

QUALITY APPRENTICESHIP TOOLKIT

A PRACTICAL PERSPECTIVE FOR LATIN AMERICA AND THE CARIBBEAN

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International
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Organization

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First edition 2019

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Axmann, Michael

Quality apprenticeship toolkit. A practical perspective for Latin America and the Caribbean.
Montevideo: ILO/Cinterfor, 2019. 180p.

ISBN: 978-92-9088-298-5

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The Inter-American Centre for Knowledge Development in Vocational Training (ILO/Cinterfor) is an ILO technical service, set up in 1963 with the aim of encouraging and coordinating the action of the Latin American and Caribbean institutes, organisations and agencies involved in vocational training in the region.

The Centre publications can be obtained through ILO/Cinterfor office Avda. Uruguay 1238, Montevideo, Uruguay, e-mail: oitcinterfor@ilo.org. Fax: 2902 1305, Tel.: 2902 0557.

Web site: www.oitcinterfor.org

Printed in Uruguay

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Acknowledgements

Quality Apprenticeship. A Practical Perspective for Latin America and the Caribbean is the joint effort of experts and is based on the contributions of ILO/Cinterfor as well as other experts from Latin America and the Caribbean, and the rest of the world.

The study was validated twice: the first time in a tripartite, two-day event in October 2016, at ILO headquarters in Geneva; the second, at an ILO/Cinterfor event in July 2018, in Montevideo.

Michael Axmann took responsibility for this publication upon his return to the ILO's Skills Development Systems in Geneva, and to November 2016, and, since then, in his new role at ILO/Cinterfor, he has updated the study and added many experiences and good practices from Latin America and the Caribbean.

Mr Axmann edited and completed the book after consulting a number of times with ILO specialists in skills and employment in Latin America and the Caribbean: Álvaro Ramírez Bogantes, Anne Posthuma, Hassan Ndahi, Julio Gamero, Noemie Feix and Rodrigo Mogrovejo.

The list of contributors also includes: Alessandra Molz, Ana Alencastro, Fernando Grafe, Josee-Ann La Rue, Kazutoshi Chatani, Marta Makhoul, Matthias Risler, Michael Reinhold, Michelle Byusa and Natalia Lacruz.

ILO/Cinterfor colleagues (Anaclara Matosas, Fernando Casanova, Fernando Vargas, Gonzalo Graña and Rodrigo Filgueira) provided extensive information. Enrique Deibe, ILO/Cinterfor director, provided guidance and advice on the production of this publication.

Foreword

Youth unemployment rates have increased since 2007, reaching in excess of 13% worldwide in 2017, and, in the same year, peaking at 18.3% in Latin America and the Caribbean (LAC), the highest figures seen for a decade. These are average figures; in some LAC countries, they are even higher.

Youth unemployment in this continent is more than 3 times higher than that of adults (over 25 years of age), and has amply exceeded the critical levels of 2017. For example, in Argentina, 18.9%, in Brazil, 27.1%; in Chile, 16%; in Costa Rica, 22.8%, and in Uruguay, 22.5% (ILO/Cinterfor, 2017).

In a way, countries in Latin America and the Caribbean are facing a double challenge: on the one hand, they must devise short-term responses in order to mitigate the negative social and employment impacts of the downturn and return to growth that includes employment generation, and, on the other, they must take steps to address the structural issues of low productivity and the lack of product diversification.

Policymakers have been looking for answers to the negative effects on employment of global financial crises and the stagnation of productivity figures in Latin America. There is, clearly, no single alternative that can cater to all when it comes to considering vocational training and capacity-building as a solution to the dilemma of employment and productivity. It is not only in Latin America that policymakers are rediscovering, or perhaps discovering for the first time, the importance of “Quality Apprenticeship,” which provides a solid route to enable young people to make the transition from the world of education to the world of work.

Quality apprenticeships help match the demand for skills with those on offer in labour markets and education and training systems. The design, implementation and evaluation of quality apprenticeship systems require collective efforts from governments and their various agencies, social partners such as employers’ associations and unions, as well as from training providers.

ILO/Cinterfor promotes “Quality Apprenticeship” as a priority, not only because it helps young people to move on towards decent jobs, but also because it helps companies to find the workers they need while improving productivity and competitiveness. As a centre for education and vocational training in LAC, Cinterfor undertakes to advise its member institutions on policy issues related to quality apprenticeship in the region, as well as to provide technical assistance for quality apprenticeship capacity-building in countries, regions and industries.

Increasingly, governments and social partners in LAC are approaching ILO/Cinterfor in their search for advice on how to design quality apprenticeship systems and programmes. They view Cinterfor as a knowledge centre that will help them to apply the latest research findings on quality apprenticeship and to implement agreed principles on quality apprenticeship good practices in the countries of Latin America and the Caribbean.

This publication acknowledges the developments that have emerged from the Skills and Employability Branch of our headquarters in Geneva over the last decade.

We hope that these tools will contribute to the implementation of quality learning programmes in the region through vocational training institutions.

Enrique Deibe
Director
ILO/Cinterfor

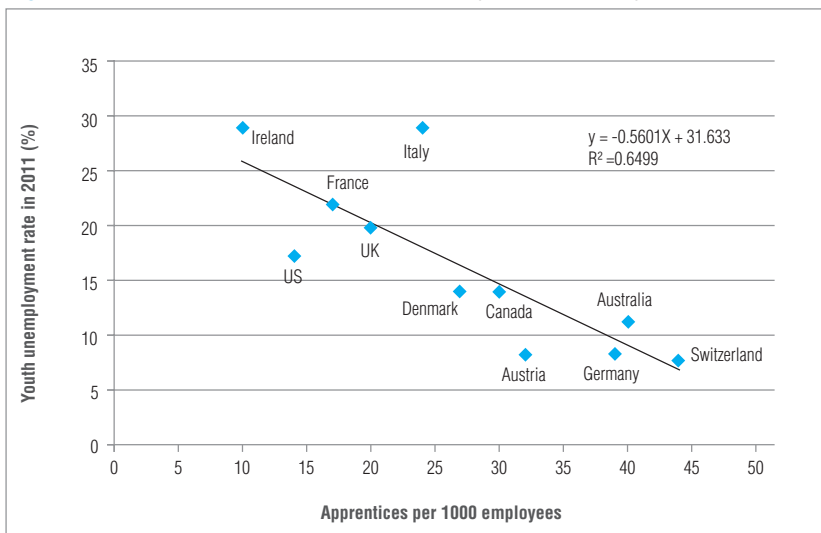
Executive summary

Increasingly, countries around the world, at all levels of development are putting apprenticeship high on their policy agenda, recognising its potential for smoothing transitions from education to the world of work. The capacity of quality apprenticeships to address youth employment concerns has led to calls to countries to seriously consider “improving the range and types of apprenticeships” (ILO 2012a: p. 7) and foster “...sharing of experience in the design and implementation of apprenticeship programmes and explore ways to identify common principles across the G20 countries (G20 Labour and Employment Ministers, 2012: p. 6).

