FLASH THEMATIC COUNTRY REVIEW ON APPRENTICESHIPS

SWEDEN
SWEDEN
Flash thematic country review on apprenticeships in SWEDEN
The European Centre for the Development of Vocational Training (Cedefop) is the European Union’s reference centre for vocational education and training. We provide information on and analyses of vocational education and training systems, policies, research and practice.
Cedefop was established in 1975 by Council Regulation (EEC) No 337/75.

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There is broad consensus in Europe that apprenticeships can be an effective way of helping young people make smoother transitions from school to employment and of addressing labour market imbalances. However, as recently highlighted by the adoption of the EC proposal for a European framework for quality and effective apprenticeships, several necessary conditions must converge to establish good quality apprenticeship schemes.

As part of Cedefop work to support policy-making and European cooperation on apprenticeships, this report contains the findings of the flash TCR conducted in Sweden. It concludes a season of bilateral work with about 10 countries (1). By making our findings available, we aim to support national stakeholders in their endeavour to strengthen their structured dialogue and joint work, to make apprenticeships a valuable option for learners.

Cedefop's apprenticeship reviews rely on a participatory, evolving and iterative approach. In cooperation with national stakeholders, we identified strengths and enabling factors, focused on the challenges, and developed action points for the attractiveness and quality of apprenticeships. The involvement of stakeholders and beneficiaries suggests that dialogue among the ministries and the social partners is growing and that the gap between education and labour market representatives is narrowing, with each reaching out for synergies and cooperation.

Feedback from our national partners suggests that the exercise has helped them clarify and shape their policies. Reviewing countries’ apprenticeships has proved mutually rewarding and Cedefop has gained better insight into the issues at stake in Member States while working with national authorities and social partners. This is why we believe that the in-depth information gathered so far will help not only the countries concerned but, through our role as intermediary, also other countries to reflect on their practices and implement reforms for better apprenticeship programmes.

(1) Cedefop’s TCR reports include three more reports in this series on TCRs carried out in Croatia and Cyprus and a flash TCR carried out in French Community of Belgium; and five reports in a previous series on TCRs carried out in Lithuania, Malta, Greece, Italy and Slovenia.
Cedefop's team has been following policy developments closely in all the TCR countries. It will continue to do so by organising policy learning activities, enabling Member States and European stakeholders to learn from each other, and sharing experiences with a view to establishing high-quality apprenticeships in their national contexts.

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Executive summary
Executive summary

Cedefop conducted the flash thematic country reviews (TCRs) in Sweden from June 2017 to April 2018, with the contribution of a national panel of experts independently appointed by Cedefop among Swedish authorities responsible for apprenticeships (\(^\text{\textsuperscript{2}}\)). The study focuses on the Västra Götaland region in western Sweden; it also considers the national context and provides evidence at both the regional and national levels (48 and 13 interviews respectively).

The Swedish VET system offers 12 national vocational programmes that aim at preparing students for the labour market and can be pursued through two different modes of delivery: the school-based scheme (skolförlagd utbildning) that includes compulsory in-company training, or apprenticeship education (lärlingsutbildning) (\(^\text{\textsuperscript{3}}\)). The school-based and the apprenticeship schemes lead to the same vocational diploma (yrkesexamen) and largely share the same curriculum, as well as admission and diploma requirements and goals. Both schemes require students to spend time in a workplace but in different proportions, at least in principle. In the school-based VET scheme, most learning is delivered at school, with a minimum of 15 weeks spent in a workplace (around 14% of the total VET programme duration) (\(^\text{\textsuperscript{4}}\)). In the apprenticeship scheme, at least 50% of the total time, calculated from the moment the student starts the apprenticeship training, should be spent in the workplace. Students have the possibility to switch from the school-based scheme to apprenticeship and back. Companies do not select apprentices and they receive grants, through the school, per student per term (see p. 37), and a subsidy if they have qualified workplace trainers.

\(^{\text{\textsuperscript{2}}}\) The Ministry of Education and the National Agency for Education (Skolverket).

\(^{\text{\textsuperscript{3}}}\) There is a distinction between the terms programme and scheme: programme refers to a coherent learning offer including a curriculum, defined learning outcomes and assessment procedures within a specific subject area; scheme refers to the mode of delivery through which the VET studies are pursued.

\(^{\text{\textsuperscript{4}}}\) There is no official documentation determining the percentage of workplace-based learning for school-based VET. Hours for workplace-based learning are also calculated differently, with a week of workplace-based learning (usually 40 hours) deemed equivalent to 23 hours of school-based learning. The estimate of 14% is taken from the National Agency for Education guidelines.
Apprenticeship in Sweden was first introduced with a stable legal basis (5) in 2011, as part of school reform that aimed at bringing VET closer to the labour market and making it more attractive. Apprenticeship was designed as complementary to the school-based scheme (6), such that it would contribute to fighting skills mismatch and strengthening the link between the labour market and the education system. Participation levels have increased since its introduction, at least in relative terms and compared to decreasing number of students in VET; apprenticeship remains limited overall, especially due to low company participation.

Investigating ways to increase participation levels by making the scheme more responsive to the labour market was the starting point of the flash TCR on apprenticeships. While the scheme’s responsiveness to the labour market was the main focus, the review identified four broader sets of challenges, reflecting the opinions of the stakeholders interviewed. Challenges relate to the level of the scheme design and of its implementation.

(a) Design: scarce knowledge and low attractiveness of the apprenticeship scheme.
The distinction between apprenticeship and school-based VET, their respective benefits and value on the labour market, may not always be clearly drawn or perceived by employers. This may trigger competition between the two, constraining the scope for apprenticeships to increase participation levels among employers and young people.

(b) Design: apprenticeship responsiveness to the labour market.
The education sector does not seem to respond fully to industry skill needs. This may be due to a lack of bridging structures, both horizontally between the two sides and vertically between local and national levels. Local level flexibility does not seem sufficient to adapt curricula to the needs of the labour market; existing instruments to share training responsibilities between schools and workplaces are not fully exploited. The results indicate that schools have had a hard time setting up and implementing platforms for cooperation with employers, such as the local programme councils.

(c) Implementation: responsibilities and ownership.
Schools bear the biggest share of responsibility and they own the scheme, leading to an asymmetrical relationship between schools and

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(5) A pilot scheme had run from 2008 to 2011. See the evaluation report based on three follow-up studies of the pilot project of upper secondary school apprentice education, which were conducted during the academic years 2009/10, 2010/11 in Berglund et al., 2017.
(6) The scheme is open also to adults, though this remains out of the scope of this study.
employers. Schools are dependent on companies’ willingness to provide placements and to deliver 50% of the training at the quality levels expected for the final assessment and qualification. Cooperation between learning venues is often highly person-dependent, which can be a challenge for schools when setting up and running the apprenticeship scheme; this can lead to major differences in quality between different programmes within schools and between different schools.

(d) Implementation: employer engagement.
The overall level of company participation in apprenticeships in Sweden is low, considering the policy objective to expand the VET system. Employers (and students) cannot base decisions to use the scheme on evidence of costs and benefits, in comparison with school-based VET. Some companies still perceive apprenticeships as costly in terms of time and human resources, while others appreciate it as a low-cost way to hire a young workforce. Employer representatives point to the need for higher financial incentives, to ensure that companies can recoup their investment.

Whether to address these challenges or not, and to what extent, depends on the country’s vision of apprenticeship and the main function associated with it.

If the ultimate goal of the apprenticeship policy is to provide an alternative option to students to increase overall participation levels in upper secondary VET by delivering something which complements school-based VET, or at least provides an option within it which does not compete with it, then the existing apprenticeship scheme at the upper secondary level has already achieved this goal.

If, instead, the ultimate goal of apprenticeship policy is to make the apprenticeship scheme at the upper secondary level a valuable option for young people and employers to increase participation levels, this value needs to be clearly proved in absolute terms and also in relation to other options. If apprenticeship policy aims at making the apprenticeship scheme more responsive to the labour market needs, then further work needs to be done at all governance levels.

Based on the reported findings and the challenges analysed, Cedefop identified areas for reform and suggestions for action.

(a) Design: clarify the identity of the scheme and its selling point.

If the apprenticeship scheme is to have a clear identity, more distinct from school-based VET, it is critical to clarify or limit any fluidity over the possibility of starting an apprenticeship at any point during three-
year VET programmes, and also the possibility to switch from school-based VET to apprenticeship and back. Clarifying the identity of the apprenticeship scheme would improve monitoring and evaluating apprenticeship performance, making value and benefits visible and raising profile and recognition in the eyes of learners, parents, society and labour market. The overall expected result is that apprenticeship, as a distinct option, would become more visible and readily communicated, and ultimately increase participation levels.

(b) Design: make the scheme more responsive to the labour market. Governance mechanisms should engage labour market actors (social partners, institutions and collaboration platforms) to a greater extent and at different levels, to make apprenticeship more responsive to the continuing transformation of the world of work (such as changes in technology). In a medium-term scenario labour market representatives could hold national discussions on the share of learning content in the national VET core curricula equivalent or comparable to that of workplace-based learning in the apprenticeship scheme. This could then be adapted to sectoral and local labour market needs for apprenticeship provision. A long-term scenario would be designing apprenticeship-specific programmes, distinguished from school-based VET programmes. This could result from a gradual process and only in specific industries, where the demand for apprenticeship is higher, and be ideally managed at sectoral level through the engagement of social partners. Apprenticeship-specific programmes would have, among other aspects, dedicated curricula, with learning outcomes jointly defined with labour market representatives, involved in dedicated governance mechanisms, apprenticeship-specific qualifications. Both scenarios point to greater employer ownership and a more balanced allocation of responsibilities and workload between firms and schools.

