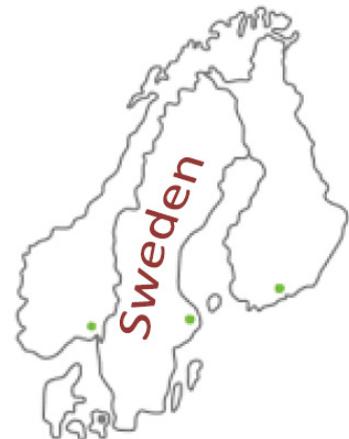




Nord-VET – The future of VET in the Nordic Countries

## The Swedish model of vocational education and training – establishment, recent changes and future challenges

Jonas Olofsson, Malmö University  
Daniel Persson Thunqvist, Linköping University



Research report published 2014 by  
Nord-VET – The future of Vocational Education in the Nordic countries



A research project supported by the NordForsk programme “*Education for Tomorrow*”

Department of Psychology & Educational Studies  
Roskilde University, Postbox 260, DK-4000 Roskilde, Denmark

Homepage: <http://nord-vet.dk/>

© Copyright: the author and Nord-VET

ISBN: 978-87-7349-877-4

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](http://www.nord-vet.dk)

# Content

<b>1. Growth of the Swedish Model of Vocational Education and Training</b> .....	5
1.1 An unregulated model of vocational education: vocational youth schools and workshop schools .....	5
1.2 Workshop schools and apprenticeship through collective agreement .....	7
1.3 The concerned organizations' approach provokes criticism: the comprehensive primary school and the establishment of a school-based model of education .....	10
1.4 The Swedish model of vocational education is complete: the integrated upper secondary school .....	13
<b>2. Experiences of the university-oriented upper secondary school: building bridges to both working life and higher education</b> .....	18
2.1 Transitions between school and the labour market .....	18
2.2 Transitions from upper secondary school to higher education .....	19
2.3 Vocational education and young people's occupational socialization .....	20
<b>3. A long-term view of the Swedish model of vocational education and training</b> .....	22
<b>4. References</b> .....	23



# 1. Growth of the Swedish Model of Vocational Education and Training

Is there any such thing as a Swedish model of vocational education? The answer is ‘yes’ there probably is. Development of the Swedish model of vocational education during the past one hundred years has entailed a less prominent role for apprenticeship as compared to school-based education. In Sweden, the involvement and operative responsibility of trade and industry in relation to education came to be less evident than in countries with strong apprenticeship systems.<sup>1</sup>

As in other countries, the origins of vocational training in Sweden can be found within the traditional handcrafts. Up to the mid-19th century, there were laws regulating the training of apprentices and journeymen as well as stipulating the status of being a master.<sup>2</sup> Around the mid-19th century, however, freedom of trade reforms and a decline in traditional handcrafts resulted in a loss of momentum for that form of education. When vocational education came back into focus at the end of the 19th and beginning of the 20th century, the decision to establish special vocational schools was motivated by the needs of industry.<sup>3</sup> The increasing interest in elementary technical training resulted in, among other things, the foundation of Sunday and evening schools. To the extent that there was a political breakthrough for publicly run vocational education, it occurred as a consequence of the 1918 parliamentary resolution on vocational youth schools.

## 1.1 An unregulated model of vocational education: vocational youth schools and workshop schools

The first modern laws on vocational education and training were passed in 1918 and 1921.<sup>4</sup> On those occasions, the government appropriated state subsidies for municipalities that established so-called vocational youth schools. These were apprenticeship and vocational schools focusing on industry, handcrafts, commerce and domestic work as well as workshop schools concentrated more specifically on handcraft and industry. The apprenticeship schools were meant to offer elementary theoretical training related to various occupations, whereas the vocational schools were to provide a more advanced supplementary education. The prerequisite for admittance was, in both cases, that the student be employed. The training was to take place during the students’ spare-time, on evenings and Sundays, and was considered complementary to the actual workplace-based training.

The workshop schools, which were introduced a couple of years after the apprentice and vocational schools, added something very important. First, employment was not a prerequisite for admission to the programmes – being 13 years of age and having completed elementary school sufficed. Second, the workshop schools were to offer a full-time education. These prerequisites were of great principal importance. They resulted in a form of vocational training that was com-

---

1 Nilsson, 2013.

2 Edgren, 1987.

3 Nilsson, 1981; Olofsson, 2005.

4 The Swedish Code of Statutes 1918:771 and 1002; 1921:705-707; and Government Bill 192:1.

pletely separate from gainful employment and apprenticeship and that was given in a separate environment not connected to a workplace. Vocational education was, thus, transformed from a spare-time into a full-time occupation.

It is of some interest to note the justification for the workshop school reform. Behind the proposition, which had been drafted by the Swedish National Board of Education, loomed a distrust of the efficiency and developmental potential of apprenticeship. It was emphasized that apprentices were often taken advantage of as cheap labour, and that qualified supervision was often lacking.<sup>5</sup> It was also stressed that the existence of public or municipal responsibility for the schools could be interpreted as a guarantee for a qualitatively satisfactory education. It was pointed out, among other things, that training within individual firms could “invite greater utilization of apprentices’ labour than could be considered compatible with the educational mission” (our translation).

Afterwards, we can infer that the indirect criticism of the apprenticeship and vocational school reforms reflected in the workshop school decision can likely be explained by the deteriorated situation on the labour market. The end of the First World War was followed by a severe crisis involving a tremendous increase in youth unemployment. Vocational education appeared to be an important means of counteracting unemployment. At the same time, the crisis revealed the fundamental weakness of a system of unregulated apprenticeship, namely that the number of training places typically decreases in connection with trade recessions.

How, then, did the above-mentioned reforms affect the possible future development of vocational training in general and apprenticeship in particular? It should be pointed out at once that the numbers of students in these types of schools were very small. Thus, their practical and economic importance should not be exaggerated. Nonetheless, the reforms were important in principle. Intense political discussions about vocational education followed during the 1920s and 1930s, i.e., two decades struck by massive unemployment. The employer and labour organizations also became more and more engaged in these discussions. In particular, the following four elements of the legislation on vocational youth schools and workshops schools passed in 1918 and 1921 turned out to be of long-term importance:

- The question of compulsory attendance at schools for apprentices and unemployed youth was avoided. On the other hand, compulsory school attendance came to be an important instrument for developing apprenticeship training in a number of countries where such training has a strong position today.
- With few exceptions, only school-based vocational education - particularly under public, but also under private management - could be offered government subsidies. The exceptions concerned very limited grants to master craftsmen who accepted apprentices. Such grants were introduced in 1917 and still remained into the 1980s. Approximately one hundred apprentices fell within this category annually.
- Nothing was said about the possibility to induce businesses to assume collective responsibility for vocational training through special education fees. In other countries, the redistribution of costs for education between large and small firms became a decisive part of the regulation and financing of apprenticeship.

