed schools to accept pupils who come directly from primary school. The upper secondary schools as informal arenas for socialization into youth and peer cultures might also play a role. Once young people in year two start to know each other in school, they might find it hard to break up the community to join the main part of the education at a workplace with adults. In fact, according to recent evaluations (Skolverket, 2013), this is one of the reasons why students shift from apprenticeship to a school-based vocational program during their second year. This pattern is prominent in municipal schools where apprenticeship is integrated into the regular vocational programs. It is less prominent in school companies that only offer apprenticeship.

3.3 Improving the progression from initial VET to higher education

The institutional connection between apprenticeship and school-based vocational education is also important for linking apprenticeship to higher education. If different parts of the upper secondary school are disconnected, such division will likely to affect students' possibilities to formally qualify for studies at a tertiary level. A related challenge concerns the degree of equality and comprehensiveness versus differentiation and elitism. As mentioned earlier, the latest GY-11 reform created a stronger division between vocational programs and higher education preparatory programs. Some of the previous largest vocational programs (the Media program, the Art program) were integrated in higher education preparatory programs with small amount of vocational training. In order to increase the prestige of secondary education for industry work, the possibility to develop the Technology program to include several vocational trajectories for industry work is on the current political agenda. In GY-11, the apprenticeship track was expected to deal with problems partly created by an upper secondary school system dominated by programs with a strong orientation towards higher education. The apprenticeship program provided an opportunity for young people to get away from school on a road that ultimately could provide a faster route to a specialized occupation (SOU, 2010).

At present, however, several attempts have been made by the government to change the image

of the apprenticeship as the track for “school-tired” and academically unmotivated youth. Public information about the programs accentuates that apprenticeship training is an integrated part of the gymnasium and by law it also prepares for higher education. The most common question schools receive from the public since the launch of GY-11 is pupils’ parents’ inquiries if apprenticeship will keep the doors open to higher education (Skolverket, 2013). When the apprenticeship track was introduced in 2011, the students had to make an active choice if they wanted to complement their education with courses that gave them basic eligibility for higher education. Gradually, educational providers at local level have started to integrate these courses in their programs so that students had to actively choose if they did not want to join them. Hence, the division between different educational tracks is partly downplayed in advertising the apprenticeship to students and their parents. Nowadays, educational providers and organizers of apprenticeship even advertise that they “guarantee” that students study for a basic eligibility for higher education, which students are entitled to according the Education Act (Skolverket, 2013). Ytterligare ett institutionellt dilemma gäller relationen mellan lärlingsutbildningarna och de teoretiska och högskoleförberedande momenten som är gemensamma för alla gymnasieprogram.

Despite the formal eligibility to higher education, many difficulties remain when making the progression from apprenticeship to the tertiary level to work. The prerequisites for gaining eligibility for higher education are different in the apprenticeship track compared to the vocational programs. As the apprentices spend more time at work than in school than their peers in school-based vocational programs, they have less time to engage in the core-subjects and vocational courses in school. An additional challenge is to provide equal access to higher education to all students regardless of their social background. A well-known pattern regarding the academically oriented education is that different social groups have different perspectives on education and schooling. Among academically educated people, education is viewed as a goal in itself and as a norm. However, the upper secondary school system in Sweden is to some extent differentiated by social class as well as gender. The majority of students in the male-dominated technically oriented vocational programs prefer an early entrance into working life (Härdig, 1995; Högberg, 2009). Dissertations based on close-up descriptions of vocational students participation in the core subjects (Högberg, 2009; Kärnebro, 2014) illuminate how students recurrently resist subjects that they perceive as not immediately relevant for their future occupation. However, the dissertations also reveal that vocational students generally want to get good grades (to pass the courses) since they assume that poor grades will negatively affect their chances to get a job. While issues regarding social class and gender are central in current Swedish educational research (Nylund, 2012), the priority within VET-policy (in terms of social inclusive goals) is directed to meet educational needs of young people that otherwise tend to get caught in precarious positions and categories in the labour market: Youth lacking final grades from primary school and non-Scandinavian immigrants (Olofsson, 2006; Skolverket, 2013). We will get back to this issue in a subsequent section (6.2) when we discuss the function of apprenticeship as a social-political measure to fight against social marginalization and exclusion.