(c) Implementation: involvement of companies in learner selection and final assessment. Involving employers in apprentice selection and recruitment could ultimately shift ownership and responsibility more towards workplaces, while enabling schools to continue holding overall accountability for the education aspect. The paid apprenticeship employment scheme should establish conditions for making this happen. The introduction of vocational examinations jointly managed by schools and companies is currently being considered as another way to strengthen cooperation between them, engage employers more in the scheme and make it more
attractive and competitive for firms. The vocational exam would test the student’s vocational skills in a workplace setting, providing employers with a standardised certification. This would ensure national quality standards but also reflect labour market needs and apprenticeship responsiveness.

(d) Implementation: strengthen stakeholder cooperation.

There is a need to explore further the potential of existing actors, networks and coordination platforms for VET, to improve dialogue between schools and employers. The function of the apprenticeship coordinator in schools could be expanded, such as through national guidelines to bridge the gap between schools and industry. The national and local programme councils could become areas for cooperation, if they were restructured to become more attractive to workplaces and schools alike. They would need to be better linked with stronger cooperation based on a strategy for the coordination, management and implementation of the apprenticeship scheme at all levels. Key factors for well-functioning local programme councils are close and frequent dialogue between VET teachers and workplace supervisors, agendas that are appealing to firms, have meetings chaired by employers and jointly organised by clusters of schools (instead of individual schools) together with local or regional company associations. Regional Chambers of Commerce could also be engaged more via the creation of regional platforms for collaboration and they could even take the ownership, chair or simply coordinate the creation of local programme councils. Existing college networks could also be considered an ideal context for creating dialogue and collaboration between VET and the labour market, as they are designed as ‘ecosystems’ where all relevant actors are represented. Their programmes, designed according to skill needs, could be seen as best practice to study how this could be applied to apprenticeships.

These areas for reform and suggestions for action do not necessarily reflect the opinions of all stakeholders involved in the review. Sweden itself will decide whether and how these would be taken forward.
1. Introduction
1.1. Cedefop flash TCRs on apprenticeships

In the context of its work to support countries that are reforming or implementing reforms of apprenticeships, besides the fully fledged thematic country reviews (TCRs) on apprenticeships started in 2014 (7), in 2017 Cedefop piloted the first two flash TCRs on apprenticeships, in Sweden and French-speaking Belgium.

Like the TCRs, the objective of Cedefop flash TCRs on apprenticeships is twofold:
(a) at national level, to carry out a focused, in-depth review of the strengths and weaknesses of selected area(s) of analysis of apprenticeship systems, resulting in examples of policy- or practice-oriented solutions to tackle the recognised weaknesses and/or identification of good practices;
(b) at the European level, to increase the evidence base which can support policy- and decision-makers in European countries at different levels in designing and implementing policies and measures for developing and/or improving quality apprenticeships; and also to support cross-country comparison.

Different from the TCRs, the flash TCRs are an independent review process, steered and managed by Cedefop, focusing on selected aspects of the apprenticeship system or scheme under review. The expected result of Cedefop’s flash TCRs on apprenticeships is identification of areas for reform and suggestions for action and/or examples of policy- or practice-oriented solutions. These are based on a focused, in-depth analysis of strengths and weaknesses of specific aspects of apprenticeship systems or schemes, reflecting the opinions of the national stakeholders.

The scope of the project covers apprenticeship systems or schemes under reform or to be set up/improved. Apprenticeship as a term is understood as having the following distinguishing features:

(a) systematic long-term training, alternating periods at the workplace and in an education and training institution or training centre that leads to a qualification;
(b) an apprentice is contractually linked to the employer and receives remuneration (wage);
(c) employer is responsible for the company-based part of the programme.

The methodology of the project is based on the following:
(a) an analytical framework, which includes characteristic features present, to different extents and in different combinations, in existing apprenticeship systems (annex);
(b) a participatory and policy-learning approach through stakeholder involvement. The analysis largely relies on surveys of a wide range of stakeholders at different governance levels, from those in charge of the implementation to institutional representatives. Stakeholders are interviewed during the data collection phase, with two rounds of interviews. Cedefop establishes contact with the country at national institutional level, to appoint a national panel of experts (Box 1).

The flash TCRs are organised in two phases. The preliminary phase aims at setting the baseline and preparing the first survey round: establishing contacts with the country at national institutional level; defining the scope of the review; preparing a country fiche; and identifying broad target groups of interviewees for round 1. During the implementation and analysis phase stakeholders are surveyed in two consecutive rounds of interviews: the first collects information to gather the deepest understanding of the strengths and weaknesses of the specific area(s) of apprenticeships considered, as reflected in the opinions of the national stakeholders in the interviews. Discussions at the appropriate governance levels focus on things that work and that do not work in priority areas; on what is missing in the current practice and what support is needed; and, if applicable, identified good practices. The second survey round builds on the findings of the first and addresses stakeholders at institutional level, including policy-makers, social partners and experts, called to assess and discuss findings and propose policy- and practice-oriented solutions.
The panel of experts on apprenticeship in the flash TCR country voluntarily cooperates:

- to identify the scope and focus of the review, on the basis of the analytical framework;
- to help reviewing the apprenticeship country fiche prepared by Cedefop;
- to help identifying potential target groups for the two survey rounds and to support the contacts with the interviewees;
- to support in timely manner the practical implementation of the review, for instance through in-depth discussions on the strengths, weaknesses, areas for improvement, solutions and policy, institutional, and organisational implications for the apprenticeship systems or schemes;
- to discuss main findings throughout the project, primarily the analysis of strengths and weaknesses of the apprenticeship system and final policy recommendations.

1.2. Cedefop flash TCR on apprenticeships in Sweden

The overall aim of the flash TCR in Sweden was to provide an in-depth investigation of apprenticeships compared to school-based VET. Although apprenticeships in Sweden cover learners of various ages and adults, this study is concerned only with those offered within upper secondary education (gymnasieskola). The scheme under analysis is upper secondary apprenticeship (lärlingsutbildning). The primary focus of the flash TCR was the scheme’s responsiveness to the labour market, while there was also interest in exploring the cooperation between schools and employers, the participation of and support to employers, and quality assurance.

Desk research was initially carried out to provide a short review of what is already known about the features and the implementation of the scheme under analysis (8).

A total of 61 interviews with key stakeholders were carried out as part of this flash TCR to understand more fully the way in which the apprenticeship

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(8) A detailed description is available in the online Cedefop European database on apprenticeship schemes: Swedish country fiche; and apprenticeship scheme fiche.
scheme responds to the needs of the labour market. These were undertaken in two rounds, with the findings from round 1 feeding into round 2.

In round 1, 48 interviews were carried out in the Västra Götaland region of western Sweden with those involved in the day-to-day running of the apprenticeship scheme, including several heads of vocational schools, VET teachers and apprenticeship coordinators and students, as well as workplace training supervisors/tutors (9) and local school inspectors. Concentrating the interviews in a single region offered a better opportunity to capture the inter-relationships between apprentices, schools and employers.

The second round of interviews focused mainly at the national level (10), developing a picture of the apprenticeship scheme across Sweden. Round 2 interviews addressed stakeholders at the national institutional level: interviews were first conducted with employer representatives, followed by experts from the National Agency for Education and the Ministry of Education and Research. The discussion with the institutional actors was grounded on evidence from the first round of interviewing and from information provided by national level employer representatives.

Round 1 interviews sought to be as representative as possible in selecting vocational schools and employers who had been engaged in the implementation of the scheme. Ideal coverage would include those who withdrew from providing apprenticeships in order to offer a more balanced picture but identifying such organisations is far from straightforward. The potential for biased results to emerge from respondent selection in round 1 is partly counterbalanced by the inclusion, in round 2, of organisations able to reflect upon the relative merits of apprenticeships without being involved in their delivery. While the study aims at providing a balanced view of apprenticeships in Sweden, these caveats are important.

Chapter 2 describes the key features of the Swedish VET system and the place of apprenticeship scheme within it. Chapter 3 provides an analysis of the challenges in practice. This analysis provides the basis for presenting a series of pointers for enhancing the apprenticeship scheme in Chapter 4.

(9) The company trainers responsible for overseeing apprentices in the workplaces are referred to as supervisors.

(10) One of the respondents in round 2 represented a regional organisation.
2. Apprenticeship scheme within upper secondary VET
CHAPTER 2

Apprenticeship scheme within upper secondary VET

Based on a literature review, the aim of this chapter is presenting VET at upper secondary level in Sweden and the place of the apprenticeship scheme within it, explaining the policy rationale for introducing apprenticeship and providing information about participation levels in VET and apprenticeships.

2.1. VET at upper secondary level and introduction of apprenticeships

Swedish VET at upper secondary level targets young people aged 16 to 20 (11). It encompasses 2 500 hours, equivalent to three years of full-time education, combining school-based teaching and practical training at the workplace. For admission to upper secondary national vocational programmes, students must have passing grades in specified subjects (12). Students who are not eligible may attend an introductory programme, an individually adapted programme leading to either the labour market or to national upper secondary programmes (13).

The Swedish education system is sometimes classified as ‘statist’, characterised by high public commitment and low firm involvement. Such systems ‘largely reflect a strong political strategy to integrate the vocational training system into the general education system’ (Busemeyer and Trampusch, 2012). However, the degree of centralisation and the extent to which the Swedish system has involved industry varied over time.

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(11) Students must start their upper secondary education, at the latest, in the year they turn 20. Older students can turn to municipal adult education, which is available for students aged 20 and above. Newly arrived immigrants with permanent residence have the right to start their upper secondary education before the end of the spring term of the year they turn 20; for asylum seekers the limit is 18.

(12) Sweden has used the ECTS A-E grading system in primary and secondary schools since 2011.

(13) Yrkesintroduktionsprogram is an introductory vocational programme targeting learners who do not initially qualify for a national upper secondary programme. They qualify a person to commence either VET or general upper secondary education where their existing qualifications do not make them eligible to do so or for employment.
From the 1990s, the Swedish school system became decentralised in its implementation: while the Swedish parliament and government set national goals, legal requirements, programmes and curricula, municipalities deliver primary and secondary education, hire public school teachers and can determine the share of State subsidies to allocate to education. In the past 10 years, there has been an attempt to distinguish general education better from VET at the upper secondary level, bringing VET closer to the labour market but also leaving progression routes to university open for all students.