---

5 Government Bill 1921:1.

- The question of apprentices' educational and contractual terms was not mentioned but was taken to be the firms' responsibility. The entire reform package was based on an unregulated model of vocational training.

## 1.2 Workshop schools and apprenticeship through collective agreement

For a long time, vocational education was limited in scope. The difficult economic situation during all of the interwar period and the Second World War caused businesses' interest in recruiting apprentices to be very weak. In addition, the employer and labour organizations had a difficult time agreeing on the terms of apprenticeship training. This was a matter of apprentices' wages and work conditions as well as of guaranteeing the quality of their education. In several public enquiries, such as the Enquiry on Workshop Schools in 1938, it was emphasized that the number of apprentices fell very short of the actual needs.<sup>6</sup> It was estimated that approximately 5 per cent of industry workers had experience of any type of organized vocational training.

However, the high rate of unemployment - not least the worries about youth unemployment - in combination with a lack of qualified manpower in some areas resulted in increased public interest in vocational education.<sup>7</sup> As part of the economic policy, parliamentary decisions were taken on vocational courses and appropriations to vocational schools. Demands were made for legal regulation of apprenticeship, i.e., for businesses to be required by law to employ apprentices, but these proposals were rejected. Instead, in connection with the Saltsjöbaden negotiations in the 1930s, the then principal organizations on the labour market – the Swedish Employers' Confederation (SAF) and the Swedish Trade Union Confederation (LO) – agreed that vocational training should be regulated by voluntary collective agreements within each trade association.<sup>8</sup>

### Public enquiry on the need for a new vocational education programme

The Enquiry on Workshop Schools from 1938 carried out a survey of the educational activities of individual companies. The results of the enquiry indicated that the standard of vocational training was acceptable in only a few major companies. In most cases, the training was quite unsystematic and narrow in content. Theoretical elements were included only in exceptional cases. In addition, the enquiry report stressed that an increasingly forced working pace in combination with a system of payment by results made it more and more difficult to find space and supervisors for apprentices in companies. For this reason, it was recommended that vocational education be organized in such a way that less strain would be placed on businesses. Workshop schools should be established in different parts of the country. The intention was not to completely relieve trade and industry of responsibility for vocational training; rather, it was to achieve a more efficient

---

6 Swedish Government Official Reports (SOU), 1938:26.

7 Swedish Government Official Reports (SOU), 1934:11.

8 The key idea of the principal agreement (the "Saltsjöbaden Agreement") arrived at between the Swedish Trade Union Confederation and the Swedish Employers' Confederation (LO and SAF, respectively) was that labour market conditions should be regulated by the concerned employer and labour organizations without governmental interference; this should also apply to vocational education.

allocation of responsibility between stakeholders in working life, on the one hand, and the state, the counties and the municipalities, on the other.

According to the report, greater importance should be attached to the employer and labour organizations' interest in school-based vocational education and training. First, responsibility for public vocational education should be separated from the National Board of Education and transferred to a new authority, the Royal Board of Vocational Education (KÖY), through which the labour market organizations would have direct access to executive functions. Second, the concerned actors in the different trades should organize special apprentice boards. Such boards (later referred to as trade boards) were established after a few years, but then based on agreement rather than governmental pressure. The intention was that these boards would enforce the collective agreements' provisions on apprenticeship within each individual trade. In 1944, the Royal Board of Vocational Education (i.e., KÖY) was established in order to increase and co-ordinate public commitment to vocational education, while giving the employer and labour organizations clearer insight into the workings of the government's educational authority.<sup>9</sup> However, there was no talk of the authority intervening to encourage apprenticeship education and training. The regulation on which the Royal Board of Vocational Education was established stipulated that it should "supply information and advice, suggestions for organizational schemes, courses of study, etc."<sup>10</sup> The explanation for this cautious attitude on the part of the government was that apprenticeship was primarily seen as a concern for individual businesses and employer and labour organizations; it did not constitute part of the regular educational system.

### Initiatives of the employer and labour organizations after the Saltsjöbaden Agreement

The criticism of the existing vocational education system voiced in the Enquiry on Workshop Schools was repeated in a report presented in 1944, via the labour market organizations' committee on vocational education, by the Swedish Trade Union Confederation and the Swedish Employers' Confederation: *Report including Proposed Measures for the Promotion of Apprenticeship*. The Committee on Vocational Education had been appointed for the distinct purpose of resolving disagreements between the concerned organizations regarding their views on vocational education and, in addition, making a clear delineation between politics and trade and industry as regards responsibility for such education. The background was, among other things, the demand for apprenticeship legislation, a question that had been brought forward in public enquiries and via claims made by handcraft organizations in the late 1930s. In addition, the trade-union side was concerned that the apprentices might be exploited as cheap labour without being offered qualified training. The employers, on their part, took the view that clearer regulation was needed to abate individual businesses' uncertainty concerning investments in workplace training.

By and large, the report was a self-critical account of the educational efforts made by trade and industry. Quantitatively, the training was considered entirely inadequate. In addition, apprenticeship was carried out more or less aimlessly and depended on the goodwill of foremen and experi-

---

9 These stakeholders turned out to have a dominating position on the KÖY board.

10 The Swedish Code of Statutes (SFS) 1943:963.

enced workers.<sup>11</sup> Moreover, the Committee on Vocational Education admitted that the apprentices were often exploited as cheap labour. Against this background, the committee was not particularly surprised at the fact that dropping out of the training programmes was common. A vicious circle had been created. The dropout rate reduced businesses' willingness to employ apprentices and to allocate resources to improving the training. Moreover, individual employers' fear that their investments in apprenticeship would finally favour competing firms was a significant obstacle to the possible expansion of apprentice training programmes.<sup>12</sup> Thus, to encourage firms to invest more in apprenticeship, businesses' and apprentices' mutual commitments had to be clarified and regulated. In addition, co-operation between firms should increase.