4. Bridging the gaps between apprenticeship and the world of work

4.1 Transition from apprenticeship to labour market

Previous comparative research reveals that longer periods of work-based training in vocational programs enhance the connections to the labour market and generally support fast transitions from school to work (e.g. Raffe, 2008). In a Nordic context, the upper secondary apprenticeship system in Denmark clearly differs from the Swedish trials with apprenticeship in the gymnasium, in terms of stronger institutional networks that support apprenticeship. For example, employers and unions have a larger role in the design, updating, delivery and assessment of vocational training (Helms Jørgensen, 2004; 2014). Hence, the working life value of apprenticeship is generally more strongly recognised in the Danish system compared to Swedish initial VET, historically marked by an “educational logic”. Recently, however, the “employment logic” (Iannelli & Raffe, 2007) has been stronger within Swedish VET. This seems particularly to be the case in Advanced vocational education (adult education) profiled by a large amount of workplace learning. National statistics (Myndigheten för Yrkeshögskolan, 2013) show that approximately 87 % of the students had an employment one year after the completion of vocational program. These programs are generally characterised by strong links with the labour market and are also rather specialised and connected to certain occupations.

The same applies to the technically oriented vocational programs (e.g. construction, energy, electricity) in upper secondary school where students generally have the fastest access to the labour market (Statistics Sweden, 2002). These programs are characterised by a large amount of workplace-based training oriented to well-defined occupations and with established certification systems.

In the case of the regular upper secondary apprenticeship programs, transitions to working life are not well-documented. The first report based on national statistical data (Statistics Sweden) will be available 2007 three years after the first student cohort has graduated from the new regular apprenticeship programs (since GY-11). At present, however, information about transitions from the apprenticeship programs to working life cover only those well-established schools and programs that regularly conduct evaluations. Indeed, some schools are successful (Skolverket, 2013; School Inspectorate, 2013) in providing smooth transition to work for those young people that complete an apprenticeship program. However, many schools do not conduct such evaluations on a regular basis. At present, schools also report enrolment patterns to different national statistical registers; one based on students that receive state funding (in 2012 6 191 students) and one based on students who get aid from the CSN-organization (in 2012 5842 students). Public statistics are often based on the former register (Skolverket, 2013: 22). In consequence, it is not clear how many students are actually enrolled in an apprenticeship program during a certain semester. Lack of accurate statistical data makes it also difficult to track apprentices’ carrier development in a long-term perspective. Hence, it is too early to say whether the upper secondary apprenticeship programs will follow the same pattern as those European countries with a longer tradition of apprenticeship.

4.2 The new school companies: innovators and competitors in apprenticeship

In the pilot scheme with apprenticeship (2008-2011) that preceded GY-11, the launch of apprenticeship largely took the shape of start-ups. A handful of school companies soon took the lead in receiving state funding, offering apprenticeship as an alternative pathway for those youngsters that have had difficulties in graduating from the primary school.

Table 2. Apprentices within municipal respective independent upper secondary schools 2010/11 till 2012/13 (year 1, spring semester).

Apprentices Numbers	Municipal	Independent schools			
		Total	Praktiska	Yrkesgymnasiet	Other
2010/11 (Trial)	1 109	2 575	2 197	191	187
2011/12 (GY-11)	902	1 351	754	419	178
2012/13 (GY-11)	728	1 145	552	462	131

Source: National Board of Education, 2013

The subsequent decline of students in the vocational programs has been most noticeable in school companies (in particular *Praktiska*) exclusively engaged in apprenticeship. These schools have not the same opportunity as the larger municipal schools to economically and practically compensate small numbers of vocational students with the greater numbers of applicants to the academic oriented programs. As equipment and tools for conducting vocational training are expensive for schools, training placements could not easily be replaced by school-based vocational training. In general, both municipal schools and independent schools with small apprenticeship tracks and small teaching groups also tend to have difficulties in establishing relations with the labour market partners and, consequently, to get access to qualified training placements.

This, in turn, contributes to high drop-out rates and decreasing esteem. Indeed, these schools are caught in a vicious circle that makes it difficult to survive in a decentralized educational market characterized by a strong competition among local schools for attracting students and employers. The situation is worsened because of the lack of legislation for regional coordination of apprenticeship and other forms of vocational education. Today, legislation requires that program committee is associated with a school. Regional program board and regional health and social care colleges and technical colleges have been encouraged by the government and various industries to create better conditions for co-operation between schools and to ensure the quality of different apprenticeship tracks. We will get back to this issue soon.

4.3. Different sectorial conditions for expanding apprenticeship

Since GY-11, the conditions for expanding apprenticeship differ to a large extent between national vocational programs and regions (Olofsson, 2014). Although the apprenticeship tracks remain small on national level, some local and regional innovations, such as Technology College and Health and Care-College, have contributed to develop the new organizational forms for strengthened cooperation between initial VET and different branches. Next, therefore, we will briefly analyse what jointly characterises cases where the conditions for expansion have been most favourable as well as point at some main difficulties. The main source of statistics is based on the latest evaluation made by National Agency of Education (2013).