The Swedish upper secondary education system offers 18 national programmes; the structure and courses for each are determined at the national level. There are six general higher education preparatory programmes (högskoleförberedande program) (14) and 12 vocational programmes (yrkesprogram) (15). The former aim at providing students with a foundation for progress in higher education. The latter aim at preparing students for the labour market and can be pursued through two different modes of delivery: the school-based scheme (skolförlagd utbildning) that includes compulsory in-company training, or apprenticeship education (lärlingsutbildning) (16).

Each of the 12 national vocational programmes is organised in blocks of credits, with a minimum 2 500 credits for the total duration of the programme, but students can take more courses and complete the programme with more credits. Vocational programmes have a set core curriculum of upper secondary foundation subjects (17) (600 credits) and programme specific subjects. The national framework allows schools to create local deviations from national programmes and to set up specialisation (also called ‘special orientations’), as long as these adhere to the core curriculum of a particular programme. Programme specific subjects, together with programme specialisations and further specialisations, give 1 600 credits. Students can also choose elective courses (‘individual options’, 200 credits) that build on foundation subjects to gain eligibility for higher education. Part of the individual study plan is a diploma project (100 credits). As a result, study

(14) Business management and economics, arts, humanities, natural science, social science, technology.

(15) Child and recreation, building and construction, electricity and energy, vehicle and transport, business and administration, handicraft, hotel and tourism, industrial technology, natural resource use, restaurant management and food, HVAC and property maintenance, health and social care. There are also additional education programmes with their own diploma goals, such as for dancing, aeronautics, and shipping.

(16) There is a distinction between the terms programme and scheme: see footnote 3.

(17) These subjects are English, history, physical education and health, mathematics, science studies, religion, social studies, and Swedish or Swedish as a second language.
plans are individualised (18) within the limits of the national core curricula and set out the courses and expected learning outcomes to obtain a given final qualification.

As in many other EU Member States, vocational education in Sweden has undergone several reforms over recent decades, to improve the attractiveness of VET to young people and employers. Historically, most students opted for general education at upper secondary level (Olofsson and Thunqvist, 2014). In 1991 an attempt was made to bring about parity between the general and VET pathways at upper secondary level: the duration of the latter was extended from two to three years and successful completion granted entry to higher education. This reform was meant to create a homogeneous upper secondary education system where VET and general education were often delivered in the same schools, offering courses of the same duration delivered predominantly in the classroom. As a result, VET was characterised by a strong academic/general education component so that it could achieve broader learning results than serving the immediate needs of the labour market (19).

In 2011, the government introduced a major set of reforms of the entire school system, including VET (known as Gy11) (20). These reforms sought to uncouple vocational and general education, with the aim of tying upper secondary VET more closely to the needs of the labour market. This reform reduced academic requirements, led to the award of a different diploma, and no longer granted automatic access to higher education (21). To compensate for these changes, however, VET learners still had the option to choose elective courses to gain admission to university. The reform also introduced a compulsory in-company training (22) component meant to increase IVET attractiveness and participation for young people; it increased the vocational

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(18) Individual learning plans are tools that apply not only to VET but also to general higher education preparatory programmes in upper secondary education and to other levels of the Swedish education system.

(19) See Hall C. (2012) for an evaluation of the effects of introducing a more comprehensive upper secondary school system in Sweden aiming to reduce the differences between academic and vocational tracks.


(21) In spring 2018, the Swedish Government referred Law proposal 2017/18:184 to the Council on Legislation for consideration of changes in the law regarding vocational programmes. The proposal is to have all vocational programmes automatically include higher education preparatory courses to increase the attractiveness of vocational programmes.

(22) In-company training or workplace-based learning refers to the learning that takes place in the workplace; school-based or classroom education refers to the learning taking place at school.
element in the overall share of education and training VET programmes at the expense of the academic/general education component. Although employer-school engagement is still seen as underdeveloped and participation rates in upper secondary VET have shown little sign of improvement (OECD, 2016b), initial evidence – provided in more detail below – suggests that the reforms may not yet be able to achieve their intended goals.

Since the introduction of the upper secondary school reforms (Gy11), the share of students enrolled in upper secondary VET in Sweden has continued to decrease, from 32.2% in 2012 to 27.2% in 2017/18 (see Figure 1) (\(^{(23)}\)).

Figure 1. **Students enrolled in VET as a share of total students enrolled at upper secondary level under the Gy11 legal framework, (%)**, 2012/17

A highly relevant determinant in choosing between a VET programme and general (higher education preparatory) programme in upper secondary education is the parental level of education. Those students who choose to

\(^{(23)}\) Since data comparisons before and after 2011 would not be reliable, this section is limited to the years after the reform.
pursue VET tend to have parents with lower education levels compared to those who choose higher education preparatory programmes. Lower grades in secondary school are also essential in determining the programme in which students can enrol. Typically, VET programmes have less demanding requirements (including lower grades) than for general (higher education preparatory) programmes. There are also differences in enrolments between students with a Swedish background and those with a foreign background with regard to which upper secondary school programmes they qualify for, the percentage of those who complete their upper secondary education, and the percentage gaining eligibility for higher education. Much, but not all, of this difference can be accounted for by socioeconomic factors (Panican, 2015; Skolverket, 2013).

2.2. Apprenticeship in upper secondary education

The Gy11 reforms also introduced an apprenticeship scheme within the VET pathway at upper secondary education (24), alongside the school-based scheme. Prior to this reform, apprenticeships had been piloted between 2008 and 2011. In a labour market context characterised by a rising youth population, increasing youth unemployment and skill shortages (OECD, 2016a), and lack of cooperation between employers and education providers in determining skills needs (Olfsson and Thunqvist, 2014; OECD, 2016a), introducing an apprenticeship scheme in the VET pathway at upper secondary level was meant as a step forward. It aimed to fight skills mismatch and strengthen the link between the labour market and the education system, with the engagement of all stakeholders.

The school-based and apprenticeship schemes lead to the same vocational diploma (yrkesexamen) and share the same subject syllabuses and orientations as well as admission and diploma requirements and goals. Both schemes require students to spend time in a workplace but in different proportions, at least in principle. In the school-based VET scheme, most learning is delivered at school, with a minimum of 15 weeks spent in a workplace; this is around 14% of the total VET programme duration (25). In

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(24) An apprenticeship scheme was also introduced in the adult education system, which is not part of this study.

(25) The estimate of 14% is taken from the National Agency for Education guidelines. There is no official documentation determining the percentage of workplace-based learning for school-based VET. Calculations of the hours for workplace-based learning vary: a week of workplace-based learning (usually 40 hours) is usually considered equivalent to 23 hours of school-based learning.
the apprenticeship scheme, at least 50% of the total time should be spent in the workplace; the 50% is calculated from the moment the student starts the apprenticeship training. For instance, if a student decides to enrol in the apprenticeship scheme in the third year, after carrying out the first two years of studies in school-based VET mode of delivery, he or she will spend only 50% of his or her last year at a workplace.

Schools (26) are free to choose whether to offer upper secondary VET through apprenticeships or school-based VET, or a combination of both, and how to distribute the workplace-based learning element throughout the VET programme. There is some fluidity between school-based VET and apprenticeships, allowing students to switch between from school-based VET to apprenticeship, or vice versa, over the duration of their programme. For example, a student could spend the first year in the school-based VET scheme and then switch to the apprenticeship scheme for their second and third years.

Schools also have flexibility in making choices in relation to VET teacher roles: at some schools, a VET teacher will be working only on one scheme (exclusively either for school-based VET or for apprenticeships), while, in others, they will be assigned to both.

A student taking part in workplace-based learning as part of either the school-based VET or an apprenticeship should have a supervisor at the workplace. Only those with the necessary knowledge and who are considered appropriate, by both the vocational school and workplace, can be supervisors.

Unlike VET as a whole, the number of upper secondary VET students enrolled in the apprenticeship scheme (27) has grown steadily since its introduction in 2011, with an average annual increase of over 1 000 students, from 5 600 in 2013/14 to 10 300 in 2017/18 (28). The building and construction programme has by far the largest number of apprentices (29) comprising approximately 25% of all those enrolled in the apprenticeship scheme; the

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(26) Schools at all levels can be either public or independent and both are equal when applying for public funding.

(27) The apprenticeship scheme and school-based VET scheme primarily target young people (15-24), though older students without an upper secondary diploma might also pursue these paths. The vocational education and apprenticeship schemes are also available for adults (from age 20) within the municipal vocational education system – a separate part of the Swedish education system – which is out of the scope of this study.

(28) 5 600 students in 2013/14, 6 800 in 2014/15, 8 300 in 2015/16, 9 693 in 2016/17 and 10 300 in 2017/18 (data from the National Agency for Education, trial period not included).

(29) Throughout this report, the term ‘apprentice’ is used to refer to the students who have chosen to pursue their VET studies through the apprenticeship scheme.
handicraft programme has the largest share of students enrolled in the apprenticeship scheme compared to the equivalent course in school-based VET. However, because students can switch between apprenticeship and school-based VET, data on apprenticeship participation levels may not be reliable (30).

The government ambition is to increase participation in apprenticeship in Sweden, along with its quality. Despite the positive trend, apprenticeship participation remains below expectations; there are also significant challenges in relatively low completion rates and high drop-out rates. Evidence referring to the first pilot of apprenticeship (31) showed that, in 2012, 36% of the students who had begun apprenticeship in 2008 had dropped out, and only 44% received the leaving certificate within the stipulated time of three years.