Even if the report of the Committee on Vocational Education paid a great deal of attention to the shortcomings of apprenticeship, it should be emphasized that the school-based education organized by the municipalities was subjected to even more severe criticism. Compared to the Enquiry on Workshop Schools, there was the considerable difference that criticism of the vocational schools had principled and political overtones. School-based education should be regarded as complementary to the "actual" vocational training taking place in the companies, and the number of students in vocational and workshop schools should only be allowed to increase during economic downturns when the number of apprenticeship places in the firms decreased. In general, workplace-based vocational training was to be preferred over school-based education, partly because it could more easily be adapted to current needs, and partly because it put less strain on economic resources.

To handle the problems of education, the Committee on Vocational Education took the view that both employers and trade unions must assume greater responsibility for managing, financing and determining the content of the training programmes. All proposals that apprenticeship should be regulated by law were rejected. Instead, apprenticeship and apprentices' legal labour status should be based on voluntary settlements between employer and labour organizations in the form of collective agreements. To render the efforts of these stakeholders more efficient, a new labour market agency, the Swedish Trade Council, should be established. The purpose of the new council would be to co-ordinate the work of the employer and labour organizations, both in relation to the governmental educational authorities and *vis-à-vis* the apprentice boards of the various trades. The primary objective of the apprentice boards was, exactly as proposed by the Enquiry on Workshop Schools, to develop the content and forms of apprenticeship in the various trades.

The ideas behind the vocational education reform of 1918 were revived such that vocational education and training should be organized as a firm-based apprenticeship supplemented with theoretical instruction in the evenings and at weekends. The Committee on Vocational Education rather regretted that the organization of training had shown a tendency to develop in quite the opposite direction. Decisions to invest more in schools were regarded with distrust. Vocational training that was school-based and completely separate from working life would lead in the wrong direction, away from the real production setting, the "workshop air" and the technical innovation

---

11 The Committee on Vocational Education, 1944, p. 41.

12 "The apprentice often discontinues his employment to be employed as a 'fully trained' worker at another company within the trade." *Report including Proposed Measures for the Promotion of Apprenticeship*, p. 55.

work constantly going on in the companies.<sup>13</sup> A more efficient and comprehensive apprenticeship would, thus, provide the basis for future vocational training, whereas school-based education would be complementary. The main task of the employer and labour organizations was to create good conditions for apprenticeship. This would be done through agreements in each trade between the employer and labour organizations.

### 1.3 The concerned organizations' approach provokes criticism: the comprehensive primary school and the establishment of a school-based model of education

The view of the Committee on Vocational Education and the Swedish Trade Council, that businesses should assume responsibility for the essential elements of the vocational education, caused critical reactions. The point of the criticism of apprenticeship training was, first, that it was solely practically oriented, and that it did not offer either the vocational-theoretical knowledge or the broad overview of working life that were regarded as crucial aspects of professional competence. Second, the training often concentrated on the needs of the individual company rather than those of the profession. Third, the training was vulnerable to the extent that training places were rapidly withdrawn during economic downturns.

Criticism of the opinions held by the Swedish Employers' Confederation and the Swedish Trade Union Confederation emerged in various contexts, e.g., discussions within the *1946 National School Commission*. The Commission was responsible for proposing a 9-year compulsory primary school, a proposal that resulted in a parliamentary decision in principle to establish a so-called comprehensive primary school in 1950. Extensive experimental work was initiated, but the final decision on the compulsory primary school was not taken until 1962.

Little by little, the employer and labour organizations' views on the relation between company-based and school-based education also began to change. This did not come about immediately, however, but rather gradually; in addition, there remained clear differences of opinion within and between these stakeholders. This change of opinions was also related to the comprehensive primary school and the opportunities for vocational training that were proposed within the framework of prolonged compulsory school attendance. The companies' - especially the smaller industrial companies' - difficulties in investing in a broader form of education constituted a barrier to apprenticeship training that was difficult to surmount. This was very well known within the labour market trade councils. The idea was, of course, that the Swedish Trade Council would improve educational opportunities by offering pedagogical support and by encouraging companies to collaborate more in order to, among other things, redistribute the costs of education within and across trades. The labour market trade councils would form part of the support structure for apprenticeship training in the various trades. As indicated, however, this did not succeed.

There was a trend in which the employer and labour organizations' and companies' direct influence over vocational training diminished. More and more, their influence came to be mediated through corporative bodies for decision-making and consultation, while the straightforward ad-

---

13 The Committee on Vocational Education, 1944, p. 56.

ministration and educational organization were taken over by the government and municipalities. In what follows, we will look at a number of stages in the reform work underlying the vocational education model that emerged during the decades following the Second World War and that was completed by establishment of the programme-based upper secondary school in 1971. The model is characterized by instruction in school-based forms, gradually broadened educational content and relatively minor elements of apprenticeship and company-based training. It was a matter of a preparatory rather than qualified education.

### Expansion of the school-based public vocational education system

The work of the 1946 National School Commission resulted in the *Report of the 1946 National School Commission, including guidelines for development of the Swedish school system*.<sup>14</sup> The report was not only important to the work being done to reform compulsory school education. It was also of fundamental importance to post-compulsory education, particularly vocational training.

According to the main proposal of the National School Commission, the first six years of elementary school should be common to all students. Not until the senior level should some differentiation be allowed. From the ninth class, the education should be divided into different study programmes. According to the proposal, there should be two theoretically oriented study programmes and one vocational programme. The two theoretical study programmes should prepare for studies at the upper secondary level as well as other types of schooling at the post-compulsory level. On the other hand, the vocational study programme, referred to as 9y, was meant to prepare for entrance into working life or advanced vocational training.

The National School Commission expected that the 9th-year vocational study programme would comprise a majority of students attending the comprehensive primary school, say between 60 and 70 per cent of an age cohort. The School Commission noted the limited extent of school-based vocational education, such as that offered by vocational and workshop schools or conducted in the form of apprenticeship training in trade and industry.<sup>15</sup> Only 10 per cent of an age cohort received any organized, shorter or longer, vocational training. Through the proposal to establish 9y, the proportion of trained workers would increase dramatically.