The Leaders Declaration arising from the G7 Summit, 7-8 June 2015, recognised that technical and vocational education and training (TVET) via formal and non-formal learning is key to the economic empowerment of women and girls, including those who face multiple sources of discrimination (e.g. women and girls with disabilities), and to improving their employment and entrepreneurship opportunities.

In addition, the global financial crisis of 2007 put the spotlight on youth, as their unemployment rates in some countries far surpassed a critical level in 2012: 55.3 per cent in Greece, 37.6 per cent in Portugal, 51.5 per cent in South Africa, 53.2 per cent in Spain and so forth (ILO, 2013). Amid the financial crisis, countries with a strong tradition of apprenticeship recorded lower youth unemployment rates than others. And as Figure 1 reveals, the prevalence of apprenticeship and youth unemployment show a significant negative correlation. In other words, countries with higher shares of formal apprentices recorded lower youth unemployment rates. The recent surge of interest in apprenticeships has emerged in this context.

Figure 1. Prevalence of apprenticeships and youth unemployment (2011)



Source: ILO calculations based on ILO (2012b; 2013).

What is quality apprenticeship?

Quality apprenticeship can be defined as a unique form of vocational education/training, combining on-the-job training and school-based learning, for specifically defined competencies and work processes. Apprenticeships are regulated by law and based on a written employment contract with compensatory payment and standard social protection coverage. A formal assessment and recognised certification come at the completion of a clearly defined period of training.

Apprenticeships combine: (a) gaining professional experiences that are directly applicable at workplaces; and (b) learning applied knowledge and skills that enable apprentices to understand the logic behind the job s/he is tasked with, cope with unpredictable situations, and acquire higher level and transferable skills. The International Labour Organisation's (ILO) 'quality apprenticeship' approach is based on four building blocks: (i) social dialogue, (ii) a clear definition of roles and responsibilities, (iii) a legal framework and (iv) a shared-financing arrangement. A quality apprenticeship is a sophisticated learning mechanism based on mutual trust and collaboration among the stakeholders (i.e. apprentices, employers, workers, government and TVET institutions).

Box 1. Myths about quality apprenticeships

Myth 1: Quality apprenticeships are only for advanced economies

Austria, Denmark, Germany, Switzerland, and some other European countries are known for well-established traditions of apprenticeship. This might give rise to an impression that only advanced economies can implement apprenticeship schemes. Not true. As we shall see when we discuss the building blocks of quality apprenticeship, developing countries can also implement this system. In fact, many middle-income countries promote apprenticeships (e.g. Indonesia, Jamaica, Mexico, Turkey and South Africa). The ILO supports low-income countries (e.g. Malawi and Tanzania) where tripartite constituents commit to quality apprenticeship and request technical assistance from the ILO.

Myth 2: Apprenticeships cannot be practiced in the informal economy

Informal apprenticeships function as an important training mechanism in the informal economy. Based on a mostly oral training agreement, a young person acquires the skills of a trade or craft from an experienced craftsman while working in a micro or small enterprise. The ILO has produced a resource guide to upgrade informal apprenticeships in order to enhance young people's access to decent work (ILO, 2011).

Myth 3: Apprenticeships are only for men

This perception may be because many people associate apprenticeships with traditionally male-dominated trades (e.g. technicians, carpenters and plumbers). In reality, apprenticeships are offered in a wide range of fields such as agriculture, manufacturing, finance, business administration and law, media and healthcare. In fact, many young women participate in apprenticeship programmes. Statistics shows that about a half of the apprentices in Denmark and the UK are female. The share of female apprentices is over 40 per cent in Germany, Indonesia, Italy and Switzerland (ILO, 2012b). It is an important task of policymakers and social partners to promote gender equality in apprenticeships by breaking down gender stereotypes and occupational segregation, as well as by assuring equal training and employment opportunities for both women and men. Keep in mind

that gender stereotypes start at school, in the curriculum, and the streaming of young students into higher education, where options may be restricted to certain occupations for young women and men. It is important to note that apprenticeships are not only for young people. They are also utilised to re-skill older workers.

Myth 4: Only large companies can offer formal apprenticeships

Although it might be true that large companies have higher capacity (e.g. more staff members who can mentor apprentices, more budget for training, more modern equipment) to offer apprenticeship positions, small and medium-sized enterprises (SMEs) do not shy away from offering apprenticeship programmes. In fact, the vast majority of apprenticeship programmes are offered by SMEs, for instance in Austria, Germany and Switzerland. SMEs join forces with local schools and take in apprentices. Policy support for SMEs is important. The United Kingdom makes apprenticeships more accessible for SMEs by, for instance, establishing a dedicated hotline from which SME owners can seek advice from experts. See building block 2 below for additional ideas to support SMEs that offer apprenticeship positions.

Other work-based programmes have some, but not all, of the characteristics of apprenticeships; notably, duration, assessment and certification (See Table 1).

Table 1. Attributes of quality apprenticeship and other workplace-based training

| | Wage | Legislative framework | Programme of learning | Off-the-job training | Social Security | Formal assessment | Recognised certification | Duration |
|--|-----------------------|-----------------------|-----------------------|----------------------|-----------------|-------------------|--------------------------|-----------------|
| Traineeship | Maybe | No | No | No | Yes | No | No | 12-24 months |
| Internship | Maybe | No | No | No* | No | No | No | 3-6 months |
| Informal apprenticeship | Pocket money/ in kind | No | No | No | No | No | No | Variable |
| Industry attachment | Yes | Maybe | Maybe | No | Maybe | No | No | |
| Quality Apprenticeship programmes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Fixed 1-4 years |

Source: Adapted from ILO (2012b: Table 1)

* Some interns are studying at universities/graduate schools while doing an internship.

Box 2. Main objectives of apprenticeship programmes

- Provide workers with knowledge, skills and qualifications needed in a changing work environment.
- Avoid skill shortages, tackle skills mismatch and foster lifelong learning.
- Help employers raise the level of the workforce skills according to the particular needs of companies.
- Provide young people with qualifications facilitating their access to the labour market and increasing labour market mobility.
- Reduce the incidence and duration of unemployment.
- Promote faster and more efficient school-to-work transitions.

Source: G20 Task Force on Employment (2012: p. 1).