To reduce drop-outs and increase completion rates, by motivating apprentices to stay in the scheme, the paid apprenticeship employment scheme was introduced in 2014. Employers can hire apprentices using a paid apprenticeship employment contract: this can cover either part or all studies carried out in the apprenticeship mode of delivery, with the terms specified by law (SFS 2014:421, Swedish Government, 2014). Policy-makers expect this to increase the engagement of employers too, as they would be motivated to retain their apprentices after graduation, to recoup the higher investment in training made (32). From 2014 to 2017, a total of 73 students had been hired in three years under the paid apprenticeship employment scheme. Though it was a significant increase over the 16 paid apprentices in 2016, it remains quite a low number in comparison with the total number of apprentices (around 10 000).

(30) The National Agency for Education states that data on the exact number of students enrolled in apprenticeships are not reliable due to differences in the number of apprenticeship students that schools report and the number of applications by schools for the apprenticeship State subsidy. Data on the number of apprenticeship students are based on the latter. Nevertheless, it is presumed that the data inaccuracies are minor and do not influence the overall conclusions drawn.


Box 2. **2017 pilot project for the paid apprenticeship employment scheme**

During the autumn of 2017, a pilot project for paid apprenticeship employment, initiated with support from the National Agency for Education, was launched. The pilot involves 18 schools and will last for three years, covering the Health and social care programme, the Industrial technology programme, and the Child and recreation programme. Apprentices can be hired both in the private and public sectors, with collective agreements for each sector regulating their minimum wages. A paid apprenticeship employment contract is established between the apprentice and the employer, which allows for exemption from the Employment Protection Act (SFS 1982:80) (33) so long as they are agreed by the relevant trade union (34) or in the relevant collective agreement (35). Those in the pilot will be employed as apprentices and will receive a salary from the start of the apprenticeship, which will then increase with each year of education/employment. The employer pays the salary, determined through sectoral collective agreement, directly to the apprentice without the involvement of the school but receives from the school a State subsidy to a maximum of SEK 47 500 a year. Schools also may transfer an additional subsidy of SEK 10 000 per year and per student to employers with paid apprentices whose supervisors have undertaken a training course approved by the National Agency for Education. Evaluation of the pilot has yet to be made publicly available.

*Source: Cedefop.*

2.3. **Education-labour market collaboration and apprenticeship financing**

2.3.1. **School-company cooperation in implementing apprenticeship**

Schools are responsible for most of the implementation tasks (both administrative and content-wise) of apprenticeship in upper secondary education.

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(33) The Employment Protection Act regulates temporary employment, notice periods and what is required by the employer in order to fire an employee (Swedish Government, 1982).


(35) Trade union involvement in paid apprenticeship employment differs from non-paid apprenticeships, where unions exert their influence mainly through local and national programme councils.
education. They have responsibility for the administration and coordination of the scheme and for learning that takes place both at school and in company, including identifying and defining the learning outcomes, organising, planning and following up apprentice progress, and allocating an apprentice to a company. Schools, often the school head, have overall responsibility for ensuring the creation and implementation of the learning contract (36) that the apprentice, the education provider, and the company must sign, which defines the roles and responsibilities of the different stakeholders, and the content and scope of workplace-based learning (Skolinspektionen, 2013). Schools also have responsibility for the final assessment, which helps them ensure that they meet legal and quality-related requirements.

In larger schools there are usually two functions supporting each other in the administration and running of the scheme: a teacher and an apprenticeship coordinator. The teacher is responsible for vocational training and has frequent contact with employers through tripartite meetings between the student, VET teacher and workplace supervisor. The apprenticeship coordinator is generally responsible for the overarching cooperative tasks, such as initial identification of workplaces, maintaining a database of current and potential workplaces, participating in local programme councils, and resolving problems of an administrative or inter-personal nature that may arise with apprentices in their workplace. Their function is to assist the teacher in cooperating with employers; in the Västra Götaland region, as this study confirms, it is considered central to maintaining good cooperation with employers.

Two formal tools are used to coordinate the cooperation between learning venues: the learning contract and the individual study plan. The learning contract is a legal document mandated by the National Agency for Education and signed by all stakeholders, which clarifies their roles and responsibilities as well as specifying the overall content and scope of the workplace-based learning. Individual study plans are primarily put together by the school, with input from employers and the student; they present the learning content and goals for each apprentice. If the apprentice is hired under the paid employment apprenticeship scheme, he or she will also have an employment contract.

(36) SFS 2010:2039, Chapter 1, Section 8 (Swedish Government, 2010a).
2.3.2. Programme councils (for VET delivery)

There are 12 national programme councils (*nationella programråd*), one for each of the 12 national vocational programmes, consisting of 6 to 10 representatives from industry, representatives of employer and employee organisations within the specific vocational area, and some national or regional authorities. The national programme councils work as permanent forums for dialogue between the National Agency for Education (*Skolverket*) and labour-market stakeholders on the quality, content and organisation of VET. The national programme councils are not decision-making bodies, as they have a consultative function with respect to the National Agency for Education. The overall aim of their work is to make the VET pathway at upper secondary level more responsive to the needs of stakeholders and to improve correspondence between VET programmes and labour market demands (Skolverk, 2012). As the apprenticeship scheme is a mode of delivery for VET programmes, they are key players also in relation to the scheme.

At the local level, every upper secondary school offering VET programmes, regardless of the scheme, can organise one or several local programme councils (*lokala programråd*) (37) to support closer cooperation between education providers, employers and their representative organisations, and trade unions (38) on each specific programme the school offers. Although the law does not specify their tasks, the local programme councils may assist schools on several levels: arrange workplace-based learning placements for their students for both schemes; organise and assess diploma projects; and address issues such as workplace environment, workplace safety, working hours, and the expectations of the different stakeholders, as far as students’ presence at the workplace is concerned. The study revealed a need for local programme councils to play a more decisive role than they currently play. Previous research suggested that greater local council involvement should guarantee that the national core curriculum is adhered to and tougher demands be made on workplaces to ensure that in-company supervisors are suitably prepared and trained (Olofsson and Panican, 2012).

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(37) One local council/school/programme.
(38) SFS 2010:2039, Chapter 1, Section 8 [Upper secondary school ordinance] (Swedish Government, 2010a).
2.3.3. Colleges for general education and VET delivery
Another relatively new (39) form of cooperation between education (including VET) and the labour market is that of the ‘colleges’ (ReferNet Sweden; Skolverket, 2014). These are defined as a structured, continuing regional form of cooperation between stakeholders/industries and VET providers. They are sector-based platforms, voluntarily initiated at regional and local levels by multi-stakeholder groups, which apply to become a nationally recognised association (riksforeningen). Members of these groups are representatives of education providers (both municipal and independent), employers, employer organisations and trade unions and, sometimes, universities, the Swedish public employment service and the Swedish Association of Local Authorities and Regions (40). Their role may differ depending on local structures and resources. The rationale of the colleges is to ‘prepare the students for their future working life as well as the labour market for the future competence supply’ (ReferNet Sweden and Skolverket, 2014, p. 5). The colleges offer VET programmes outside the scope of the State regulations. Their curricula require a minimum 2 800 credits instead of the 2 500 in the national curricula for upper secondary education (41), and the learning outcomes are largely defined by labour market actors, to reflect the local and regional labour market needs closely. Nonetheless, an apprentice who has been studying in a college gets the same diploma and qualification as a student who has studied either in the school-based VET scheme or in regular apprenticeship. Graduation at a college, though, comes with a stamp of approval by the industry, so it has a different value on the labour market.

So far, two colleges have been set up at regional level: the Technical College (Teknikcollege) and the Health and Social Care College (Vård- ochomsorgscollege). They are managed by national steering groups, usually chaired by employer representatives, which certify the education they provide (in the case of the Technical College) or quality monitoring Health and Social Care. In 2018, there were 25 technology college regions with almost 150 local certified education providers and over 3 000 participating companies (Teknikcollege, 2014). Early in 2017, there were 22 regional and 85 local ones, with over 200 municipalities participating. The Health and

(39) The concept was first discussed in 2004 by the Swedish Industry Council, an organisation composed of leading representatives of social partners within the industrial sector.

(40) In some cases, groups of municipalities can also apply directly to become members of the college.

(41) In principle, all schools, outside the colleges, can also offer 2 800 credit points, if the student takes more courses.
Social Care College also provides a platform listing workplaces that will accept apprentices or students in school-based VET for workplace-based learning. Where this is the case, schools are obliged to use the platform when identifying potential workplaces instead of contacting them directly.

### 2.3.4. Apprenticeship financing

Schools offering apprenticeships are entitled to State subsidies, which they apply for and partly redistribute to companies hosting apprentices. Public subsidies are dedicated to the development of the apprenticeships and to stimulating employer participation and providing training for workplace supervisors. Companies where supervisors undertake the web-based training course provided by the National Agency for Education, or any other similar course approved by the school, are entitled to a State grant to a maximum of SEK 5 000 (\(^{(42)}\)) per apprentice, per term (\(^{(43)}\)). There is also a general State grant – the purpose of which is to encourage employers to take on apprentices – of a maximum of SEK 16 250 per student, per term, available to employers. To receive the subsidy, the school must be able to demonstrate that a learning contract has been signed and that compensation will be paid to employers by the schools receiving the subsidy (\(^{(44)}\)). Employers are free to use the subsidies as they choose, with many choosing to remunerate the supervisor in addition to their usual wage. There is also a State grant available to schools to a maximum of SEK 2 500 per apprentice, per term to deal with the school’s costs in training apprentices. Since 2014, apprentices have been entitled to a State allowance of SEK 1 000 a month to cover travel expenses and meals (\(^{(45)}\)). Studies and evidence from Cedefop TCRs on apprenticeships suggest that that funding is not what makes the difference in influencing the decision of employers who take on an apprentice (Berglund, et al. 2014). Nevertheless, employer representatives at national level believe that there is a need for greater financial incentives, to ensure that companies can recoup their investment in training.

\(^{(42)}\) Approximately EUR 480 (April 2018).

\(^{(43)}\) A school year is divided into two terms.