However, precisely how vocational training during the ninth school year would be organized was left rather unclear in the School Commission's main report. It would function as a self-contained programme and as an introductory year prior to vocational school or apprenticeship. It was thought that the vocational programme could be specialized in a particular trade, whereas the School Commission, at the same time, repeatedly emphasized the importance of its more general nature.

The ninth school year was meant to offer students a certain insight into the conditions of working life. This was a matter of practical work experience in combination with some general knowledge subjects as well as elementary vocational theory.<sup>16</sup> Vocational education proper was not

---

14 Swedish Government Official Reports, SOU 1948:27.

15 Swedish Government Official Reports, SOU 1948:27, p. 221.

16 It was said, among other things, that productive "work should stand out as the most important subject during the

discussed in any great detail. The School Commission also did not submit any proposals concerning vocational or workshop schools. On the contrary, it was thought that the existing educational organization could remain unaltered except that, in future, the programmes should be based on the 9-year comprehensive primary school rather than on the 7-year elementary school. The courses could thus begin at a more advanced level. In addition, more general theoretical subjects could be left out in favour of earlier specialization. Moreover, the School Commission did not mention anything in particular about the potentials of apprenticeship. Instead, it referred to the position taken by the Swedish Trade Union Confederation and the Swedish Employers' Confederation on apprenticeship regulation by collective agreement. The School Commission apparently thought that the responsibility for the final, qualified education should lie outside the school system. The school system could offer general education and elementary vocational training only.

### A more advanced vocational education programme

The comprehensive primary school reform had been dragging on, as noted above. Nevertheless, it had one important outcome, namely that vocational education was now put on a par with upper secondary school education. Vocational school programmes were to be run in parallel with upper secondary school education rather than, as before, correspond to the secondary school level. This placed greater demands on the standard of education, both qualitatively and quantitatively. According to most concerned parties, if school-based vocational training was to admit students who had opted for vocational courses in the ninth school year, the entire organization would have to be extended.

In practice, the experimental work with 9y did not turn out to be particularly successful, at least not from the point of view of recruitment. Quite contrary to the legislators' intentions, over 80 per cent of students opted for general and academic courses in the ninth school year. This, in turn, added to a renewed criticism of the whole 9y project. Vocational elements within the framework of the compulsory primary school were gradually phased out. When the parliament adopted a new curriculum for primary schools in 1968 - Lgr 69 - the 9th-year study programme division was finally and completely dismantled.

Discontentment with the continued weak and uncertain status of vocational training led to the appointment of a new enquiry, *Experts on vocational education*, in the early 1950s.<sup>17</sup> The committee's task was to review the conditions for vocational education and adapt its structure to the reforms that had been implemented or planned for compulsory education. The Committee proposed increased state subsidies and an expansion of vocational and workshop schools. Business schools and apprenticeship training would also receive more generous funding, although, according to experts, their educational elements were limited in scope. Apprenticeship was perceived primarily as a concern for the traditional handcrafts. Experts on vocational training contributed to increased centralization and government control of the Swedish model of vocational education.

---

final 9y year of the comprehensive primary school, because during this year the young students should be initiated into industrial life." The term "productive work" specifically referred to practical work experience (The Swedish Government Official Reports, SOU, 1948:27, p. 226).

17 Swedish Government Official Reports, SOU 1954:11.

After the committee's proposal for increased state funding had been carried through, there was a sharp growth in vocational schools. The number of students who graduated from vocational training almost tripled in the 1950s, amounting to over 40,000 in 1960. During the following 10-year period, there was an additional doubling. The strong expansion in number of students reflected the increased state subsidies and the steady spread of vocational schools throughout the country.

## 1.4 The Swedish model of vocational education is complete: the integrated upper secondary school

In the early 1960s, several initiatives were taken for further co-ordination of upper secondary school level education. In 1960, a special upper secondary school investigation committee was appointed.<sup>18</sup> Its proposal was presented in a report in 1963, resulting in 1964 in a parliamentary decision in principle to establish a new upper secondary school that would comprise the former general upper secondary school as well as the commercial and technical upper secondary schools. Moreover, the organization of the new upper secondary school was to be co-ordinated with the study programmes offered at the 2-year continuation and vocational schools. To further emphasize that the different programmes, including vocational education, were parts of one and the same system, the Royal High Council of Vocational Education was dissolved. Responsibility for elementary vocational training would henceforth lie with the National Board of Education.

The rapid changes in structure and number of students, as well as the efforts to increase integration resulting from establishment of the compulsory primary school, formed the basis of the appointment of the 1963 Commission on Vocational Education. The Committee report came to be of crucial importance to the continued fate of the upper secondary school, particularly that of vocational education.

### The Commission on Vocational Education and the new vocational study programmes

The primary task of the Commission on Vocational Education was to define the significance and role of vocational training within the framework of an integrated educational system at the post-compulsory level. The directives to the Commission emphasized that it should examine how vocational education had adapted to the compulsory primary school reform of 1962 as well as to the plans for an undifferentiated upper secondary school. In addition, the Commission was instructed to propose forms for connecting vocational training to working life. The student influx into vocational education programmes was expected to increase from less than 15 per cent of an age cohort in the early 1960s to 25 or even 30 per cent in 1970. This considerable increase in number of students, in combination with the build-up of the new upper secondary school, required organizational overview and adjustments to the study programmes. The main principle was that the various study programmes should be as co-ordinated as possible. Also, with regard to

---

18 Swedish Government Official Reports, SOU 1963:42.

instructional content, the vocational programmes should be broadened to allow for some general theoretical instruction.

The Commission on Vocational Education proposed extensive organizational and contentual changes for the entire vocational education system. In brief, the aim of the proposals was that vocational training would be transformed into fewer and broader 2-year study programmes. To be sure, most vocational and workshop schools already offered programmes of precisely that duration, i.e., two years. The major changes instead concerned regulation of the education as well as its content and timetabling. The vocational study programmes should be co-ordinated with the upper secondary school and 2-year continuation school programmes to create a new, integrated upper secondary school.

Vocational education was to be streamlined. Management and control of the programmes' educational content should be stricter. Despite ambitions, resulting from the reforms of the 1950s, to create more co-ordination and uniformity, in the early 1960s vocational schools were still highly dependent on the local initiatives of individual schools or local businesses.<sup>19</sup> Schools were established based on local initiatives, and even within a specific vocational programme the content of the schools' syllabuses varied considerably. Beginning in 1964, in connection with establishment of the new National Board of Education, a gradual transition to centrally determined syllabuses took place.