Elements of quality apprenticeships

The benefits of apprenticeships are multi-fold and accrue to all stakeholders:

1. Apprenticeship facilitates school-to-work transition

Securing the first job can present real challenges to young people. On the one hand, employers are reluctant to hire young people whose productivity is unknown. It is difficult for employers to fully apprehend the technical and soft skills of young jobseekers during a recruitment process. As a result, they hesitate to hire fresh graduates or rely on the reputation of the education/training institution in making hiring decisions. Apprenticeship programmes allow employers to train the workers their enterprise needs, while apprentices have the opportunity to demonstrate their productivity potential to employers as well as making well-informed choices about education and training.



Key point: Apprenticeships can smooth the transition into the workplace: employers can observe skills of young apprentices and young people can make informed decisions on education/training and career choice.

Box 3. Cost-benefit analysis of the quality apprenticeship model

While there are few cost-benefit analyses available on quality apprenticeship systems, perhaps the most comprehensive is one that includes all of the countries of the European Union, using reliable databases and providing an analysis of the period 1998-2010, with the following results:

- a) The increased occurrence of quality apprenticeship is positively linked to increased employment among young people aged 15 to 24.
- b) Quality apprenticeship is correlated with lower youth unemployment figures.
- c) An increase of one percentage point in the coverage rate of quality apprenticeship is linked to an increase of 0.95 percentage points in youth employment rates and to a reduction of youth unemployment of 0.8 percentage points.

Sources: European Commission, 2013a.; OECD, 2017.

2. Apprenticeship promotes coordination between education and industry and reduces skills mismatch

Apprenticeship schemes are a systematic means of forging collaboration between TVET and industry. Employers are often critical of the skills of jobseekers, ascribing it to a mismatch between education and their needs. In order to help ensure that new recruits are “job ready,” companies need to be actively involved in training, ideally through collaboration with local education/training institutions in the design and delivery of curriculum/training modules.



An apprenticeship is a mechanism that systematically brings education/training institutions and industry closer, thereby reducing skills mismatches.

3. Apprenticeship makes good business sense

Companies invest in apprenticeship because it is sound business; a skilled workforce enhances productivity. The benefits gained by businesses far outweigh the initial challenges of new apprentices who require more supervision and coaching. Companies recover the training costs and accrue net benefits as apprentices learn the trade and become productive. In fact, many studies corroborate this point (see Box 4). Importantly, companies can also save recruitment costs, since apprentices have lower turn-over rates. Therefore, in many countries, the lion's share of the costs of apprenticeships are borne by companies.



Companies can recover the costs of quality apprenticeships and benefit from a skilled workforce.

Box 4. Quality apprenticeship pays off for host companies

There are two significant studies on the impact on companies of quality apprenticeship. The first of these is the European Commission study (2013) we have mentioned on the costs and benefits of quality apprenticeship systems. We can draw some very interesting conclusions from this study regarding the German and Swiss industries:

- a) During the apprenticeship period, German companies incur average net costs, while Swiss companies show average net profits. These differences in net training costs between the two countries are related to the high proportion of productive tasks assigned to apprentices in Switzerland, as compared to German companies, and to wage differentials (higher in Switzerland). While training costs are similar in both countries, benefits are higher in Switzerland, owing to the greater productivity they require from apprentices, as compared to the requirements of German employers. Swiss companies find it worthwhile to replace high labour market wage costs by apprentices' lower levels of productivity, although these are sufficiently high to offset their wage costs.
- b) The large supply of apprenticeship places in Germany could be linked to the fact that, for companies, short-term costs are more than offset by the higher productivity of graduates in the long term. Information asymmetries in the labour market enable employers to pay apprentices below their productivity, which, therefore, enables them to recover costs.
- c) Differences are observed in the net costs that companies must bear, depending on their economic sector and size. For example, in Germany, there is evidence of positive short-term benefits in the trade, sales, crafts and construction industries, while in

the manufacturing sector there are short-term net costs, but long-term benefits.

- d) In some companies, quality apprenticeship represents a long-term investment, while in others it may be used merely to replace regular jobs. In Germany, it is estimated that only 20% of companies with quality apprenticeships in place adopt this replacement strategy, although small firms do lean more towards replacement.

A second (2013) study by the Centre for Economics and Business Research estimated the impact of apprenticeship on productivity in the United Kingdom. The study revealed that apprenticeships boost output, leading to higher profits and wages and better products at lower prices. Workers who have completed apprenticeships increase productivity by £214 (approximately USD336) per week on average. The productivity effect of apprenticeships differs by sector: £414 per week in engineering and manufacturing and £114 per week in healthcare.

An empirical cost-benefit analysis of apprenticeship programmes offered by five Indian SMEs reveals that benefits surpass the costs of offering training if apprentices are retained. According to the study, cost recovery occurs during the course of the apprenticeship and in some cases within a year from the start of the programme. While the number of SMEs covered under the study is small; nevertheless, this research offers empirical evidence that apprenticeship makes business sense for SMEs in developing countries.

Sources: Centre for Economics and Business Research (2013) Productivity Matters: The impact of Apprenticeships on the UK economy (London); Rothboeck, S. (2014) Using benefit cost calculations to assess returns from apprenticeship investment in India: selected SME case studies. Unpublished report submitted to the ILO.

4. Cost-effective delivery of vocational training

The costs and effort required for education/training institutions to catch up with fast-changing technologies and ever-changing skills demand in the labour market are substantial. Anticipating future skill needs, equipping vocational schools and training centres with the latest facilities and tools, updating curricula and training modules, and re-training teachers and instructors easily inflate the costs. And this is not a one-off investment.

In view of this, if the government brokers a partnership between education/training institutions and industry, the former can tap into the resources of companies (e.g. equipment and facilities, accumulated know-how) and the latter can also benefit from the partnership as discussed above. The government ministries/agencies in charge of vocational education and training may wish to explore opportunities to utilise existing resources before embarking on costly reforms of the TVET sector.



Forging a partnership between education/training and industry permits tapping into existing resources and know-how of the industry, allowing cost-effective delivery of vocational training. The government can play a catalytic role in establishing apprenticeships.