\(^{(44)}\) Information available on the Skolverket website under Statsbidrag för gymnasial lärlingsutbildning.

\(^{(45)}\) The subsidy is given only to apprenticeship students or students in introductory programmes; it is not available for apprentices hired with an employment contract. Apprenticeship students apply to the Central Board of Student Finance (CSN) to receive the subsidy.
2.4. Conclusions

VET at upper secondary level in Sweden lasts three years and combines school-based teaching and workplace-based learning. It has been traditionally characterised by a considerable element of general education, so that it would prepare citizens rather than serving short-term labour market needs. This approach changed in 2011, when school reform aimed at making a clearer distinction between general education and VET, with a view to bringing the latter closer to the labour market. As part of this strategy, apprenticeship was introduced as a ‘mode of delivery’ of vocational pathways at upper secondary (and for adults, but this is outside the scope of this study), as alternative or in combination with school-based VET with compulsory workplacements.

The main difference between apprenticeship and school-based VET is, at least in principle, the amount of learning taking place in the workplace, which is to be larger in the case of apprenticeship. In practice, however, this is the case only if apprenticeship commences in the first year of upper secondary education, and much less if the student starts apprenticeship later, for instance in the last year of the VET programme. As switching between school-based VET and apprenticeship (and back) is another possibility for students, distinction between the two schemes is even more fluid. The difference in their learning content is also minor, since the curriculum is mostly determined at national level and flexibility is mostly available to tailor the curriculum to apprentice needs, rather than to the labour market.

The apprenticeship governance and financing mechanisms are school-centred. Schools are responsible for most tasks related to apprenticeship in upper secondary education, from design to implementation. Since its introduction, there has been a steady increase in the absolute number of students enrolled in the scheme, almost doubling between 2013 and 2017. Still, the relative number of apprenticeship students is marginal and low compared to upper secondary VET.

The description of the system and the evidence collected from the project interviews suggest that apprenticeship in upper secondary education today faces a number of challenges: these will be examined in Chapter 3. First, the demarcation between apprenticeship and school-based VET schemes remains relatively unclear, mainly in the perception of companies. The lack of a clear identity and of the relative advantages of apprenticeships may hinder company and student participation. Second, the design of the scheme and
its governance mechanisms allow margins of flexibility but these do not seem to be capable of aligning the scheme to labour market needs. There are also challenges at implementation level in terms of lack of company and social partner ownership and responsibility and, consequently, a lack of engagement with the scheme.
3. Challenges in realising apprenticeship scheme potential benefits
CHAPTER 3
Challenges in realising apprenticeship scheme potential benefits

Using information provided by stakeholders during the fieldwork (46), this chapter analyses if, and to what extent, the apprenticeship scheme at upper secondary level is contributing to VET programmes being more responsive to the labour market and to improving their attractiveness to young people and employers. The interviews with various stakeholders provide a basis for thinking about the actions that might be taken (Chapter 4) to ensure that apprenticeship fulfils the role initially envisaged in the 2011 reforms, as described in Chapter 2.

Apprenticeship and school-based VET schemes (which include compulsory workplace-based learning) are inextricably intertwined in Sweden; they are not, as in some other countries, distinct entities (Chapter 2). They are modes of learning and refer to the same VET programmes. For a given programme, the student will obtain the same upper secondary education qualification regardless of the scheme they take or the number of switches they make between schemes. The apprenticeship option has less classroom-based training compared to school-based, even though the difference may be insignificant where, for example, apprenticeship training starts in the third year of his/her VET programme.

National level employer representatives reported that the ultimate goal of apprenticeship policy was not necessarily increasing the number of apprentices but to provide an alternative to students, in order to increase overall participation levels in upper secondary VET. Apprenticeship is seen as complementing school-based VET, or at least providing an option within it which does not compete with it. The scheme affords learners the possibility to start apprenticeship studies at different points in time during the VET programme, to switch between schemes, and to replace missing elements of the workplace-based training through school-based training. In

(46) The evidence provided is indicative – since it is based on a modest number of interviews – but it is still able to provide valuable insights for future policy-making.
practice, though, the scheme does not seem to be necessarily perceived as contributing to increasing VET responsiveness to labour market needs, or making VET more attractive for the employers.

The remainder of this chapter will investigate why this may be the case by looking into the following dimensions:
(a) design:
   (i) the scheme’s identity and its selling point for the employers;
   (ii) the scheme’s capacity to align with labour market needs, including the use of the local programme councils;
(b) implementation:
   (i) responsibilities and ownership;
   (ii) employer engagement.

3.1. Design: identity and selling point

In principle, the difference between apprenticeship and school-based VET with compulsory work placements is clear, as the interviewees from the National Agency for Education and the Ministry of Education and Research reported. It is based on the share of the overall training (in terms of number of hours) spent at the workplace as opposed to the classroom.

In practice, however, as a result of upper secondary VET fluidity, the distinction based on the different share of work-based learning may blur, especially if the apprenticeship starts in the third year (Section 2.1). There is also the effect of switching between schemes: VET teachers and the heads of vocational schools in the Västra Götaland region reported that this is not uncommon, although it is never taken lightly and is authorised only after discussions among teachers, school principals, and guidance counsellors. Students mainly switch from school-based VET to apprenticeship if advised to do so, given that spending more time in the workplace means they would learn more and more easily obtain a job at the end of their training. In contrast, students typically switch back from apprenticeships to school-based VET when both the apprentice and the employer realise the learning project is not working out for reasons that have to do mostly with life in the workplace (time-keeping, the pace of work in the real workplace). The possibility of switching may benefit students and reduce potential drop-out, but its frequency reinforces the fluid boundary between apprenticeships and school-based VET.
If a company is unable to provide training in all the skills required by the VET programme, the scheme allows the possibility:

(a) to organise apprenticeship workplace-based learning in several companies; in such cases, the school moves the apprentice to another workplace;

(b) to account for the missing elements through school-based training.

These possibilities vary among programmes and, in the best case, are activated in response to apprentice requests to broaden their skills range. Such transitions were generally reported as fluid and evidence to track them is not consistently available.

Many employers in the Västra Götaland region saw little difference between the apprenticeship scheme and school-based VET; they claimed the former has not developed yet a distinct identity vis-à-vis the latter. They also reported a lack of information about, and a weak perception of, the relative added value of apprenticeship compared with alternatives. When recruiting upper secondary education graduates, they consider as key requirement having a diploma, irrespective of whether this was achieved via apprenticeship or the school-based VET scheme.

Lack of information is also due to scarce data distinguishing apprenticeships from school-based VET, making it difficult to compare the two schemes, not least in terms of labour market outcomes and value on the labour market. Similarly, the absence of apprenticeship-specific indicators of success and failure (47), makes it impossible to carry out regular evaluation of apprenticeships, which could inform employer decisions and eventually support increase in participation levels.

In the absence of a clear identity and transparent added value of apprenticeships compared to school-based VET, student choices between the two schemes are also not fully informed. Because it is difficult to have equivalent apprenticeship learning experiences that could demonstrate their value in comparison with the school-based scheme, those who undertook or completed an apprenticeship may struggle in selling their experience in the labour market, beyond the training company.

(47) It is not just quantitative data on the rate of returns that is required. More qualitative aspects, such as the capacity of employers to shape the application of skills in the workplace, can also be important in demonstrating how an apprenticeship can help an employer ensure that a person is ready to be hired on completion of their training.
3.2. Design: capacity to align with labour market needs

According to policy-maker intentions, the Swedish apprenticeship scheme would be characterised by high degree of flexibility to adapt to the labour market needs. However, this is still an aspiration, lacking evidence to demonstrate whether or not it is the case in practice.

From the field work conducted for this study, it seems that the potential for making apprenticeship more responsive to the labour market may not be exploitable at implementation level. The margins of flexibility available are mainly intended for tailoring individual learning plans to apprentice and training company learning needs, rather than to the labour market. Flexibility applies to decisions at the local level, between schools and workplaces, on a range of management and administrative issues: when the workplace-based learning starts; what training will take place and where, in the case of multiple-employer apprenticeship; and the possible elective options for the apprentice determined at the national level. This room for manoeuvre is possible within the boundaries of the core curriculum and it is not apprenticeship scheme specific; the same level of flexibility is also available for school-based VET.

Several company supervisors emphasised the opportunity to ‘shape’ apprentice training according to company needs and culture (not to the sector or local labour market) as one of the major potential advantages of the apprenticeship scheme over school-based VET scheme. However, national employer organisations saw the apprenticeship scheme as lacking flexibility in the sense that it was considered inadequate to the practical circumstances of the workplaces due to being originally based on the school-based VET scheme. There were concerns from employer organisations that the delivery of training via apprenticeships still appears to be determined by the school-based track from which it grew and, in this sense, is not as flexible as it could be in delivering workplace-based training. This seems to impose a certain structure on workplace-based learning which does not always fit with the actual situation in the company. For example, as schools themselves reported, despite allowing for individual variation, the learning contract was mostly found to be highly standardised and not used actively as an instrument to stipulate responsibilities nor to guide workplace-based learning. Students and workplace supervisors, while enthusiastic about the individual study plan as it clarifies what the apprentice needed to focus on, reported that it was common for apprentices within the same VET
programme to have the same study plan. As change within industries can be rapid, frequent contact between the VET teacher and the workplaces would be required to ensure that the apprentice’s individual study plan accurately reflects industry needs, but this is rarely the case.

While the apprenticeship scheme’s intended flexibility is regarded as one of its key strengths by all stakeholders interviewed in this study, in practice this may not be the case.

All stakeholders agreed that, to face these challenges, local programme councils could be useful platforms for cooperation and communication between schools and employers and provide a forum wherein the latter can influence how the apprenticeship scheme runs in practice. VET teachers recognised the importance of local programme councils in the Västra Götaland region and expressed positive expectations for them to be potentially effective instruments to support apprenticeship responsiveness to the labour market, by favouring the matching between skills demand and supply. Their success may lead to higher levels of employer participation in providing workplace-based learning placements.