Up until this point, vocational schools had consisted of an abundance of different and occupation-specific training programmes. Thus, although the need for broader vocational training had been emphasized much earlier, very little had happened. Vocational school programmes were often highly specialized and focused on well-defined occupational categories. The new upper secondary vocational education programme was meant to be more broadly oriented towards occupational fields and trades. A vocational education that provided broader qualifications than courses oriented towards the specific, short-lived skills of the day was thought to be of greater use to both individual students and businesses. In this way, the training could be more easily adapted to changes in working life while, at the same time, a broader vocational education programme would offer individual workers skills enabling more adaptability and flexibility. A broader education in earlier in life could well be supplemented with more specialized labour market training courses later on.

In accordance with the above, the decision to implement the new programme-based upper secondary school in 1971 also led to a considerable broadening of the content of vocational programmes. It was emphasized that the new vocational study programmes should provide a basic education. The final qualified education, which was described as the responsibility of trade and industry, should take place afterwards.

Establishment of the programme-based upper secondary school entailed a still stronger expansion of the number of students in vocational training. In the mid-1980s, over 75 per cent of new students opted for vocational programmes.<sup>20</sup> At the same time, however, the element of workplace-based training was very limited. An investigation carried out by *The task force for*

---

19 Gårdstedt 1967.

20 Swedish Government Official Reports, SOU 1986:2.

reviewing upper secondary vocational education (ÖGY) showed that, on average during school year 1983/84, only 6 per cent of the period of study was workplace-based.

After its establishment, the integrated upper secondary school has been significantly reformed twice. The two reforms pointed in different directions although they did not essentially change the Swedish model of vocational education.

### **A university-oriented upper secondary school and the Gyll reform**

In 1991, the Swedish Parliament decided to radically change the upper secondary school. The reform was anchored in liberal values: management by objectives rather than in details and an individualized school with a diversified content rather than a philosophy of uniformity. One purpose of this reform was to decentralize the responsibility, shifting it away from the government and the county boards of education to the local level.<sup>21</sup>

Decentralization was followed by the 1992 private school reform, which resulted in greater freedom of establishment of schools that did not fall under municipal authority. This private school reform involved a decision to redistribute resources. Thus, a system was introduced in which each individual student was awarded a school capitation allowance, that is, money that followed the student to his/her chosen school. The establishment of independent or private schools has expanded sharply. During the past ten years, for example, the number of such schools at the upper secondary school level has tripled. During school year 2012/13, 25 per cent of upper secondary school students attended a school with a private principal.<sup>22</sup>

The 1991 school reform comprised the introduction of 17 3-year national educational programmes, 14 of which were vocational in nature. The intention here was to broaden the general theoretical elements of the vocational programmes so as to offer all students the opportunity to continue to post-upper secondary school studies. The new educational programmes were meant to be more generally oriented and to allow more local adaptation as well as individual educational choice, compared to the situation in the former programme-based upper secondary school. Academic and vocational programmes were to pursue the same general theoretical subjects. Basic eligibility for higher education thus became the explicit objective of all educational programmes. It was clear almost immediately, however, that the university-oriented upper secondary school, particularly the vocational programmes, had major problems with student throughput. According to the latest statistics from the National Agency for Education (regarding 2012), 23 per cent of students did not meet the requirements for a final certificate after four years of study; and 36 per cent did not achieve basic eligibility for higher education after four years.<sup>23</sup>

It has been pointed out that workplace-based learning within the upper secondary vocational programmes falls short in a number of respects. The Swedish School Inspectorate, a national examining authority, has concluded that workplace-based learning does not fulfil the learning requirements. It is not in keeping with the syllabuses in force, and competent supervisors are often

---

21 Government Bill 1990/91:85.

22 The National Agency for Education, 2013.

23 The National Agency for Education, 2012, comparative figures.

lacking at the workplaces. In addition, schools find it difficult to offer students workplace-based learning to the extent prescribed by the regulations.<sup>24</sup>

The attention given to some effects of the educational reforms of the 1990s resulted in renewed reform efforts. In autumn 2011, a number of changes of the upper secondary school were introduced. These reforms have been collectively referred to as the Gy11 reform. The most significant change concerned the content of vocational training, where the goal was greater emphasis on the specifically vocational subjects.<sup>25</sup> Since autumn 2011, the new upper secondary school comprises 18 national programmes, 12 of which are vocational. All programmes lead to a diploma. Vocational programme students have the option to choose an apprenticeship track. Already in 2008, a pilot upper secondary apprenticeship project was introduced. From 2011, apprenticeship is a regular feature of vocational training. However, student numbers are low, and the apprentices are not employed. The condition for being classified as an apprentice is that at least half of the training period is workplace-based. Apart from the regular capitation allowance, the school and workplace receive a special allowance for each apprentice as compensation for arranging the apprenticeship.

The influence of trade and industry over upper secondary vocational programmes was meant to increase. Thus, the schools are now obliged to set up local programme councils for each programme. The councils are to include representatives of businesses and trade-union organizations. At the national level, there must also be vocational councils organized via the National Agency for Education. The idea is that representatives of trade and industry will gain increased influence over the programmes via the national councils.

One change entailed in Gy11 is that vocational training no longer automatically leads to basic eligibility for higher education. However, from autumn 2013, it is possible to acquire basic eligibility for higher education within the framework of all upper secondary vocational programmes without having to choose an extended curriculum.<sup>26</sup> Many critics think that this has a negative effect on students' interest in vocational programmes. Recently, in fact, the number and proportion of students applying to vocational education programmes have decreased considerably. The proportion of students in vocational programmes of the total number of upper secondary school students has dropped to approximately 30 per cent. At the same time, companies are experiencing a great need to recruit people with professional qualifications acquired in the upper secondary school. Youth unemployment is high, but businesses still have difficulties finding applicants with the right qualifications. This is the background of the agreements on so-called occupational introduction in certain trades (industry, commerce, nursing and healthcare) where young people without relevant occupational experience are offered opportunities to take on time-limited employments that include organized instruction. As we can see, there is a problem of mismatching

---

24 For students in school-based upper secondary vocational programmes, at least 15 per cent of instruction time should be workplace-based (Swedish School Inspectorate, 2011).