The expansion of apprenticeship has been paramount within some of the largest national school-based programs; construction work, VVS, energy, transport and health and care. Looking at these cases from some distance, the recent development of apprenticeship seems to follow a path dependency in relation to the interplay between school-based VET and different labour market sectors (Dobbins & Busemeyer, 2014). Large firms in the above mentioned labour market sectors have adjusted their recruitment strategies to school-based VET over time, and are reluctant to initiate apprenticeship in partnership with new actors (e.g. school companies), sometimes viewed as competitors, in the educational market. Specifically, the conditions for apprenticeship have been most favourable in those regions in south Sweden (Skåne, Västergötland, Östergötland,) where companies for many years have cooperated with upper secondary schools (Skolverket, 2013).

In addition, workplace-based training has played an important role also in these school-based vocational programs. Hence, the institutional preparedness to implement apprenticeship programs (since GY-11) has been rather good, at least in some regions and municipalities. Yet, apprenticeship does only account for a smaller part of these broad vocational programs. In many cases, apprenticeship functions as a supplement in relation to smaller branches, occupations and companies that are not associated with regular apprenticeship system in the labour market (e.g. in the construction sector). Common to all these cases above is also a strong link between the vocational programs and occupational standards and certificates. In particular, this applies to the construction program characterized by rather detailed occupational standards concerning both workplace training and the vocational subjects (Berglund, 2011).

In the case of Health and care programs, the expansion of apprenticeship has been paramount in those municipalities where programs are engaged in organized partnerships between school and work (Healthcare Colleges) and have received certifications. These partnership-constellations also contribute to the increase of the professional esteem for certain occupations. However, as many occupations in health and care (such as assisting nurse) for a long period of time have recruited experienced unskilled workers (Ahnlund & Johansson, 2011), it is too early to say if the new apprenticeship program will manage to gain a larger place in this sector. An alternative scenario is that these skilled trades will be sustained by adult recruitment and adult education combined with learning on the job.

A certain challenge concerns the introduction of apprenticeship in those labour market sectors that lack previous traditions for apprenticeship (Helms Jørgensen, 2014: 188). Similar to Norway (Olsen, Høst & Hagen Tønder, 2014: 10), in the weakly regulated service sector, the skilled service worker does not present a powerful occupational category. In Sweden, young people and workers

in general are commonly recruited as unskilled labour. At present, in partnership with upper secondary schools, the large branch-organization (Handel) in the service sector has initiated a trial with apprenticeship, “Apprentices in shops” (Swedish: “Lärling i butik”) in order to secure future skills provision and increase the interest in certain occupations (e.g. salesmen) within the sector.

In the context of the industry sector in Sweden, the labour market’s need for skills provision and the recruitment of young people for industry work is big, but the number of applicants to the vocational tracks remains low (Skolverket, 2013). In the 1980s, industrial jobs were still interesting to young people, and the industry program attracted large numbers of students, including those who were highly motivated and with good grades (Berner, 1989). Today, however, students are fewer and many of the young people enrolled in the industry program have lower grades and are generally tired of studying theory, mathematics and other school subjects (Berner, 2010). This might partly explain why school-based vocational training continues to dominate since it is easier for vocational teachers to combine the educational goals with inclusive working methods in a school setting, as compared to a workplace-setting.

At the same time, for large industry companies, a combination of general school-based VET with specific on-the job training may be more attractive than a separate apprenticeship track in school presented as *below* the academic. However, as industry work becomes more technologically advanced, the demands on stronger integration between different kinds of competencies and qualifications from school and work life increase. For example, learning CNC machining involves abstract calculations, three-dimensional thinking and programming, competences that require advanced theoretical knowledge and also specific industrial skills, “know-how”, achieved during on-the job training. As mentioned in the introductory section, in recent years, several joint industry/upper secondary schools have been established in Sweden. These partnerships-schools are expected to attract more and “better” students to fill vacant positions within industry (Berner, 2010). Evaluations based on surveys and interviews with labour market partners within industry and the construction sector show that many companies do not accept to recruit students who experience difficulties in school (Berglund et al, 2014).

4.4 Improving the cooperation between schools and workplaces

The introduction of a regular apprenticeship track was intended to increase the influence of the labour market partners on the curriculum and the educational content. Previous research has shown that one of the main obstacles with previous trials with upper secondary apprenticeship has been a lack of established frameworks for cooperation between schools and the labour market (Olofsson & Panican, 2008; OECD, 2008). Since the launch of GY-11, several measures have been taken to improve the opportunities for the labour market partners to exert influence via the national and local councils (Olofsson, 2014).

At the national level, vocational councils have to be organized via the National Agency of Education. The goal is that representatives of trade and industry gain increased influence over the programs via the national councils. At the local level, schools are obliged to set up local program councils for each vocational program. Councils have to include representatives of business and trade-union organizations.