Table 2 – Costs and Benefits of Quality Apprenticeship

| | Costos | Beneficios de corto plazo | Beneficios de largo plazo |
|--------------------|--|---|--|
| Apprentices | <ul style="list-style-type: none"> •Take lower wages •Opportunity costs (lost income for unskilled work) | <ul style="list-style-type: none"> •Job opportunities •Level of income •Job satisfaction •Dropping out is less likely in VT than in general education | <ul style="list-style-type: none"> •Flexibility and mobility •Lifelong learning (more likely to receive training and new skills in life) |

| | | | |
|-------------------|--|---|--|
| Employers | <ul style="list-style-type: none"> •Wages (and other labour costs) higher than productivity •Miscalculations and mistakes made by inexperienced workers, as well as resources and time of experienced workers wasted •Apprenticeship equipment (materials, clothing, instructors' salaries, administration) | <ul style="list-style-type: none"> •High productivity resulting from a well-trained workforce •Cost savings in external recruitment of well-trained workers (including company induction times) | <ul style="list-style-type: none"> •Supply benefits (E.g.: Improved image) •Less turnover (no need to train new workers) |
| Government | <ul style="list-style-type: none"> •Subsidies for on-the-job apprenticeships •Financial benefits (tax credits) | <ul style="list-style-type: none"> •Cost savings in social benefits (unemployment costs owing to poor school-to-work transition) | <ul style="list-style-type: none"> •Positive externalities arising from productivity gains due to better training •Increased tax revenues owing to higher income |

Source: European Commission, 2013a, adapted from Hoeckel, K., 2008, Cost and Benefits in Vocational Training. OECD

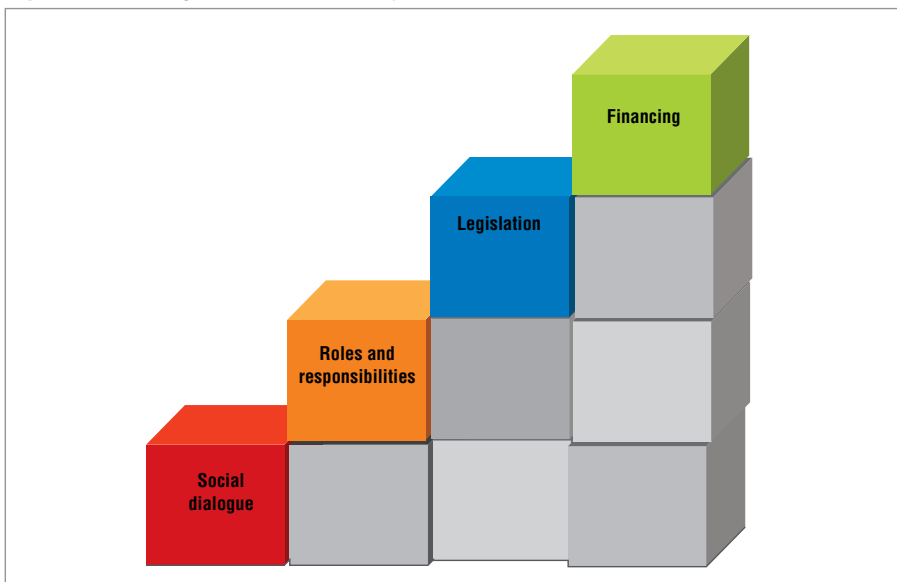
Building blocks of a quality apprenticeship system

While there are multiple and varied approaches to offer young women and men a combination of education and work experience, successful quality apprenticeship systems share several features. ILO considers these features as the building blocks of a quality apprenticeship. Remember, there is no single standardised “one-fits-all” model of apprenticeships.



There is no universal apprenticeship model: apprenticeships must be tailor-made!

Figure 2. Building blocks for a Quality Apprenticeship



Building block 1: Social dialogue

“When you look at apprenticeship systems around the world, the most important success factor is practically always social dialogue. Apprenticeships work because they link classroom and workplace training and because they tap the knowledge of both employers and workers on what training is needed and how to deliver it” (ILO Director General Guy Ryder, 2014)¹.

Commitment, active participation and collaboration of the government and employers’ and workers’ organisations, as well as training institutions, through the design, implementation and monitoring of apprenticeship schemes are essential.



Social dialogue is the engine of any apprenticeship system. Collaboration of stakeholders is an essential factor for successful apprenticeships.

Building block 2: Clear roles and responsibilities

The division of labour between schools/training centres and industry must be clear. Enterprises must be in the driving seat, and education/training providers must work closely with enterprises in order to avoid a break between schooling and company-based training. Employers may take a leading role in the governance of apprenticeship programmes in their design and implementation. Chambers of commerce or associations of small business owners may help small enterprises by sharing knowledge (e.g. mentoring, training modules) and training workshops (e.g. apprentices receive practical training in several workshops).

In addition, trade unions can play a role, for instance, in safeguarding the rights, wages, working conditions, welfare and occupational safety and health of apprentices. Workers’ and employers’ organisations also engage in the governance of apprenticeship systems. Employment services can play an important role in linking the different partners and matching apprenticeship positions and interested young people.



Employers’ leadership ensures the quality and labour market relevance of apprenticeships, while other parties also contribute to their success.

Box 5. Steering apprenticeship – Case of the German BIBB

The Federal Institute for Vocational Education and Training (BIBB) is Germany’s centre of excellence for research, development and advisory work aimed at identifying future vocational education and training (VET) tasks, promoting innovation and developing new, practice-oriented solutions for initial and continuing VET.

The Board provides a cross-section of expertise on all issues relevant to VET in Germany, and acts as the statutory advisory organ of the Federal Government. Delegates representing employers and employees, the federal states (Länder) and the Federal Government work together on the Board, each group (or “bench”) having equal voting parity. One representative each from the Federal Employment Agency, the German local authorities’ associations and the BIBB Research Council may also assist in the Board’s decision-making in an advisory capacity. The Board’s tasks include

¹ - Quality apprenticeships “gold standard” to get youth into decent jobs. Presentation by ILO Director-General at a high-level meeting in Winterthur, Switzerland, 2014. Available at: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_307451/lang--en/index.htm

adopting the annual research programme and the Institute's budget, making recommendations on the promotion and development of VET, and commenting on the draft of the Federal Government's Annual Report on VET.

Source: BIBB (2016). Available at: <http://www.bibb.de/en>

Building block 3: A sound legal framework

Quality apprenticeships are, firstly, work placements and apprentices are therefore considered as workers, not as students, and given an employment contract. Formal laws, regulations and collective agreements ensure decent working conditions (e.g. wages, working hours, occupational safety and health) for apprentices, and avert exploitation. Employment law and contracts governing apprenticeships should cover all aspects of working conditions including wages, education/training at school, and social protection coverage. Assessment at the end of the apprenticeship should be tripartite and certification of the successful completion of an apprenticeship should be recognised nationally.



Apprenticeships are work placements and require a sound legal framework in order to avoid abusive practices.

Building block 4: Shared financing

Costs, as well as benefits, of implementing apprenticeships should be shared between firms, apprentices and the government. Typically, companies finance the biggest share (e.g. costs of in-company training and apprentices' salaries), while the government runs vocational schools and covers the teachers' salaries. To support companies that offer apprenticeship positions, apprenticeship funds are established in many countries. For instance, all employers are required to pay into the fund and host companies receive funds per apprentice they take on. The government may also introduce tax incentives for host companies (see Box 6).