25 Swedish Government Official Reports, SOU 2008:27; Government Bill 2008:199.

26 The upper secondary school national programmes correspond to 2,500 course points. On average, a single course comprises 100 points, corresponding to four weeks of full-time studies. In a number of vocational programmes, the 2011 reform made it necessary to acquire more than 2,500 points to achieve basic eligibility for higher education. This is, thus, no longer the case.

on the Swedish labour market, that is, too many young people lack the qualifications that are in demand in working life.

The mismatching problem is also related to how educational programmes are dimensioned. There is no connection between admission of students to different programmes and the demand for labour with various educational profiles. The students' choices are meant to govern the number of places in each educational programme. Until the university-oriented upper secondary school was implemented in the early 1990s, resources had been allocated to the different vocational education programmes based on an assessment of local and regional labour market needs. The principle of free school choice, i.e., the establishment of an educational market, reinforces these problems to some extent: The schools offer the education programmes demanded by students, not necessarily the training that leads to jobs.

## 2. Experiences of the university-oriented upper secondary school: building bridges to both working life and higher education

As the above historical and institutional analysis shows, the Swedish educational model underwent considerable changes from the 1990s onwards. As described, the upper secondary school was decentralized and opened up to local initiatives to a greater extent. A further change was that upper secondary vocational education was extended to include a third, mainly theoretical year, which made the upper secondary vocational programme students, too, eligible for higher education. In this way, the gap between theoretical and vocational study programmes was reduced. At the same time, increasing the elements of general education in the vocational programmes weakened the direct link between training and the labour market. Starting from the existing empirical research, we will now briefly discuss some experiences of the university-oriented upper secondary school with respect to the transition between vocational training, working life and higher education.

### 2.1 Transitions between school and the labour market

Many reports have presented a rather dim view of the employment effects of the upper secondary vocational programmes from the 1990s onwards. For example, comparative statistics show that vocational students in Sweden face greater difficulties in getting jobs immediately after completing their education than do their Danish and Norwegian peers. In a Nordic perspective, these results can be interpreted in light of the relatively high youth unemployment rate in combination with the fact that the connection between the upper secondary school and the labour market is weaker in Sweden than in, for example, Denmark (Lindahl, 2011).

However, in-depth longitudinal studies of various types of vocational programmes provide a more complex and diverse picture (see, e.g., Olofsson, 2005; Statistics Sweden, 2012). Vocational programs designed for well-defined occupations and with established certification systems tend to promote smoother transitions between school and the labour market. Students in many technically oriented vocational programmes, such as energy, electrical engineering, and building and construction, establish themselves on the labour market more quickly than do students in the, e.g., food, arts and media programmes, which have weaker links to specific occupations.

In addition, there are important differences in the historical and organizational prerequisites for various upper secondary vocational programmes, i.e., differences that have consequences for young people's ability to establish themselves on the labour market. For example, research on the building and construction as well as electrical engineering programmes can be mentioned in this connection. Both programmes are characterized by a long-standing, close co-operation with their respective occupational trades and by apprenticeships regulated by collective agreements (Berglund, 2009). These circumstances tend to create relatively good opportunities for students to establish themselves in the respective occupational groups. In addition, a complete upper secondary school education with a passing grade in all core subjects is required in the electricity

trade as the basis for continued apprenticeship employment. This has been brought forward as a partial explanation for the fact that, at least periodically, students in the electrical engineering programme seek admittance to higher education to a greater extent than do students in most of the other male-dominated upper secondary vocational programmes.

It should be noted, however, that it is difficult to generalize on the basis of specialized research on particular programmes. Experiences from research on advanced vocational education in Sweden show that a combination of breadth throughout upper secondary education and depth throughout specialized, workplace-based vocational training can promote, among other things, student throughput (Lindell & Johansson, 2002). In this connection, one factor for success can be illustrated by cases in which there is good co-operation as well as integration between formal education and more informal, labour-market-oriented learning. Applied to the upper secondary vocational programmes, this is an argument for increased co-operation between concerned parties in the upper secondary schools and actors on the labour market.

## 2.2 Transitions from upper secondary school to higher education

When it comes to transitions between upper secondary and higher education, the number of students continuing to higher education has constantly increased since the 1990s. In general, these transitions can be described as frequent but slow: in 2010, between 45 and 50 per cent of an age cohort began some form of higher education before the age of 25. However, less than half as many began higher education immediately or within one year after graduation (Statistics Sweden, 2013). Among vocational students, 6-7 out of 10 (67 per cent in 2010) finished their upper secondary education and were qualified for higher education.

At the same time, these transitions have continued to follow a familiar historical pattern in Sweden: most students in higher education come from theory-oriented programmes, whereas students in vocational programmes more often aim at employment after upper secondary school (Högberg, 2009; Statistics Sweden, 2013). Transitions to higher education have been particularly low (3-7 per cent) in male-dominated upper secondary vocational programmes aimed at relatively specific occupations, such as building and construction, but higher in female-dominated programmes, particularly those oriented towards broad occupational areas such as the arts and media programmes.

Social science research pointing out the importance of students' educational background, as well as of social factors such as class, gender and ethnicity, has deepened our understanding of vocational students' occupational and educational choices. The academic programmes attract a larger proportion of students with well-educated parents, whereas students in the vocational programmes usually come from families that do not have a background in higher education (Hill, 1998; Broady and Börjesson, 2006). In addition, vocational training in Sweden and the other Nordic countries is more gender segregated than are other education programmes (Paechter, 2003; Salminen-Karlsson, 2006). This reflects the gender division on the labour market.

## 2.3 Vocational education and young people's occupational socialization

Finally, we would like to summarize findings from praxis-oriented Swedish research on vocational training in the university-oriented upper secondary school and on young people's occupational socialization. This body of research has focused on the basic challenges and dilemmas that are always at play within the framework of school-based education. This concerns, for example, the notorious dilemma of adapting general and specialized education as well as of balancing school-based and workplace-based vocational training (Berner, 1989; Carlsson, 2002; Lindberg, 2002; Jørgensen, 2004; Lundahl et al., 2010).