Practice, though, is not in line with expectations. Interviewees stressed the need for local programme councils to do more and function better, although acknowledging that this is not easy. Both schools and employers reported that the knowledge of, and participation in, local programme councils varied greatly among workplaces. Employers and supervisors revealed little knowledge or interest in the programme councils: while some were unaware of their existence and/or had not been invited to participate, others said they could not afford to participate due to time constraints and as the cost of attending in working hours was too high. It is also challenging for the schools to arrange them; they struggled to persuade a sufficient number of companies to participate in the programme council meetings with SMEs being particularly difficult to attract.
Box 3. Local programme councils in practice

Schools in the Västra Götaland region reported difficulties in attracting companies to participate in the councils, with extensive efforts resulting in limited results. One VET teacher mentioned sending out more than 20 email invitations to the meetings, but only five companies attended. To mitigate the problem, one school organised the programme council meetings at the different workplaces, instead of hosting them at school, to ease the attendance of local supervisors.

One VET teacher mentioned that companies participated more actively in programme council meetings when the school had separate councils for the different vocational programmes, since a narrower focus would retain the interest of employers. According to a school, the loss of workplaces participating in the local councils has been registered since 2011, when that particular school had merged the upper secondary education apprenticeship scheme and apprenticeships for adults in the same councils.

Schools reported that yearly gatherings, such as Christmas dinners, start-of-the-term meetings, and regular breakfast meetings that discussed a variety of apprenticeship related issues, were used as platforms to discuss common issues and for supervisors to share experiences with representatives from other sectors. The general impression was that these types of semi-formal gathering at schools proved more popular than the local programme council meetings.

Source: Cedefop.

At both the regional and national levels, it has been indicated that the system of local programme councils, albeit mandatory, may not be an ideal solution for school-employer collaboration on a broad scale. For instance, in cities with several schools offering the same programmes, there will also be several programme councils in the same location; few workplaces will be able to commit to participation in more than one. Another issue was raised in that there are no formal links between local programme councils and the national programme councils that exist for each VET programme. It can be difficult to ascertain more broadly which labour market responsiveness issues exist at local levels and whether these are common enough to be relevant nationally.
The evidence collected suggests that local programme councils failed to institutionalise the relationship between employers and vocational schools, so success depended on the relationships between key individuals. Local programme councils have proved difficult to implement with the consequence that the extent to which employers are able to feed back their experiences of delivering an apprenticeship is less than originally hoped for.

3.3. Implementation: responsibilities and ownership

There is consensus in Sweden that schools should be responsible for ensuring that the apprenticeship scheme is delivered according to the goals and standards set out in the national regulations. Responsibility and ownership go hand-in-hand and the school-centred configuration of Swedish apprenticeship governance does not ensure that the employers’ voice, among others, is heard in the design and in the implementation of apprenticeships, including the selection and the final assessment of apprentices. However, schools are highly dependent on companies’ willingness to take in apprentices and deliver 50% of the training. The schools interviewed said they had covered part of the employers’ administrative burden to prevent them from quitting apprenticeships. There is an imbalance of responsibilities and ownership and a potential power asymmetry between schools and companies that may ultimately affect the quality of workplace-based learning (as pointed out in point Section 3.4).

Companies appreciated that schools retained ultimate responsibility for the management of the apprenticeship scheme and related administrative tasks. At the same time, employers positively valued the close contact and strong relationships with schools – primarily through the apprenticeship coordinator and VET teachers – as a vital support mechanism for jointly evaluating the apprentice’s progress as well as building strong relationships with educators. From an employer representative perspective, this was important as workplaces feared being given too much responsibility, increasing their participation costs.

Cooperation between learning venues is often highly person-dependent, which signals another point of vulnerability. Many schools reported that identifying potential workplaces was highly dependent on the personal and professional networks of the VET teacher and/or apprenticeship coordinator. Many VET teachers were either highly experienced within their
field or were familiar with the local area, supporting the ability of schools to find workplaces for students on the apprenticeship scheme. The low level of institutionalisation of the governance mechanisms also creates vulnerability, resulting from people leaving their job, for whatever reason.

3.4. Implementation: employer engagement

According to some schools in Västra Götaland, it can be difficult to find workplaces willing to participate in apprenticeships. This was the finding of a follow-up study of the 2008-11 pilot project (Section 2.1), which highlighted a shortage of workplaces available for apprenticeship, and difficulty in finding ‘workplaces with an enough broad production: many […] were small and had a specialised production’ (Berglund, 2013). Nowadays, however, schools rarely struggle to find workplaces that can host apprentices, and such issues generally only apply to specific sectors, none of which are represented in this study (48).

To expand the system, the key issue is how to persuade more employers to provide apprenticeship placements (49). The process of identifying and signing-up workplaces has been described by school heads and VET teachers in the Västra Götaland region as continuous, as it requires staying up to date with the state of the local labour market and constantly identifying new employers to provide better student-workplace matches. Schools may experience deficits in workplaces willing to take on an apprentice; in rare cases, there may be a surplus of such workplaces. One issue that schools in more densely populated areas must consider is that they are competing with other VET schools for apprentice workplaces. In some sectors and locations, competition has become fiercer over recent years, making it more difficult to find companies located close enough to the students’ homes. The priority of matching students to a workplace close to their home has also been emphasised as particularly important by VET teachers in the Västra Götaland region. This restricts the selection of potential hosting companies, which may ultimately affect the quality of the workplace-based learning.

(48) It is likely that this finding partly depends on the fact that many of the schools included in the study are located in small or medium-sized municipalities with few companies within each field.

(49) There is a need for more evidence on employers who do not participate in apprenticeships and why this is the case.
Box 4. **Why companies engage in apprenticeships**

Findings from the first survey round show that there are two primary motivations for workplaces in the Västra Götaland region to participate in the apprenticeship scheme. Most workplaces interviewed based their decision to participate on a combination of the two:

- **strategic:** in that there is a need to meet the workplace’s future skill needs. Workplaces primarily see apprenticeships as a cost-efficient way to gain qualified employees and are considered to both alleviate the workloads of existing employees and as providing a supply of skilled workers in the future who are able to contribute productively while in training. Being able to determine whether apprenticeships are better than something else is sometimes hard to disentangle in that Swedish apprenticeships are not always a distinct form of training within upper secondary VET. This inevitably makes the employer strategic decision to engage in apprenticeships somewhat fuzzy;

- **social:** in that there is a need to contribute to growing the overall pool of skills available to the sector in which the workplace operates. Workplaces’ primary motivation for providing apprenticeships is, in this case, for the greater good of the economy and society. The study shows that workplace preferences in the Västra Götaland region, for an apprentice or intern from a school-based VET programme, largely depend on traditions in that particular sector. This is likely to be the same at the national level. Some sectors, such as construction, have a long history of hosting post-upper secondary school apprentices, and prefer hosting them at the workplace for an extended period. Other fields, such as business and administration, traditionally prefer students from school-based VET programmes.

*Source: Cedefop.*

Regardless of the motivation, the workplaces interviewed in the Västra Götaland region found the scheme’s main advantages to be the opportunity to train an apprentice at relatively low cost, who can then become a productive employee as soon as they complete their training. Many workplaces reported that they appreciated being able to contribute to the apprentice’s personal growth and found that the apprenticeship scheme allowed apprentices to become fully integrated in the workplace culture. They maintained that these benefits far outweighed the scheme’s perceived
disadvantages, which are primarily related to time and resource-related costs and dealing with apprentices that are not a good fit for their company or the apprentice’s chosen vocation.

Participating employers reported that they find apprenticeships beneficial and intend to continue to use them because they are a low-cost investment in the future skills of the workforce. There are a range of financial incentives available to employers to take on an apprentice, such as the government grant offered to workplaces where the supervisor has undergone supervisor training (Section 2.3). Interviews with employers suggest that financial incentives on offer are not decisive in the decision to take on apprentice; this is also apparent in other countries. Conversely, employer representatives at the national level believe that financial incentives are a key to increasing engagement because apprenticeships are time-consuming and costly for participating employers. If the goal is to engage employers more widely and for longer periods (for example, for the full period of achieving a qualification), there is a need to ensure that employers can recoup the costs of this investment. Employer representatives appeared wary of apprenticeships resulting in transfer of training costs for young people away from the State to the employer; they maintained that there was a need for higher financial incentives for firms to offset the substantial costs of training an apprentice. However, there is no clear evidence of such costs and, in many respects, in Sweden the direct costs borne by employers in delivering an apprenticeship are less than those found in some other countries (such as the apprentice not being paid by the employer).

This is not the case in the paid apprenticeship employment scheme (Section 2.1), which is at an early stage of development. Most of the companies interviewed were unaware of the existence of this scheme but this is likely to change once the pilot (Box 2) is implemented and marketing by the National Agency for Education gathers pace.

3.5. Conclusions

In many ways, the apprenticeship scheme can be considered a national success, as available data show that participating schools and workplaces are enthusiastic, and the number of students increased, although remaining low since its introduction in 2011. Yet, evidence collected within the scope of this review points to key challenges relative to both the design of the scheme and its implementation.
(a) Design: limited knowledge and low attractiveness of the apprenticeship scheme.
The distinction between apprenticeship and school-based VET may not always be clearly drawn or perceived by employers. It is difficult to compare the two schemes, not least in terms of labour market outcomes and value. The potential risk of the two tracks competing for the same pool of beneficiaries and employers, constrains the scope for apprenticeships to increase levels of participation by employers and young people, also because the specific benefits are not visible. Despite a steady increase in the number of students choosing the apprenticeship scheme, it seems to be associated with the low status and low attractiveness of VET in Sweden. Information is still scarce about the paid apprenticeship employment scheme mainly among employers.