Recent evaluations of the apprenticeship track reveal gradual improvements concerning frameworks for co-operation between schools and working life compared to earlier trials with apprenticeship. However, despite the revitalization of the frameworks for school-enterprise co-operation and the establishment of apprentice councils (*lärlingsråd*), the new apprenticeship programs remain quite different from the Danish-style model of trade self-management. Instead, the apprenticeship programs, at least at present, are governed by the central government and individual schools. At present, there are no branch-specific agreements on skill formation. At the local level, a main challenge for the apprenticeship programs is the flexibility in the design of programs in meeting the local and regional needs in the labour market, while simultaneously operating in accordance to the requirements within the national framework of the upper secondary school, in particular, the school-based VET.

Still, the institutional preparedness of schools to conduct regular apprenticeship tracks has been very varied. The School Inspectorate shows in their latest evaluation (2013) that many schools still do not work systematically to improve the quality of workplace learning. The evaluation was conducted in 35 schools that included the largest apprenticeship programs (Construction, Health and Care, Business and Administration, Transport). The evaluation dealt with and assessed the implementation (or lack thereof) of the national educational goals for the apprenticeship programs. The evaluation shows that most schools have started to use teaching contracts on a regular basis as they are obliged to do, but they do it in a passive way. The schools formally decide about the training contracts, informing workplaces about the major educational goals, and then leave it to the tutors to deliver the training.

The report points at many innovative local and regional examples as well. Several schools with well-established vocational programs have maintained and developed intense co-operations with the labour market. In contrast to many other schools, different partners not only participate together in local councils but also take mutual responsibility for organizing workplace training and in monitoring and assessing apprentices. This also contributes to the transparency of the requirements of assessments and grades. The report concludes, however, that the quality of the workplace learning needs to be strengthened in many different dimensions in many schools.

In order to deal with recognized quality-problems as well as the decreasing number of applicants to the new apprenticeship track, several political measures have been taken. They include the development of a more favorable financing system in order to motivate firms to take apprentices. In order to encourage more employers to offer apprenticeship education, the government has also suggested an increase in the grants available for VET providers. At the same time, the government takes a stronger hold of the apprenticeship track. The political measures include the formation of new quality schemes and, at present, a new apprenticeship council under the auspices of the National Agency of Education. The main goal of the council is to support VET providers, employers and social partners in developing apprenticeship education and to improve the quality of apprenticeship education partly by training supervisors at workplaces.

5. The dilemma of managing social inclusion and improving the status of initial VET and apprenticeship

5.1 Innovations aimed at decreasing social exclusion and some of their unintended consequences

Apprenticeship is often presented in the Swedish policy debate as a suitable form of education for academically unmotivated and people at risk of social exclusion in society (Olofsson, 2014). Meanwhile, companies want vocational educational programs to attract ambitious and committed students. Since 1980s, five different attempts to introduce apprenticeship have been conducted in upper secondary school. Common to all these attempts is that they have been presented as innovations to handle youth unemployment and/or drop outs in school (Olofsson & Panican, 2008). In the pilot scheme that preceded GY-11, the recruitment-base for apprenticeship was rather similar for the new introduction program aimed for students that have not yet graduated from primary school. In many cases, pupils with low grades in primary school have also been advised by their study councilors to choose an apprenticeship track.

In 2002, before the pilot scheme, *Praktiska* was recognized by politicians, stakeholders and trade union representatives as an innovative example of apprenticeship and a model for integrating low school performers in secondary education and work. The National Board of Education also highlighted certain local schools (e.g. *Praktiska* in Gothenburg) as successful models for developing new forms of workplace learning for young people (Skolverket, 2013). As mentioned above, *Praktiska*, and a few other school companies, expanded rapidly and by numbers dominated the scene of upper secondary apprenticeship; for instance, in 2009 *Praktiska* run 49 local schools (Skolverket, 2013). Soon, however, the school companies received criticism by the National Board of Education, and other state bodies as well (e.g. the School Inspectorate, 2013) for the lack of quality. Criticism of the school companies was also voiced by several of the larger organizations within industry. Fueled by public controversies about the legitimacy of profit-making school companies in general, the criticism of apprenticeship in these companies recurrently gained public attention in national media. It is likely that the bad publicity to some extent affected the reputation of the apprenticeship track, and consequently, attracted decreasing numbers of young people.

Since the launch of GY-11 the issue of the intended target groups for the apprenticeship track has been a contested one both inside and outside the gymnasium. A recurrent opinion voiced by teachers, principals and study counselors in schools is that the apprenticeship programs *should* primarily recruit students who experience difficulties in completing regular schooling. At the workplaces, the apprentices are supposed to gain new positive role models and mature as individuals as they co-operate with adults in real work life settings (Skolverket, 2013). Still, the school setting functions as a “safety net” if difficulties at the workplaces occur. At the same time, teachers in schools have come to realize that the actual requirements in the apprenticeship programs

are more demanding than in the school-based vocational programs. Apprentices have to be able to function independently in the workplace by managing tasks and take responsibilities for their learning but also to cope with the same theory-based courses in the gymnasium, as other vocational students.