School-based vocational training has played a very prominent role in young people's occupational socialization within the university-oriented upper secondary school, and it is well documented. One of the merits of school-based vocational training is that the student's development is of primary interest rather than being secondary to more company-specific interests. Thus, in upper secondary schools with good resources, an elaborated pedagogy and teachers with occupational experience, students can be trained to develop creative problem-solving skills and independence. Students can also be allowed to learn from the mistakes they make in the context of more or less realistic work processes (Berner, 2010). In addition, a programme guided by educational policy considerations enables teachers to more easily handle weak students and develop inclusive working methods. On the other hand, it is difficult for both vocational teachers and students to develop and maintain an occupational identity in a school setting.

The comparative benefits of work-based occupational socialization include socialization into the adult world, authenticity of instruction as well as the gradual conveyance of working life norms and values to the student. These benefits are all connected to the student's motivation to study. For example, a number of questionnaire studies have shown that most upper secondary vocational students find the workplace-based part of their training very constructive (Arnell Gustavsson, 2007).

Sociological and praxis-oriented studies have shown that socialization to specific occupations within the framework of the university-oriented upper secondary school takes place very differently in schools and workplaces (Berner, 2010; Persson Thunqvist and Axelsson, 2012a). However, the studies also elucidate the close connecting links between the school and working life in different forms of vocational training. Everyday practice in vocational training is marked by teachers or supervisors combining working methods and pedagogical traditions, with various origins in the schools and working life, and sometimes doing this in a way that transcends the boundaries and dichotomies between school-based and workplace-based vocational training.

One particular problem observed in the university-oriented upper secondary school is that much of the responsibility for making vocational training happen in reality is placed on individual teachers. In the end, it is these teachers who, often working on their own, must deal with and make sense of the various goals stipulated by educational policy. In an interplay with vocational students, these teachers shoulder the responsibility of being the bearers of professional occupational experience and intermediaries between the "school world" and the "occupational world,"

i.e., the special knowledge demanded by the school and the occupation in question (Berner, 2010; Lagström, 2012; Persson Thunqvist and Axelsson, 2012).

Experiences gleaned from these and other studies point to the importance of further strengthening vocational teachers' professional roles and working conditions. However, productive integration of formal education and work-oriented vocational learning also requires that the perspectives be broadened to focus on how the collaboration between several different central actors in formal education – including specialist teachers, vocational teachers, head teachers, supervisors in workplace-based training – and various employer and labour actors and organizations can be developed.

### 3. A long-term view of the Swedish model of vocational education and training

Changes in the Swedish model of vocational education and training that have taken place during the 20th century can be seen as a movement from unregulated apprenticeship to regulated, school-based vocational education at the post-compulsory level. There have been ambitions to complement the initial, school-based vocational training with final, qualified workplace training that is regulated by collective agreements. These ambitions, however, have been only partially fulfilled. Establishment of the university-oriented upper secondary school in the 1990s can probably be seen as the final point in development of the Swedish model of vocational education in an increasingly “academic” direction.

Beginning in the 1990s, a series of educational reforms have been carried out that have in some ways loosened up the educational model that had been established from the 1940s onwards. This involves, for example, greater possibilities to establish private schools and students’ freedom to choose between schools. After a number of small-scale experiments with apprenticeship from the 1970s onwards, the latest upper secondary school reform (Gy11) marked a clear shift in views on the status of apprenticeship in the upper secondary school. Although the influx of students is not large, it is evident that the interest in developing workplace-based learning is greater than before. There is currently consensus on the notion that workplace-based learning is a necessary component of vocational education.

Moreover, there is an increasingly strong feeling that representatives of working life should be able to influence and guarantee the quality of vocational training to a greater extent. When the Swedish Trade Council was established in the mid-1940s, it was stressed that the ultimate aim of vocational education was to make individuals employable and productive. The value of vocational training was ultimately determined in the workplace and influenced how the labour force was divided into different skill levels in the collective agreements. Because the labour force’s training was jointly evaluated by the employer and labour organizations, it was thought that these stakeholders should have a decisive influence over the content and organization of vocational education. This was the primary argument for giving the Swedish Trade Union Confederation and the Swedish Employers’ Confederation, via the current Trade Council, exclusive influence over the vocational education that, beginning in the 1950s, was mainly publicly managed. This idea remained even after companies’ practical involvement in education and training had begun to appear to be of decreasing importance.

Today, the interest on the part of trade and industry in being involved in defining employability in relation to education and competence requirements has increased once again. The latest upper secondary school reform has improved opportunities to exert an influence, for example via the local and national programme councils. However, this is not only a matter of changes in upper secondary vocational education and training. It is also a matter of taking advantage of professional boards and other educational organizations to create opportunities for advanced vocational learning outside the upper secondary school and the regular educational system. Agreements on vocational introduction in certain trades constitute one tangible expression of the creation of opportunity.

## 4. References

- Arbetsmarknadsorganisationernas yrkesutbildningskommitté (1944), *Betänkande med förslag till lärlingsutbildningens främjande*. Stockholm: LO and SAF.
- Arnell Gustavsson, U. (2007). Från utbildning till arbete: Hagström, T. (red.) *Ungdomar i övergångsåldern – handlingsutrymme och rationalitet på väg in i arbetslivet*. Malmö: Studentlitteratur.
- Berglund, I. (2009). Byggarbetsplatsen som skola – eller skolan som byggarbetsplats? En studie av byggnadsarbetarens yrkesutbildning. Akademisk avhandling. Stockholm: Institutionen för didaktik och pedagogiskt arbete, Stockholms universitet.
- Berner, B. (1989). *Kunskapens vägar*. Lund: Studentlitteratur.
- Berner, B. (2010). Crossing boundaries and maintaining differences between school and industry: forms of boundary-work in Swedish vocational education. *Journal of Education and Work*, 23(1): 27-42.
- Broady, D. & Börjesson, M. (2006). En social karta över gymnasieskolan. I: R. Romhed (red.) *Ord & Bild. Tema – Skolan*, s. 90-99. Göteborg.
- Carlsson, C-G. (2002). Ungdomars möte med yrkesutbildning. En jämförelse mellan ungdomar i kommunal och företagsförlagd utbildning. Akademisk avhandling. Lärarhögskolan i Stockholm (Studies in educational sciences 49): Stockholm: HLS Förlag.
- Edgren, Lars (1987), *Lärling-gesäll-mästare. Hantverk och hantverkare i Malmö 1750-1847*. Lund: Dialogos.
- Gårdstedt, Birger, (1967). ”Yrkesutbildning – mer än någonsin”, i *Tidskrift för praktiska ungdomsskolor*, 1967.
- Helms Jørgensen, C.(2004). Connecting work and education: should learning be useful, correct or meaningful? *The Journal of Workplace Learning*, 16(8): 455-465.
- Hill, M. (1998). Kompetent för det nya arbetslivet. Tre gymnasieklasser reflekterar över och diskuterar yrkesförberedande studier. Akademisk avhandling. Göteborg: Acta Universitatis Gothoburgensis.
- Höglund, R. (2009). *Motstånd och konformitet. Om manliga yrkeselevers liv och identitetsskapande i relation till kärnämnen*. Akademisk avhandling. Linköping Studies in Behavioural Science No 146. Linköping: Linköpings universitet.
- Lagström, A. (2012). Lärlingslärare. En studie av hur vård- och yrkeslärares uppdrag formas i samband med införandet av gymnasial lärlingsutbildning. Akademisk avhandling. Institutionen för vårdvetenskap och hälsa, Sahlgrenska akademien, Göteborgs universitet.
- Lindberg, V. (2003). Learning practices in vocational education. *Scandinavian Journal of Educational Research*, vol 47, no 2.
- Lindahl, (2011). Improving the school to work transition for vocational students – what can we learn from research? Swedish Institute for Social Research. Stockholms universitet.
- Lindell, M. & Johansson, J. (2002). Den svenska yrkesutbildningen – ett spänningsfält mellan skola och näringsliv. I: K. Abrahamsson, L., Abrahamsson, T. Björkman., P-E. Ellström & J. Johansson. (red.). *Utbildning, kompetens och arbete*. Lund: Studentlitteratur.