(b) Design: scheme’s responsiveness to the labour market.
Representatives from both the education and the employer side highlighted a gap between the outputs of the publicly financed education sector and industry skill needs. This may be due to a lack of bridging structures, both horizontally between the two sides and vertically between the local and the national levels. The amount of flexibility in learning content, as decided at national level, does not manifest at the local or workplace level; this has an impact on the limited responsiveness of apprenticeship training, and implicitly of the VET programmes, to the needs of the labour market. Existing instruments such as the learning contract are not used sufficiently to share training responsibilities between schools and workplaces. This is partly an effect of their asymmetrical relationship and the schools’ dependency on employer participation in the scheme. The results also indicate that schools have had a hard time implementing the local programme councils; these also have no apparent link to the national institutional level.

(c) Implementation: responsibilities and ownership.
Schools bear the biggest share of responsibility and they own the scheme, while they are dependent on the companies’ willingness to provide placements and deliver 50% of the training to the quality levels expected for the purpose of the final assessment and qualification. There is a relatively high degree of person dependency, which can be a challenge for schools both when setting up the apprenticeship scheme and in its long-term operations. This means that successful cooperation depends on driven individuals at both the schools and at the workplaces, which sets high requirements for the individuals working with the scheme.
and risks leading to major differences in quality both between different programmes within schools and between different schools.

(d) Implementation: employer engagement.
The overall level of company participation in apprenticeships in Sweden is low, at least in view of the policy objective to expand the VET system, by involving more participants and companies. Employers (and students) cannot base their decisions to use the scheme on evidence of the costs and benefits of the scheme, also in comparison with school-based VET. Some companies still perceive apprenticeships as costly in terms of time and human resources, while others appreciate it as a low-cost option in hiring a young workforce. Employer representatives highlight the need for greater financial incentives, to ensure that companies can recoup their investment.
Flash thematic country review on apprenticeships in Sweden
4. Areas for reform and suggestions for action
Based on the reported findings and on the challenges analysed, this chapter identifies possible areas for reform and suggestions for action.

If the ultimate goal of the apprenticeship policy is to provide an alternative option to students to increase participation levels in upper secondary VET, by delivering something which complements school-based VET (or at least provides an option within it which does not compete with it), then the existing apprenticeship scheme at the upper secondary level has already achieved this goal.

If, instead, the ultimate goal of the apprenticeship policy is to make the apprenticeship scheme at the upper secondary level a valuable option for young people and employers to increase participation levels, this value needs to be clearly proved in absolute terms and also in relation to other options. Further, if apprenticeship policy aims at making the apprenticeship scheme more responsive to the labour market needs, further work needs to be done at all governance levels.

What follows is based on the second assumption: it is derived by the authors of this report and does not necessarily reflect the opinions of all stakeholders involved in the review.

4.1. **Design: scheme identity, selling point and responsiveness to the labour market**

4.1.1. **Identity and value**

The design of the apprenticeship scheme needs a clearer identity, more distinct from school-based VET: currently the two are not sufficiently distinguishable in the eyes of many employers and their representatives. The aim should be to encourage apprenticeships to be seen as the ‘gold standard’ and raise their profile. The apprenticeship qualifications, unique to apprenticeships, would be the trademark, valued and recognised by learners, parents, society at large and the labour market.
To distinguish the two schemes, it is critical to clarify or limit the use of fluidity in relation to the possibility of starting an apprenticeship at any point during the three-year VET programmes and the possibility to switch from school-based VET to apprenticeship and back.

Clarifying the identity of the apprenticeship scheme would lead to easier monitoring and evaluation of apprenticeship performance, both from the point of view of apprentices and of companies. Policy evaluation is lacking, though it would be beneficial to allow employers and students to take informed decisions. Evidence on key performance indicators will provide valuable information to employers and students and possibly increase the attractiveness of the scheme in their eyes. There are several possibilities, such as relative wage and employment returns from pursuing an apprenticeship instead of a different course, employment outcomes in the short and long run, and analysis of companies’ costs and benefits. There are also qualitative indicators of value, such as the extent to which apprenticeship provides employers with skills which ensure the apprentice is work-ready post-training.

The expected result is that the availability of apprenticeship as a distinct option would become more visible and readily communicated to employers, vocational schools, young people and their parents. Unless there is clear information about the value and benefits of apprenticeships, increasing participation levels will remain a formidable task.

4.1.2. Responsiveness to labour market needs

One of the main expected non-financial benefits for companies is the possibility of shaping the needs of the labour force of the future, by investing in their training. At present, employer organisations see the apprenticeship scheme as lacking flexibility. It is considered insufficiently adaptable to the practical circumstances of workplaces due to originally being formed on the school-based VET scheme. This is seen as a challenge as it imposes a structure on workplace-based learning which is not always a good fit with the actual workplace situation. Governance mechanisms should make flexibility possible for labour market actors (social partners, institutions and collaboration platforms) in implementation, and engage them to a greater extent at different levels. This should result in apprenticeship being more responsive to labour market needs, without resulting in firm-specific training.

A medium-term scenario would be that a volume of learning content within national core curricula for VET, equivalent or comparable to the volume of the workplace-based learning of the apprenticeship scheme, be
discussed nationally with labour market representatives and adapted to sectoral and local labour market needs for apprenticeship provision. This adapted curriculum should be the basis for individual study plans, ensuring a minimum standard for learners and companies.

A long-term scenario is designing apprenticeship-specific programmes, distinguished from school-based VET programmes. This could be a gradual process and only in specific sectors, where the demand for apprenticeship is higher. The apprenticeship-specific programmes would include dedicated curricula, with learning outcomes jointly defined by labour market representatives involved in dedicated governance mechanisms at the highest decision-making levels. Social partner engagement in governance should include adapting the programmes and related curricula to changes in the sector or occupation, work organisation and production processes, allowing for flexibility to adapt to changes in technology.

Allowing employers to have more of an input into aspects of apprenticeship design may increase their ownership and help in reallocating the responsibilities and workload of setting up, monitoring and management. This could be better articulated at a sectoral level – where the social partners are represented – and for these to feed into the relevant national programme councils.

A gradual evolution of the approach to apprenticeship, from a mode of delivery of VET to a distinct programme, would lead to the set-up of apprenticeship-specific qualifications, encouraging the view of apprenticeships as the ‘gold standard’ and raising their profile. These would have dedicated curricula and governance mechanisms, involving labour market representatives from the policy design stage. Greater involvement of the social partners is regarded as key step in rethinking the distribution of roles and allocation of governance responsibilities.

4.2. Implementation: responsibilities and ownership balance to engage labour market actors

4.2.1. Company involvement in learner selection and final assessment
Introduction of vocational examinations to test student knowledge and skills within the chosen vocation, jointly managed by schools and companies, is currently being considered; it would benefit cooperation between the two and increase employer engagement. Such exams would test the
student’s vocational skills in a workplace setting, providing employers with a standardised certification of apprentice skills. This would ensure respect for national quality standards and also reflect labour market needs and apprenticeship responsiveness.

Allowing employers more say in recruitment is a further aspect. Apprentices are currently appointed to a workplace by a vocational school without giving the workplace the opportunity to influence the selection process. Although employers, with their financial stake, may tend to select the students they consider to be more able, with an impact on overall levels of participation and the universality of the programme, their representatives believe that increased employer ownership through selecting the apprentice will increase the scheme’s attractiveness and make it more competitive.

The paid apprenticeship employment scheme should set favourable conditions for this; implementation is an opportunity to shift ownership and responsibility more towards workplaces, while enabling schools to continue to hold overall accountability for the education aspect. The employer may bear larger costs in the short term but, in the medium term, the scheme could ultimately be more attractive to workplaces. Under the paid apprenticeship scheme, apprentices receive a wage and become regular employees, with clearer demands and expectations from and towards the apprentice. Similarly, being paid to undertake an apprenticeship is likely to increase the attractiveness of the apprenticeship scheme from a student perspective.

4.2.2. Unlocking the potential for cooperation

Interviews suggested the need to improve the dialogue between schools and employers, using the potential of existing VET actors, networks and coordination platforms. Apprenticeship coordinators in schools, the local programme councils, the regional chambers, and the colleges (the Technology College and the Health and Social Care College) seem likely collaborators.

A first step would be to look closer at how the function of the apprenticeship coordinator in schools could be developed through elements such as national guidelines to improve labour market responsiveness. Many schools have such coordinators, but their role seems to be mostly limited to larger ones with more resources. The apprenticeship coordinator role could be emphasised as either an alternative or a complementary function for bridging the gap between schools and industry. With the function having grown out of their need, rather than being nationally mandated, schools currently have considerable flexibility to shape the role as they see fit.
The national and local programme councils could become an ideal context if they were restructured to become more attractive to workplaces and schools alike. First, they would need to be better linked and have a stronger cooperation; second, they need to have a strategy for the coordination, management and implementation of the apprenticeship scheme at national, regional and local levels. Local programme councils currently set up by each school for each programme could be set up by clusters of schools, encouraging cooperation rather than competition.

Key factors for well-functioning local programme councils mentioned by interviewees are close and frequent dialogue between VET teachers and workplace supervisors, and that schools attract employers (and the social partners more generally) with appealing agendas for the council meetings. Multiple interviewees from both the education and the labour market sides emphasised the idea of having the programme council meetings chaired by employers. There is the possibility of jointly organising local programme council meetings with local or regional company associations as a better way of utilising existing platforms and so achieving better overall coordination between schools and industry.

Regional chambers of commerce could be engaged more via the creation of regional platforms for collaboration; they could even take the ownership, chair or simply coordinate the creation of local programme councils. It has been suggested that the chambers could appoint a regional apprenticeship coordinator to manage the platform and act as an intermediary between schools and workplaces, at the same time supporting local level apprenticeship coordinators at the schools.