5.2 Framing and handling the “drop-out-problem”

One of the main challenges for the apprenticeship track, so far, seems to be large numbers of apprentices that leave the program after their first year. A recent evaluation (Skolverket, 2013: 40-42) reveals that 25 per cent of the apprentices during the trial (1998-2011) drop out between year one and year two. Since the launch of GY-11, the drop-out rates have increased to 40 per cent (between year one and two). It is, however, rather few apprentices that leave the gymnasium (approximately 8 per cent). The majority of the students shift to a school-based vocational program. Within educational policy, patterns like these are recurrently framed and discussed as the “drop-out-problem”, i.e. as a deviation from an expected linear transition through the educational system. Drop-out is also recurrently viewed as an active choice made by the individual.

However, research from several countries (e.g. Helms Jørgensen, 2009; Bäckman et al, 2011; Walter, 2006) has shown that young people’s transitions from school to work have also become increasingly individualized, diversified and non-linear, marked by repeated movements back and forth between education, spells of work and unemployment. In the Swedish context, drop-out patterns have also been framed in relation to current tendencies toward increased marketization of upper secondary schools (Lundahl, 2011). Formally, students are expected to follow a linear path through an educational program as well as an individual study-plan (Swedish: “Individuell studieplan”), but in practice, it is rather easy for an individual student to shift an educational program.

Since the early 1990-reforms, particularly in larger cities, young people have an opportunity to sandwich between many local educational alternatives, while schools and programs compete to attract students (Lundahl & Olofsson, 2014). According to pure market logic, such competition could potentially be progressive in terms of enhancing the quality of education. If students and their parents are not satisfied, they might just turn to another educational provider. Such individualized trajectories within upper secondary education and from school to work and adult-life have sometimes been interpreted as young people’s expression of their individual choices and agency (for an overview; Lundahl, 2011).

However, for some young people such complex transitions could perhaps best be regarded as disadvantaged routes (Lundahl & Olofsson, 2014). From early age, already in primary school, children are continuously assessed regarding their school performance. They are categorized as, for example, “high” or “low” performers. Qualitative research on occupational socialization within school-based VET indicates that individual grading and assessments plays a significant role for the identity formation also among students in vocational training (Persson Thunqvist, 2006; Persson Thunqvist & Axelsson, 2012). If students over time learn that they are “low achievers”, external categorizations become internal categorizations (Mäkitalo et al, 2006), making it difficult to change from the stigmatizing school identities. However, there is also a strong trend among students in vocational programs to shift to higher education preparatory programs. As mentioned

earlier, among students in apprenticeship tracks there is a trend to shift to regular vocational programs (Skolverket, 2013). There might be many different reasons for this. The general academic drift might be an explanation. Student's experiences of their first year at an apprenticeship program might also play a role. Moreover, if young people and their parents in general associate apprenticeship as a route for weak school performers, it will probably also affect the prestige and attractiveness of this track.

6. Experiences of workplace learning in the new apprenticeship programs

Yet, in a research perspective, workplace learning within upper secondary apprenticeship largely comprises a “black box”. Finally, drawing on existing qualitative research and evaluations, we will summarize the experiences of workplace-based training among those actors that have been involved in the new apprenticeship programs, i.e. teachers, companies, supervisors and students.

6.1 The new apprenticeship teachers

The politically driven demands for renewal and higher qualities of vocational education and training have resulted in the establishment of a new teacher-training program for vocational teachers. The program aims to create conditions for preparing better-qualified vocational teachers (Ministry of Education, 2010). This can also be seen as a measure to increase the status of vocational education in general. Despite a previous mandatory teacher qualification in the gymnasium, many vocational teachers have lacked the formal competence to teach. The initiation of regular upper secondary apprenticeship is also linked to the creation of a new category of vocational teachers: Apprenticeship program teachers (In Swedish: *Lärlingslärare*). The role of these teachers differs from vocational teachers involved in school-based vocational education only (e.g. Berner, 2010). Being an apprenticeship teacher requires a higher degree of adaptation to professional activities outside school. These teachers also have to spend a great deal of their working time at workplaces, and in traveling between workplaces.

In her dissertation about this group of vocational teachers, Lagström (2012) illuminates how a significant part of responsibility for the organization of apprenticeship programs is placed on the vocational teachers. In the end it is these teachers that have to deal with and make sense of the various goals stipulated by educational policy. The dissertation presents a close-up description of the multitude of roles and strategies the teachers use in order to function as the unifying link between school and working life. The apprenticeship program teacher’s arrange the students’ work placements, using their personal experience of both students and supervisors in order to assess where each student is to be placed, follow up and supervise students during their placements. In addition, they monitor psychosocial risks at workplaces and assess whether students with personal problems could be best served by remaining in school.