Full public funding is not an option in the long run – shared financing is necessary to ensure ownership and sustainability.

Box 6. Funding mechanism of quality apprenticeship in Denmark

Employers and the government co-finance the apprenticeship system in Denmark. The Ministry of Education provides subsidies to institutions that offer theoretical and practical education as part of apprenticeship programmes, in proportion to predetermined unit costs and the number of students (taximeter system). Both public and private employers annually contribute a fixed amount per employee to the Employers' Reimbursement Fund. The fund reimburses the wages paid by companies while apprentices are at school.

Source: Ministry for Children, Education and Gender Equality of Denmark (2016), Fact sheet on Initial Vocational education and training programmes (Copenhagen). Available online at: <http://eng.uvm.dk/Fact-Sheets>

Part 1:

Concepts and Elements

■ Part 1: Concepts and Elements

A. Benefits of quality apprenticeships

Introduction

Quality apprenticeships involve multiple stakeholders and thus require intense collaboration and coordination between actors for the training programme to be successful. Nevertheless, if designed and implemented well, quality apprenticeships can generate a “win-win-win” relationship for the parties involved. The benefits that may materialise for three main actors, enterprises, trade unions and governments, are described in this section.

Enterprises

While small- and medium-sized enterprises (SMEs²) and large enterprises deploy different methods of production, they may both find quality apprenticeships an effective scheme of developing a skilled workforce irrespective of company size. It is true that large companies have greater means of offering apprenticeship positions (e.g., human resource departments and training managers, in-house training centres and trainers); nevertheless, it is of importance that SMEs – which constitute in many countries the large majority (often more than 90 per cent) of enterprises – fully benefit from the training system. Since SMEs may have relatively limited means of developing skills among their workforce and tend to face more difficulties in recruiting skilled workers, a suitable training mechanism must be put in place in order to help meet their skills demand. In fact, groups of SMEs in the same sector, coordinated by local chambers of commerce, offer quality apprenticeship programmes and benefit from the joint skills development effort.

It is in the interest of enterprises that apprenticeship programmes follow established occupational profiles and skills standards to ensure that all graduates are able to perform up to the same standards. This way, even though apprentices are trained in different companies, each apprentice will be able to perform more or less the same type of tasks. This reduces the risk of poaching the qualified workforce between companies and ensures that a pool of qualified workers is available for all companies wishing to recruit new staff.

“If you cannot find skilled labour in the community’s talent pool, you have to build it.”

BMW Training Manager in South Carolina, USA, on the apprenticeship programme

2 - The definitions of SMEs “vary by country and are usually based on the number of employees, the annual turnover or the value of assets of enterprises. Typically, microenterprises are defined as enterprises with up to 10 employees, small enterprises as those that have 10 to 100 employees, and medium-sized enterprises as those with 100 to 250 employees” (ILO, 2015, Report IV: Small and medium-sized enterprises and decent and productive employment creation, International Labour Conference, 104th Session, Geneva).

Benefits for enterprises

- 1) **Quality apprenticeship is a cost-effective way of securing well-trained personnel:** Apprenticeship training enables companies to train young workers, technicians and professionals so that they learn the skills required by the occupation and meet the needs of the company. After completing the training programme, apprentices become experienced, well-trained and full-fledged members of staff, knowledgeable about the company workflow. Apprenticeship programmes ensure that employers can rely on a pool of young workers trained according to the established skills standards of the profession.
- 2) **Saving on recruitment costs:** Companies can use apprenticeships as a recruitment strategy to meet future staff needs. They can save on recruitment costs as they can select among the candidates and among the best apprentices (since they might not recruit all the apprentices after they have finished their training).
- 3) **Integration of theory and practice:** Young people acquire the practical skills needed by companies in the setting of real work and business processes, combined with theoretical knowledge. Theory and practice are integrated in one comprehensive learning process, which culminates in the acquisition of a full set of competences. In quality apprenticeships, skills standards and professional profiles are defined according to the practical requirements of employers.
- 4) **Apprenticeships build personal engagement and trust:** The personal commitment of the individual engaging in an apprenticeship in an SME tends to be strong, as it is a complex process which combines learning, training and personality development.
- 5) **Addressing newly emerging skills and market needs:** Apprenticeships offer the possibility to adapt and develop training programmes that respond to emerging skills needs. Work specialisations, as well as familiarisation with new technologies, equipment and work processes, can take place during the in-company training. This does not exclude the need for dedicated and more specialised continuing training courses. Both programmes enable companies to adapt quickly to changes in technology, demand and regulated standards (e.g. environmental standards), while young people can be equipped with new skills.
- 6) **Apprentices – a potential source of innovation:** Skilled workers, technicians and production engineers who have gone through an apprenticeship are often the backbone of innovation in a small-scale company, as they bring in fresh knowledge, dynamism and creativity.
- 7) **Staff mobility in companies with a global presence:** Nowadays staff must be mobile, as large companies have branches in many countries. By training apprentices, companies can rely on their human resources to fill potentially key positions elsewhere.
- 8) **Vocational training and quality apprenticeship fund:** In a number of countries, companies which train apprentices can benefit from the financial support of a vocational training fund. They may also benefit from a reduction in their social security contributions or taxes, according to the rules and regulations in the specific country.

Trade unions and workers' representatives

At the national level, the trade union confederation(s) participates in tripartite or multi-party decision-making or consultative bodies that define the VET policies and strategies, including apprenticeships. Trade unions also contribute to the design of professional profiles and training programmes. In some countries, the workers' representatives participate in the examination committees (Germany) or in the governance of public training institutions (Denmark and the Netherlands).

It is recommended that trade unions establish a technical unit on skills development with professionals who are knowledgeable in the apprenticeship programme field. These professionals are respected as equal partners by other stakeholders, such as the employers' organisations and relevant government agencies (e.g. education, employment, agriculture, health). In countries like Denmark, Germany and Switzerland, trade unions invest considerable resources to run dedicated VET departments, staffed with competent professionals.

Benefits for trade unions and workers' representatives

- 1) **Shared gains in productivity through better working conditions:** Workers collectively benefit from the skills acquired by a new generation of productive workers. A gain in productivity gives the workers' representatives at the company, industry and national level stronger bargaining power in collective bargaining and wage negotiations.
- 2) **Attracting new members:** By providing relevant information, defending apprentices' and workers' rights, and by representing apprentices in negotiations and protecting their rights, trade unions can make apprentices aware of the mission and relevance of their union and attract them as new members.
- 3) **Enhanced training culture and investment in learning:** A successful demonstration of the effects of training on productivity enhances the learning culture of a company and may induce further investment in training. Apprenticeships are a proven mechanism for cost-effective skills development. They involve a VET institution and help bring VET and company work closer. By implementing apprenticeship training and realising the benefit of skills development, employers' interest and commitment to learning may be strengthened.