The existing college network could also be considered an ideal context to create dialogue: they are ‘ecosystems’ where relevant actors are represented and they work as platforms for collaboration between the VET system and the labour market. Their programmes, designed on the basis of actual skill needs, could be seen as a best practice of how this could work for apprenticeships. The ultimate goal would be to close the gap between the world of VET and the labour market, creating dialogue and collaboration and increasing engagement between employers and their representative associations.
4.3. Conclusions

The flash TCR on apprenticeships in Sweden offers several potential lessons:
(a) a clear vision of apprenticeship purpose and function is the basis for fruitful collaboration and cooperation among stakeholders;
(b) apprenticeships need to be a distinct entity from VET, if the goal is to increase participation levels;
(c) all the main actors in apprenticeships need to have a substantive say in their design, structure and implementation with suitable feedback mechanisms in place;
(d) being able to communicate the relative benefits of apprenticeship to key target audiences is essential in allowing companies, students and their parents to make informed choice and it may also be critically important to achieve policy goals.

Sweden offers an example of an innovative way in which a publicly funded apprenticeship scheme was created for the first time within the formal education system. Policy-makers sought to develop apprenticeships as complementary to school-based VET, helping contribute to improving the overall attractiveness of VET. Although this does not greatly disturb existing structures, it bears the risk of apprenticeships lacking a distinct identity compared with school-based VET. If the policy goal is to use apprenticeships to increase levels of participation by both employers and young people there is a need to be able to communicate the difference between apprenticeship and school-based VET and their relative benefits for employers and young people, as well as for the economy as a whole.

A particular strength of the Swedish example is quality assurance, resulting from the cooperation between schools and employers to ensure that the training to be delivered in the workplace meets that agreed in the regulations and learning plans. However, employers and their representative organisations have relatively little say in ensuring apprenticeships are responsive to emerging needs in the labour market. The institution designed to capture the employer’s input, the local programme councils, appeared to suffer from limited engagement from employers. There is undoubted flexibility within the apprenticeship scheme, with elective options for the apprentice depending upon their desired career path and interests. But that flexibility appears to be determined at a national level and not available to employers at the local level. The local programme councils are not directly connected to the national authorities that decide the curriculum. The result
of this can be limited employer attachment to apprenticeships, which manifests in relatively low levels of employer participation in the scheme and the attendant risk that the programme is not sufficiently responsive to skill needs. So, there is a need to ensure that the employer voice is heard through the creation of effective feedback mechanisms.

These are the challenges Sweden needs to address to maximise the potential benefits of its innovative approach to apprenticeship.
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Gy11</td>
<td>Set of school reforms passed in 2011</td>
</tr>
<tr>
<td>TCR</td>
<td>thematic country review</td>
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<tr>
<td>VET</td>
<td>vocational education and training</td>
</tr>
</tbody>
</table>
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Further reading


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Table A1. **Analytical framework**

The framework does not propose a single model to follow but is based on a variety of systems considered to be the reference functional model of apprenticeships. The features have a purely operational function and are not to be interpreted as ‘necessary conditions’.

<table>
<thead>
<tr>
<th>Areas of analysis</th>
<th>Operational descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Distinguishing features</td>
<td>Systematic long-term training alternating periods at the workplace and in an education and training institution or training centre that leads to a qualification.</td>
</tr>
<tr>
<td></td>
<td>An apprentice is contractually linked to the employer and receives remuneration (wage).</td>
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<tr>
<td></td>
<td>An employer is responsible for the company-based part of the programme.</td>
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<tr>
<td>2 Place in the ET system</td>
<td>Apprenticeship is defined and regulated in a legal framework.</td>
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<tr>
<td></td>
<td>Position of apprenticeship in relation to other learning paths is clear.</td>
</tr>
<tr>
<td></td>
<td>Apprenticeship offers both horizontal and vertical pathways to further specialisation or education at all levels.</td>
</tr>
<tr>
<td>3 Governance structures</td>
<td>Roles and responsibilities of key players (the State, employers’ organisations, trade unions, chambers, schools, VET providers, companies) at national, regional, local levels are clearly defined and distributed: decision-making, implementation, advisory, control.</td>
</tr>
<tr>
<td></td>
<td>Employer organisations and trade unions are actively engaged at all levels.</td>
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<tr>
<td></td>
<td>Employers’ organisations, trade unions, and companies understand and recognise the importance of apprenticeship to a skilled labour force (social responsibility).</td>
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<tr>
<td></td>
<td>One coordination and decision-making body is nominated.</td>
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</tbody>
</table>
### Areas of analysis | Operational descriptors
--- | ---
**4** | Training content and learning outcomes
Qualification standards and/or occupational profiles exist, are based on learning outcomes and are regularly evaluated and updated.
Curricula and programmes are developed based on qualification standards and/or occupational profiles.
The content, duration and expected outcomes of company and school-based learning are clearly distributed and form a coherent sequence.
There are provisions for adjusting part of curricula to local labour market needs.
(Minimum) requirements to access apprenticeship programmes are stipulated.
Final assessment covers all learning outcomes and is independent of the learning venues.

**5** | Cooperation among learning venues
There is cooperation, coordination and clear distribution of responsibilities among the venues as well as established feedback mechanisms.
A school, a company and an apprentice together develop a training plan, based on the curriculum.
If a company cannot ensure the acquisition of all required learning outcomes for the company-based learning as defined by the curriculum, there are arrangements to compensate for that (such as intercompany training centres, cooperation of companies).
One of the venues takes up (is designated by law) the coordinating role in the process.
It is clear who is responsible for the administrative tasks related to the company-based part of the programme (such as checking the suitability of the accredited training enterprise, technically and personnel-wise, logging of apprenticeship contracts).
<table>
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<tr>
<th>Areas of analysis</th>
<th>Operational descriptors</th>
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</thead>
<tbody>
<tr>
<td><strong>Participation of and support to companies</strong></td>
<td>Rights and obligations of companies providing training are legally stipulated.</td>
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<tr>
<td></td>
<td>There are strategies, initiatives in marketing apprenticeship and informing companies of benefits of taking apprentices, related responsibilities and available incentives.</td>
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<tr>
<td></td>
<td>There are minimum requirements for companies willing to provide apprenticeship places and/or an accreditation procedure.</td>
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<tr>
<td></td>
<td>Companies, especially SMEs, receive non-financial support to implement apprenticeship.</td>
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<td></td>
<td>There is recognition, and even awards, for companies that provide quality apprenticeships.</td>
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<tr>
<td></td>
<td>Employer organisations play a key role in engaging and supporting companies.</td>
</tr>
<tr>
<td><strong>Requirements and support to teachers and in-company trainers</strong></td>
<td>Companies have to assign a qualified staff member (tutor) to accompany apprentices.</td>
</tr>
<tr>
<td></td>
<td>There are stipulated requirements for qualification and competences of an apprentice tutor.</td>
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<td></td>
<td>An apprentice tutor in a company has to have a qualification in the vocation he/she trains for.</td>
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<tr>
<td></td>
<td>An apprentice tutor in a company has to have some proof of pedagogical/didactic competence.</td>
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<tr>
<td></td>
<td>There is a provision of training for in-company trainers to develop and update their pedagogical/didactic and transversal competences and for teachers to update their technical competences.</td>
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<tr>
<td></td>
<td>There are mechanisms for cooperation and exchange between in-company trainers and VET teachers in schools.</td>
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<td></td>
<td>There is a clear indication who (teacher or trainer) has ultimate responsibility for apprentices’ learning.</td>
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### Areas of analysis

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<thead>
<tr>
<th>Areas of analysis</th>
<th>Operational descriptors</th>
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<tbody>
<tr>
<td>Financing and cost-sharing mechanisms</td>
<td>Apprenticeship companies pay wages and cover indirect costs (materials, trainers’ time).</td>
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<tr>
<td></td>
<td>The State is responsible for financing VET schools and/or paying grants to engage apprentices.</td>
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<td></td>
<td>The duration and organisation of apprenticeships allow companies to recuperate the investment through apprentices’ work.</td>
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<td></td>
<td>There are incentives (subsidies, tax deductions) to encourage companies to take on apprentices, generally and/or in specific sectors or occupations.</td>
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<tr>
<td></td>
<td>Employer organisations and trade unions cover part of the costs (direct and/or indirect).</td>
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<tr>
<td>Quality assurance</td>
<td>Quality assurance system covers apprenticeship.</td>
</tr>
<tr>
<td>Apprentice’s working and learning conditions</td>
<td>Rights and obligations of apprentices are legally stipulated, both for working and learning.</td>
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<tr>
<td></td>
<td>There is a reference point (responsible body) that informs the apprentice of rights and responsibilities of all parties and supports him/her in case of problems.</td>
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<tr>
<td></td>
<td>An apprentice has an employment contract with the company and enjoys all rights and benefits of an employee and fulfils all responsibilities.</td>
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<tr>
<td></td>
<td>An apprentice is protected in case of company failure (bankruptcy, for example) to provide training.</td>
</tr>
<tr>
<td></td>
<td>An apprentice has access to guidance and counselling services.</td>
</tr>
<tr>
<td>Responsiveness to labour market</td>
<td>There are institutional procedures that allow apprenticeship to respond to or to anticipate the needs of the labour market.</td>
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<tr>
<td></td>
<td>Outputs and outcomes of apprenticeship are regularly monitored and evaluated.</td>
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<tr>
<td></td>
<td><em>Ex-ante</em> and/or <em>ex-post</em> impact evaluation of apprenticeship are in place.</td>
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</tbody>
</table>

*Source: Cedefop.*
This publication is the final report of the flash thematic country review of apprenticeships (TCR) in Sweden. Cedefop initiated the review which took place between June 2017 and April 2018 and looked at apprenticeship at upper secondary level. This report presents the key findings and suggestions for action to develop apprenticeship training in the medium and long term. The underlying analysis largely relies on information collected from different categories of stakeholders at different levels, and in-depth discussions with a national panel of experts. The report presents suggestions for action organised in two areas for intervention: rethinking the overall scheme design, clarifying its identity and selling point by making it more responsive to the labour market; and at the implementation level, revising the responsibility allocation and ownership balance to engage employers more.