This multitude of tasks puts rather high demands on individual teachers. Lagström shows that teachers often work alone, and with weak support from the school management and organization. In their biographical study of vocational teachers, Fejes and Köpsén (2012) point at a gap between the political intentions and actual competence-related conditions in schools for developing the vocational teachers’ competencies. The study concludes that the school setting does not include a system for vocational teachers to retain their occupational knowledge and skills. As a consequence, some teachers might find it difficult to keep up to date with their occupations, as it takes too much effort on their part (Fejes & Köpsén, 2012: 280). Moreover, as many schools are not used to co-operate with commercial enterprises, informal supervisors at the workplaces take

over the function of teacher and take on pedagogical responsibility even if the teacher still retains formal responsibility (Skolverket, 2013).

6.2 The views of the companies

One of the main difficulties for the apprenticeship programs since their start has been the lack of interest from commercial companies to actively recruit apprentices from the gymnasium. Educational research illuminates how schools, often teachers, have to struggle to get access to training placements and often meet resistance from some of the industry organizations. However, the picture is somewhat different when it comes to the views of the social partners and companies that have participated in upper secondary apprenticeship.

National surveys (National Apprenticeship Committee, 2010; Berglund et al, 2014) show that nine of ten companies that have recruited upper secondary apprentices are mainly positive. The evaluations also reveal that prioritized educational agenda questions concerning economical compensation (state funding) and training of supervisors at workplaces plays a minor role in firms' decisions to participate in the new apprenticeship program, and does not affect so much everyday training. More decisive factors are the daily contact between the apprentices and supervisors. Research (Olofsson & Panican, 2010; Olofsson, 2014) on the views of the social partners involved in apprenticeship also seems to be positive in general especially when it comes to the capacity of apprenticeship to deliver skills provision.

Although empirical research on the role of the companies involved in upper secondary apprenticeship is rare, qualitative research has contributed to the knowledge about some of the companies that regularly receive apprentices from the gymnasium. Based on interviews with representatives from eleven (11) companies in different parts of Sweden, Höghi (2014) reveals how apprenticeship training in the companies has over time become integrated with the daily work. This is different from companies that receive apprentices from upper secondary schools more sporadically. Although the study maps a mixture of many context-specific motives for the companies to engage in apprenticeship, some strategic motives are more recurrent than others.

The most important Det framkommer att den viktigaste konsekvensen av lärlingsutbildningen är att den bidrar till att säkra kompetensförsörjningen inom regionen. consequence of apprenticeship training is that it helps the companies to secure the supply of skills within the companies and, to some extent, in the region. Another strategic motive to recruit young people instead of adults was related to socialization goals. Indeed, quotations from the interviews present a certain view on socialization where teenagers (16-years olds) are seen as not yet fully mature, but easier to "form" as individuals than young adults. By doing so, i.e. enculturating the apprentices in the corporate culture, there is an additional public relational motive: Young people, committed and loyal to the organizations, help to promote the business and provide the companies with good reputation in the region. The study also points at other unexpected or sometimes seen but unnoticed consequences. Making apprenticeship a regular feature of the daily work has in many cases contributed to continuous opportunities of learning also among the employees. Since most Eftersom de flesta anställda informellt fungerar som handledare på företagen tvingas de artikulera, förklara och motivera, sina yrkeskunskaper och färdigheter i samspelet med eleverna. employees now and

then informally take the role as supervisors in the interaction with apprentices, they must articulate their professional knowledge, explain and sometimes justify work routines and procedures.

A recurrent theme in the studies above is that social partners and companies express dissatisfaction with the perception of apprenticeship in schools as a second form of education for those who are tired of schooling. It is emphasized that an apprenticeship places high demands. Eleven ska ha en hög arbetsmoral, vara motiverad och målmedveten samt visa ansvarskänsla och initiativförmåga. Students should be committed to the occupation, be motivated and demonstrate a sense of responsibility and initiative. Moreover, a common opinion is that apprentices should have the ability and interest to follow and live up to the demands both at school and at work. A certain challenge for company-based training is the extent to which training involves general skills, i.e. skills that are useful to any employer in an occupational sector, in contrast to specific skills that are useful only in the training company where they are acquired. Recurrently the studies above also present a rather firm-specific perspective on apprenticeship, where the need of the firms is most important for their recruitment strategies.