Government

Multiple education and labour ministries and public agencies of the central or regional/provincial government are involved in apprenticeship. In addition, ministries in other areas run training centres in their technical domains and shape country-level policies relevant to apprenticeship (e.g. industrial policy, agricultural policy, tourism policy, transport policy). The government coordinates professional and vocational profiles, training programmes, VET teacher education and training, training of in-company tutors, examinations and certification. In some of the traditional apprenticeship countries (Denmark, Germany, Switzerland), some of these functions have been handed over to the chambers of commerce and professional associations.

Apprenticeship may be embedded in national legislation, but overseen and monitored by a specialised technical body, such as the Federal Institute for Vocational Education and Training

(BIBB) in Germany, the Centre for Study and Research on Qualifications (CEREQ) in France, the Federal Institute for Vocational Education and Training in Switzerland.

The government operates at different levels in countries where skills development is decentralised; responsibilities for apprenticeship are shared between the different administrative levels. For instance, local governments may manage and finance the construction and maintenance of schools and training centres, as well as the purchase and maintenance of equipment.

Benefits for government

- 1) **Quality apprenticeships can ease the pressure on VET institutions:** With incessant innovation in technology and changing patterns of production, the skills demands of companies keep changing and increasing. Meeting such demands with limited public funding is a challenge. Since apprenticeship training combines school-based learning at a VET institution and practical training at a workplace, apprentices use VET institutions much less than full-time students. This means that the same VET facility and teaching staff can train a higher numbers of students.
- 2) **Quality apprenticeship programmes cost less for VET institutions:** Apprenticeships rely on a cost-sharing principle, where the companies bear the costs of practical training.
- 3) **Apprenticeship programmes match the skills needs of companies better than school-based VET:** Apprenticeship schemes are often better adapted to the needs of companies since the training programmes are jointly developed and implemented between VET institutions and companies. By reducing the skills mismatch in the labour market, apprenticeships can help reduce unemployment. Governments can make savings on labour market policy expenditure such as unemployment benefits.

B. Roles and responsibilities of key actors

Introduction

The complexity of designing and implementing quality apprenticeships stems from the fact that many actors are directly or indirectly involved in the process. The fact that quality apprenticeships involve various institutions and many stakeholders necessitates continuous interaction among actors. Over time, this forges a common understanding and a collective spirit concerning quality apprenticeship. This is exactly what holds the system together. In other words, intense and sustained collaboration between these actors makes quality apprenticeships successful.

This chapter sheds light on selected key actors and describes their roles and responsibilities in order to paint an overall picture of how quality apprenticeships are coordinated and function. Some actors are directly involved in apprenticeship programme implementation, while others are involved in the national apprenticeship system (i.e. at the macro level) and take part in the policy-related decision-making and coordination of actors.

It is important to note that the descriptions of roles and responsibilities in this chapter are merely indicative, and thus should not be treated as a rigid model of quality apprenticeships.

Institutional settings differ country by country; therefore, the roles and responsibilities of the key actors may vary.

Key actors directly involved in quality apprenticeships are:

- Youth and apprentices
- Enterprises that train apprentices
- In-company trainers
- VET institutions offering apprenticeship courses
- VET teachers
- A local or regional co-ordination body
- Employers' organisations³
- Trade unions, workers' representatives in enterprises
- Ministries and public administrations in charge of education and employment

The roles of these key players mentioned could be summarised as follows:

- Youth and apprentices acquire skills through the training programmes. Enterprises hire apprentices who undergo practical training at the workplace.
- In-company trainers develop the skills of apprentices and organise the training programme in the company.
- VET institutions and VET teachers provide apprentices with the theory, essential knowledge and skills required for the trade.
- Local coordination bodies ensure that apprenticeships programmes run smoothly in the relevant geographic region. They may be a chamber of commerce and industry or an administrative office. In some countries, VET schools or colleges can assume this role.
- For our purposes, employers' organisations include national and sectoral employers' associations, chambers of commerce and industry, craft chambers and professional associations. Employers' organisations are the motor that drives any apprenticeship system. Experience shows that the system will not work without the strong buy-in of employers. They may also play a role in authorising companies to undertake apprenticeship training.
- Trade unions and workers' representatives safeguard against labour exploitation under the guise of training programmes and assure appropriate working and training conditions for apprentices.
- Ministries and the public administrations in charge of education and employment develop rules and regulations on apprenticeship. Since successful completion of apprenticeships leads to a nationally recognised skills certificate, public authorities set quality standards and assure the effectiveness of apprenticeship programmes. They are often involved in the endorsement of competency standards for occupations, the accreditation of proposed training schemes, exams and the issuance of skills certificates. In certain cases, these roles are in part assumed by or are fulfilled in cooperation with business associations.
- In some countries, national tripartite or multi-partite VET councils shape the national policy for VET, including apprenticeships.

³ - For our purposes, employers' organisations include national and sectoral employers' associations, chambers of commerce and industry, craft chambers and professional associations. Relevant information is provided in the initial list of key actors.

Among other actors involved in quality apprenticeship, we can include institutions that teach and train teachers and instructors (for example, universities and teaching colleges), and that train teachers in both general and technical subjects.

While not included as key players in this chapter, national VET development institutes, or national institutions responsible for curriculum development that oversee the technical and content-related aspects of VET add value to quality apprenticeships.

Main roles and responsibilities of key actors

Youth and apprentices

Before entering into an apprenticeship:

- Understand the aims, strengths and weaknesses of the apprenticeship programme.
- Gather information about education and training opportunities, as well as the employment potential in order to make an informed decision over career choice.
- Explore different options – general education, VET training, apprenticeship – compare them and discuss the different pathways with peers, parents and career counsellors.

Once enrolled in a quality apprenticeship programme:

- Keep a positive attitude and be ready to learn and work.
- Engage fully and take on responsibilities gradually as the training progresses.
- Follow carefully the safety instructions and protect the installations of the enterprise and VET institution.
- Learn to assess their learning progress.
- Build confidence and be open with the trainer in the company and the tutor at the VET institution.
- Think about the career choice after completion of the training: transition to the labour market and/or the need for further education or specialisation.

Enterprises that train apprentices

- Train apprentices in their own interest with the objective of filling current or anticipated future skills shortages and incorporating “fresh blood” – young persons who can constitute a core skilled workforce for the company.
- Train apprentices in the interest of society, as the apprenticeships on offer add to the overall training offer and rejuvenate the corps of skilled workers, employees and self-employed persons.
- Train the apprentice in the occupation laid down in the training contract or other agreement. The occupation must be identical to those in the national catalogue of occupations and professions.
- Train the apprentice according to the established training programme agreed with the partners (e.g. VET institution, local apprenticeship network coordinator).
- Comply with the applicable occupational safety and health regulations.
- If the apprentice is under age as defined by the labour code (note: age thresholds differ

by countries), respect the regulations for youth at work (e.g. no night shifts, no overtime work).