- Lundahl, L. Erixon Arreman, I. & Lundström, U. (2010). Setting things right?: Swedish upper secondary school reform in a 40-year perspective. *European Journal of Education* (1): 49-62.
- Lindberg, V. (2003). Learning practices in vocational education. *Scandinavian Journal of Educational Research*, vol 47, no 2.
- Nilsson, Anders (2013), "Lärlingsutbildning – ett alternativ i yrkesutbildningen 1940-1970", i Håkansson, Peter & Anders Nilsson (red.), *Yrkesutbildningens formering i Sverige 1940-1970*, Lund: Nordic Academic Press. .
- Nilsson, Lennart (1981), *Yrkesutbildning i nutidshistoriskt perspektiv. Yrkesutbildningens utveckling från skråväsendets upphörande 1846 till 1980-talet samt tankar om framtida inriktning*, Göteborg: Göteborgs universitet.
- Olofsson, J. (2005). *Svensk yrkesutbildning. Vägval i internationell belysning*. Stockholm: SNS Förlag.
- Olofsson, Jonas (2010), *Krisen i Skolan. Utbildning i politiken och i praktiken*. Umeå: Boréa förlag.
- Pachter, C. (2003). Learning masculinities and femininities: power/knowledge and legitimate peripheral participation. *Women's Studies International Forum*, 26(6): 541-552.
- Persson Thunqvist, D. & Axelsson, B. (2012). Now It's Not School, It's for Real!: Negotiated Participation in Media Vocational Training. *Mind, Culture and Activity*, 19: 29-50.
- Prop. 1921:1 Statsverkspropositionen. Åttonde huvudtiteln: Yrkesundervisningen.
- Prop. 1990/91:85 Växa med kunskaper – om gymnasieskolan och vuxenutbildningen.
- Prop. 2008/09:199 Högre krav och kvalitet i den nya gymnasieskolan.
- Salminen-Karlsson, M. (2006). Situating gender in situated learning. *Scandinavian Journal of Management*, 22(1): 31-48.
- SFS 1918:771 Kungl. Maj:ts Nådiga Kungörelse angående statsunderstöd åt skolor för den lägre yrkesunder
- SFS 1918:1002 Kungl. Maj:ts Nådiga Stadga för den kommunala yrkesundervisningen.
- SFS 1921:705 Kungl. Maj:ts Nådiga Kungörelse angående statsunderstöd till kommunala och enskilda anstalter för yrkesutbildning.
- SFS 1921:706 Kungl. Maj:ts Nådiga Stadga för den kommunala yrkesundervisningen.
- SFS 1921:707 Kungl. Maj:ts Nådiga Kungörelse med bestämmelser angående statsunderstödda enskilda anstalter för yrkesutbildning.
- SFS 1943:963 Kungl. Maj:ts Instruktion för överstyrelsen för yrkesutbildning.
- Skolinspektionen (2011). *Arbetsplatsförlagd utbildning i praktiken – en kvalitetsgranskning av gymnasieskolans yrkesförberedande utbildningar. Kvalitetsgranskning Rapport 2001:2*.
- Skolverket (2012). *Jämförelsetal*. <http://www.jmftal.artisan.se/databas.aspx?presel#tab-1>.
- Skolverket (2013). *Skolor och elever i gymnasieskolan läsår 2012/13*. <http://www.skolverket.se/statistik-och-utvardering/statistik/gymnasieskola/skolor-och-elever>.
- SOU 1934:11 Utredning angående åtgärder för bekämpande av ungdomsarbetslösheten. Avgiven den 29 mars 1934 av 1934 års sakkunniga rörande ungdomsarbetslösheten.
- SOU 1938:26 Betänkande och förslag angående centrala verkstadsskolor m.m.
- SOU 1948:27 1946 års skolkommissions betänkande med förslag till riktlinjer för det svenska skolväsendets utveckling.

- SOU 1954:11 Yrkesutbildningen. Betänkande från 1952 års yrkesutbildningssakkunniga.
- SOU 1963:42 Ett nytt gymnasium. 1960 års gymnasieutredning IV.
- SOU 1966:3 Yrkesutbildningsberedningen.
- SOU 1986:2 En treårig yrkesutbildning. Del 1. Riktlinjer för fortsatt arbete. Betänkande från arbetsgruppen för översyn av den gymnasiala yrkesutbildningen.
- SOU 2008:27 Framtidsvägen – en reformerad gymnasieskola.
- Statistics Sweden. 2012. Temarapport 2012: 5. Etablering på arbetsmarknaden tre år efter gymnasiskolan. Örebro: Statistiska Centralbyrån.
- Statistics Sweden. 2013. Övergång från gymnasieskola till högskola, 2010/2011. Örebro: Statistiska Centralbyrån.