6.3 What about the experiences of the students?

Studies of the experiences of students have, however, been very limited. Most previous research has been based on students' participation in school based vocational training (for an overview see Olofsson & Persson Thunqvist, 2014). However, previous surveys have shown that most students in the gymnasium perceive their workplace part of the training very positively (Arnell Gustavsson, 2007). The most recent evaluation of the new apprenticeship programs (School Inspection, 2013), includes interviews with 150 apprentices and it presents a similar picture. However, it should be underlined that the evaluation is based on interviews with apprentices during their third year of study in well-established vocational programs. The experiences of the students who have left the apprenticeship program earlier are excluded from the investigation.

The evaluation shows that many students have spent more time at workplaces than at school and generally feel stronger affinity with their workplace settings than with the school setting. A recurrent experience among the students is that the difference between being employed and being an apprentice is not so big in daily work with an exception that apprentices often receive more varied tasks so that they will have greater broadness in their (future) occupation. Moreover, a common experience among apprentices is that work at workplaces is more demanding and challenging than they initially had expected. According to the evaluation, the majority of the apprentices pointed out that the main merit of the work experience part was that they have started developing an occupational identity and also got the chance to get into a "practical reality" after many years of school with almost only theoretical subjects.

The evaluation points at risks that apprentices workplace learning might reinforce already existing negative attitudes toward schooling. However, interviews with supervisors at the workplaces also illustrate cases where "school-tired" students succeed in learning and managing new tasks at work, and become more motivated in school. In the Swedish context, these results point to the importance of more research in order to get a better understanding of how students' participation and identity development evolves over time in relation to different conditions in the workplaces. While

the educational contexts surrounding the apprenticeship programs are well-documented, workplace learning and occupational socialization have not yet been researched on their own terms.

7. Discussion and conclusion

The aim of the current report has been to provide a ground for further comparisons between the Nordic countries by highlighting current reforms and innovations in Swedish initial VET. The new millennium in Sweden has seen a rather strong political movement for initiating institutional changes in the whole upper secondary school system. The latest 2011-reform of upper secondary school did not radically transform the school-based model of initial VET. Many features in the recent development of initial VET represent continuity with the previous educational reforms. Still, the regular vocational programs are integrated in the gymnasium aimed for youngsters (16-20 year-olds). The modularized vocational programs typically take three years and consist of a mix of general education, more specialized vocational subjects and 15 weeks of workplace-based training. As before, all programs formally qualify for higher education. Nevertheless, the report has pointed at some significant recent changes and innovations.

One of these innovations concerns the development of Technical College and Healthcare College. These cases represent innovative ways of organizing cooperation between three central parties in the field of initial VET; employers, unions and schools. So far, these three-party-constellations and non-profit organizations have played a vital role in improving the connectivity between school and work within certain branches and regions. Although the improvements in terms of attracting students and increasing the quality of vocational education and training have been most visible in certain local settings, one possible scenario for the future is that these organizational forms will expand and also cover more vocational areas and branches (Olofsson, 2014).

The most profound change of initial VET in Sweden since the mid of 1990s could perhaps be attributed to the increased decentralization and marketization of upper secondary education, reflecting a global tendency to subsume education under semi-market conditions as part of the knowledge-based economy (Olofsson & Persson Thunqvist, 2014). The new market situation in Sweden might explain some of the large local variations in the field of initial VET. For example, evaluations and research on the function of different vocational programs recurrently illuminate vast local differences regarding the quality of vocational programs and the conditions for cooperation between schools and working life (SOU, 2010; Olofsson & Panican, 2010). Swedish schools have acquired the greatest autonomy to decide their activities in the whole OECD area (Lundahl, 2011), and the freedom of parents and students to choose between schools has been particularly promoted. The lack of national and regional regulations and frameworks for connecting education and work has increased competition between local actors regarding access to qualified training placements.

As described in the present report, in many municipalities, school companies have dominated the scene of apprenticeship and have been recognized as innovative in creating new apprenticeship programs. Again, however, recently these tendencies have been counter-balanced by stronger centralization, that is, a higher degree of top-down state governance over the national education system. In the field of initial VET, while the government promotes stronger cooperation between schools and working life, the state takes a stronger hold on the vocational programs (e.g. through recurrent quality-assessments). The latest 2011-reform is of principal interest for initial VET as it represented a strong response to the widely recognized weak links between school-based VET

and the labor market. As has been described in the report, several political measures have been taken to develop frameworks for improve the cooperation between schools and working life. Still, despite these innovations we can conclude that initial VET at present suffers from declining student enrolment and decline in esteem in terms of its attractiveness among young people.

The question regarding the attractiveness of initial VET is urgent for the future development of initial VET. The present report supports previous observations within the Nord-VET project regarding how the double challenge of initial VET of providing access for young people both to the labour market and HE is closely interconnected with the question of prestige (Helms Jørgensen, 2014; Olsen, Høst & Skagen, 2014). In Sweden, as in all Nordic countries, the academic drift has put initial VET under press in various aspects. As academic oriented studies generally have high prestige in society, a main challenge for initial VET is to maintain high esteem by attracting committed and high performing students as well as employers who provide training placements. The quick expansion of HE is related to high participation rates in upper secondary school. Nowadays, the gymnasium in Sweden represents not only a right but appears to be a norm or even as mandatory for young people in order to get any job at the labour market (Olofsson, 2006). This also means that young people in practice are forced to join the gymnasium even if they are not motivated to do so.