- Appoint appropriate trainers, and allocate to them the necessary budget, working hours, and a degree of autonomy.
- Conclude an apprenticeship contract with each apprentice using an established template. Inform the labour council in the enterprise (workers' representation) and encourage them to welcome the apprentices.
- Collaborate actively with the partner VET institution(s), the coordination body of the local apprenticeship network and with the public administrations in charge of education and employment.
- Ensure information-sharing and collaboration of all departments and staff involved in apprenticeship training (e.g. the human resources department and the heads of the departments in which apprentices learn and work).
- Endeavour to resolve conflicts, if they arise, by mutual agreement.
- Pay the apprentice a salary or compensation according to the standards set in the relevant collective agreement concluded by employers' and workers' representatives (trade unions).
- Provide for full social security coverage in the same way as for employees of the enterprise.
- Protect the apprentices actively against abuse, such as harassment, mobbing and sexual conflict.
- Open a certain share of apprenticeship places to people with disabilities and other difficulties. Take the necessary measures to accommodate the needs of apprentices with disabilities.

In-company trainers

- Assist the enterprise management and human resources department in the selection of suitable candidates for the apprenticeship programme.
- As focal point for the apprenticeship programme, coordinate with other departments and workers in the enterprise, as well as with external entities involved in the training (e.g. VET institution, public administrations on education and employment).
- Plan, organise and implement the apprenticeship training in the enterprise.
- Ensure that the apprentices work and learn in the occupation as specified in the training contract or other agreement with the training partners (e.g. VET institutions).
- Monitor, assess and record the progress of the apprentices' skills acquisition.
- If an apprentice is younger than 18 years old, comply with the regulations for youth at work (e.g. no night shifts).
- Inform and build the capacity of the workers with whom apprentices will work and learn from during the practical work phases.
- Keep the labour council in the enterprise (workers' representation) informed regarding the apprenticeship training.
- Collaborate actively with the partner VET institution(s) and coordination body.
- Maintain good working conditions and protect apprentices from harassment, mobbing,

and other undesirable behaviour.

- Prevent and resolve conflicts by mutual agreement. If not resolved, follow the predetermined conflict settlement procedures (e.g. in-company staff regulations, collective agreements, the labour code).
- Provide adapted care for apprentices with difficulties, handicaps and other limitations.

VET institutions offering apprenticeship courses

- Contribute to the design of apprenticeship training programmes for selected occupations.
- Support the partner enterprises in establishing an effective in-company training plan, following the overall objectives of the apprenticeship training programme.
- Implement the institution-based learning components of the apprenticeship programme.
- Assign and build the capacity of the teachers teaching the apprenticeship classes, taking the pedagogical and didactical aspects of apprenticeships into account.
- Nominate one VET teacher as the focal point for interaction and coordination with the external partners.
- Conduct tracer surveys in order to learn about the career pathways of graduates and receive useful feedback on training programmes. Improve the learning content and teaching methodologies.

VET teachers

- Plan, organise and implement the apprenticeship training in the VET institution within the framework of the overall training programme.
- Ensure that apprentices understand the theory and key concepts required for the trade.
- Interact with their counterparts in partner enterprises in order to integrate adequately the enterprise training module and the VET institution training module.
- Allocate sufficient work time to coordinate with the partner enterprises.
- Regularly monitor the learning progress and skills development of apprentices.
- Regularly update their knowledge in the field they teach, adapt new teaching methods (e.g. learner-centred teaching methods and multi-disciplinary co-teaching).
- Undergo internships in partner enterprises in order to update their understanding on the skills requirements of the trade and work organisations. Experience personally the learning environment of apprentices in enterprises.
- Provide adapted care for apprentices with learning difficulties, disabilities and other limitations.

Local or regional co-ordinating body

- Facilitate cooperation between enterprises and VET institutions.
- Provide templates of cooperation agreements between enterprises and VET institutions and of apprenticeship contracts.
- Coordinate the actors involved in apprenticeships: a group of enterprises, one or several VET institutions, and a supra-enterprise vocational training centre for specific occupations (e.g. the occupations in the building and construction sector).
- Establish and maintain close relations with the regional administration in charge of supervising VET institutions and with the body in charge of exams and certification (depending on the country, it may be chambers of commerce and industry, professional organisations, or the public skills certification agency).
- Encourage and facilitate the quality improvement of apprenticeship training in enterprises and VET institutions.
- Steer the apprenticeship scheme like a project through the different phases, from design and pilot implementation to the regular running of apprenticeship training by the regional and local partners.
- Draw up the financial plan for the apprenticeship schemes and negotiate the contributions of each party.
- Ensure that the training curricula are developed and in place for the selected training occupations, and that each participating enterprise and each participating VET institution formulates and agrees on their specific training plans.
- Propose methodologies for monitoring, evaluation and quality assurance.

Employers' organisations

- Play a leading role in the building and running of the apprenticeship system.
- Engage in social dialogue and actively participate in policy-making regarding apprenticeships.
- Build confidence and trust and maintain good relations among key actors, such as government and trade unions, as quality apprenticeships are a multi-stakeholder scheme.
- Strengthen technical capability so as to advise policymakers and assist member companies. Technical work may include: training needs assessment, design of training programmes, implementation of apprenticeship schemes, assessment of apprentices, certification, as well as preparation of in-company trainers and VET teachers.
- Inform and encourage companies to offer apprenticeship positions.
- Where appropriate, incorporate apprenticeships in the agenda of collective bargaining and collective agreements.
- Support the design and pilot implementation of new apprenticeship programmes, from design and implementation to monitoring and evaluation of the programmes.
- Generate and maintain occupational competency and qualification standards.
- Prepare and administer skills certification exams.
- Provide training to member companies.

Trade unions and workers' representatives in enterprises

- Represent the interests of the workers in the building and running of the quality apprenticeship system. In particular, assure appropriate working and training conditions for apprentices (e.g. with regard to occupational safety and health, wages and allowances and working hours). Prevent exploitative practices under the guise of training.
- Engage in social dialogue and actively participate in policy-making regarding apprenticeships.
- Develop and maintain good working relations with other key stakeholders such as trade unions and government.
- Strengthen professional capacity in the areas of designing, implementing and monitoring apprenticeship programmes.
- Negotiate the terms of quality apprenticeship processes in collective bargaining.