By creating a stronger division between higher education preparatory programs respective vocational programs, the latest 2011-reform aimed to counterbalance the academic drift. The quality of the general education programs was expected to increase as they become more exclusively associated with higher education. Indeed, this could also be seen as a political measure to recruit more academically oriented students to these tracks, while “cool out” (Goffman, 1962; Walther, 2006) the aspirations of the non-academic students for HE. These students were redirected to the new vocational programs and the new apprenticeship tracks.

As described in the introduction part, the latest GY-11 reform by some observers has been presented as a radical break in relation to the fundamental principles (equality, citizenship) of the Swedish upper secondary education model. This report has also pointed a tension or a gap between the political movements (driven by the former government) toward the world of work, and the institutional preparedness among school institutions to conduct some of the intended education changes to improve the school-working life ties. The weakened links between initial VET and HE have been met with strong reactions within the world of education. In consequence, the government has been forced to make several adjustments and compromises during the launch of GY-11 in relation to the basic principles associated with the school-based model of VET.

The report has also showed that the new apprenticeship tracks have not yet developed as they were expected by the inventors of the latest reform. Several reasons have been discussed in the report. Perhaps the main explanation is that it takes time to modify the image of apprenticeship as a social political measure to fight against social marginalization among young people. In practice, apprenticeship has also been presented in the educational debate as the track for non-academic students. It might have contributed to the negative image and low prestige. A related problem in the Swedish context is the fact that apprenticeship training too often has been perceived as considerably lower ranked than school-based education (Berner, 1989; Olofsson & Panican, 2012). These perceptions are partly based on false assumptions of the capacity of modernized forms of

apprenticeship to provide skills provision and skilled workers to advanced forms of jobs and occupations (e.g. Ryan, 2000; Billett, 2001). A prerequisite for a further development of apprenticeship in Sweden would probably imply a change of the general approach on apprenticeship training. Moreover, there is a need for more knowledge and research based on the actual experiences among young people in order to get a more complex and nuanced picture about the possibilities as well as pitfalls of apprenticeship. So far we have only taken a small step on this road.

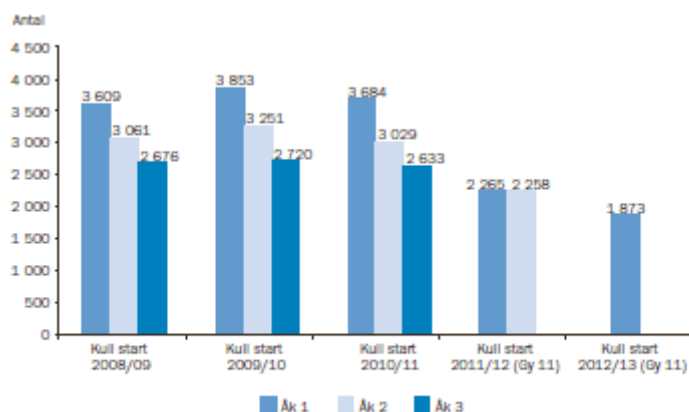
Appendix

Table 3. Distribution of apprentices by different vocational areas and apprenticeship programs spring 2013 (compared to all vocational education autumn year two).

Vocational areas and apprenticeship programs	Apprentices (Numbers)	Total numbers of students in the vocational programs
Technology/Industry		
Building and Construction	538	5556
<i>House-building</i>	328	3413
Vehicle and Transport	223	3887
<i>Vehicle (passenger car)</i>	156	1344
VVS (including Plumbing, Heating, Ventilation).	212	1412
Electricity and energy	131	5193
<i>Electricity</i>	115	2551
Industry technology	91	1938
<i>Welding</i>	48	724
<i>Process and mechanical engineering</i>	31	772
Service:		
Business and Administration	293	3236
<i>Retail</i>	286	2584
Restaurant and Food	121	2702
<i>Restaurant</i>	77	1971
Hotel and Tourism	48	1463
Care:		
Health and Social Care (Assisting nurse)	154	3078
Children and Leisure	149	3456
<i>Pedagogy</i>	127	1781
Handicraft:	220	3479
<i>Hair dressing</i>	77	1328
<i>Florist</i>	54	252
<i>Other</i>	63	1332

Source: Skolverket, 2013: 35-38

Figure 1. Number of students (five cohorts) in apprenticeship (autumn)*



Source: Skolverket, 2013: 24.

*students who receive state funding.

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