Ministries and public administrations in charge of education and employment

- Formulate and adopt a national strategy to promote apprenticeships in collaboration with the social partners and other stakeholders.
- Incorporate quality apprenticeship in the national development plan and/or the national employment policy where appropriate.
- Promote social dialogue on quality apprenticeship programmes, establish a formal coordination mechanism (e.g. task an existing body with the coordination role or set up a new body).
- Adopt an appropriate legal and regulatory framework in consultation with social partners and enforce it as necessary.
- Implement agreed funding arrangements: collecting levies, while providing subsidies and incentives.
- Accredite VET institutions and programmes based on the established quality standards.
- Run public VET institutions. Supervise public and private provision of VET.
- Train VET teachers or supervise their training.

C. Financing

Introduction

Establishing an optimal financing arrangement among the parties concerned is a core aspect of designing quality apprenticeship programmes. An immediate question is who shares the financial burden and how to determine a fair distribution of costs among the relevant stakeholders. In considering a cost-sharing arrangement, one may wish to consider the costs and benefits of apprenticeships, and how they accrue to employers, apprentices and the government.

Another key factor in designing the financing arrangements is incentives and their sources of funding. Depending on the socio-economic context surrounding skills development and desired policy outcomes, the government may allocate financial incentives to induce desired actions to promote quality apprenticeships. Incentives may be financed by tax payers (i.e. public expenditure on promoting apprenticeships) or by employers (i.e. a levy) and distributed to apprentices and/or employers that train apprentices. There is a great variety of incentive schemes existing in different countries.⁴

This section first maps out the costs and benefits of apprenticeship training, which inform negotiations on the financing arrangement. Then it presents some results of recent cost-benefit analysis of quality apprenticeship and considers the key factors determining the costs and benefits of apprenticeship training. Various schemes for incentivising actors and their sources of funding will also be presented to enrich the discussion on financing quality apprenticeships.

Cost-benefit structure of quality apprenticeships

Table 3 below summarises the costs and benefits – both financial and non-financial – of apprenticeships by actor: companies, apprentices and the government. Some cost and benefit factors may not be applicable, depending on the apprenticeship scheme (e.g. school tuition paid by companies, subsidies by the government).

Non-financial, latent benefits and costs are rarely quantified and thus, many studies exclude them from cost-benefit analysis. It is helpful to consider a comprehensive picture of the costs and benefits of quality apprenticeships when negotiating a cost-sharing arrangement, and to take a sufficiently long period into account after completion of the programme, because the positive impacts of training materialise in the long-run.

Table 3. Cost and benefit items of quality apprenticeships (QA) by actors

| | | <i>Costs</i> | <i>Benefits</i> |
|--------------------|---------------------------|---|---|
| <i>Employers</i> | During the apprenticeship | <ul style="list-style-type: none"> •Wage and social security premiums (apprentices' and supervisor's) •Training materials, space, equipment •School tuition •Recruitment and administration costs | <ul style="list-style-type: none"> •Apprentices' contribution to the production of goods and services •Subsidies (e.g. tax credits) •Payments from training fund •Public image, social status •Introduction of new knowledge and technology through the education of apprentices |
| | After the apprenticeship | <ul style="list-style-type: none"> •Wage and social security premiums | <ul style="list-style-type: none"> •High productivity of skilled workers •Savings from reduced turnover (e.g. recruitment and initial training costs) |
| <i>Apprentices</i> | During the apprenticeship | <ul style="list-style-type: none"> •Possibly lower wages vis-à-vis working in an unskilled job •Opportunity cost (i.e. lower wage) in the case of employable youth •Negative social perception of VET | <ul style="list-style-type: none"> •Wage, social security coverage •Higher employability thanks to skills certification |
| | After the apprenticeship | | <ul style="list-style-type: none"> •Higher wages •Higher likelihood of employment |

4 - Financial definitions available in the glossary

| | | | |
|------------|---------------------------|--|---|
| Government | During the apprenticeship | <ul style="list-style-type: none"> •Subsidies and incentives •Running costs of public VET institutions | <ul style="list-style-type: none"> •Higher tax revenue (e.g. payroll tax, VAT) •Savings on social security payments •Savings on employment programmes (e.g. active labour market programmes) |
| | After the apprenticeship | | <ul style="list-style-type: none"> •Higher tax revenue (e.g. payroll tax, VAT) •Savings on social security payments •Savings on employment programmes (e.g. active labour market programmes) |

Note: Italicised items represent non-monetary or latent cost/benefit.

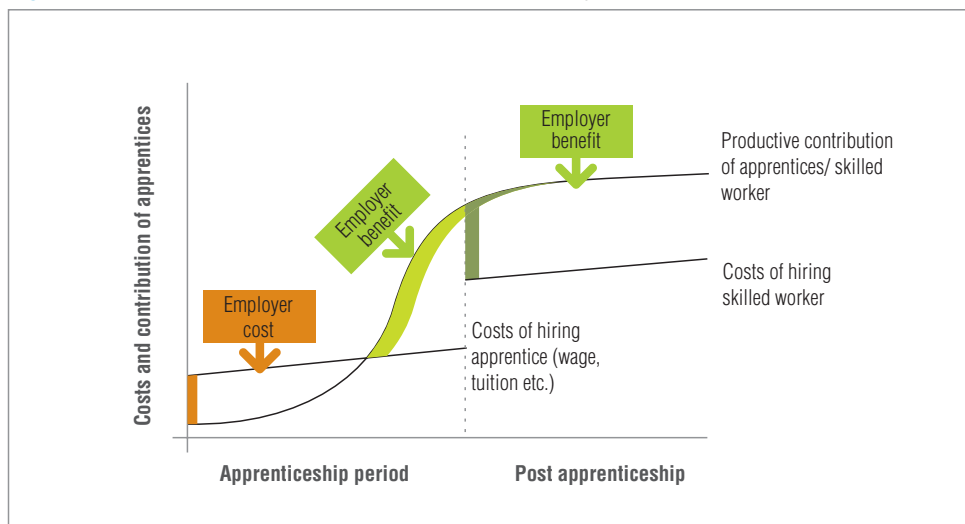
Source: Prepared by the authors

Apprenticeship programmes vary in many aspects (e.g. duration, technical complexity, degree to which apprentices engage in production) and so do the costs and benefits. Hence it is not possible to draw decisive conclusions on the costs and benefits of quality apprenticeships for each party. This section, instead, presents some recent research outcomes and highlights key factors that influence them.

a. Employers

Generally speaking, apprenticeship training represents a net cost to employers in the beginning because the initial costs of training (e.g. time spent by supervisors, wages and allowances, training materials consumed) outweigh the initial contribution of apprentices to the production of goods and services. As apprentices learn skills and become more productive, costs and benefits eventually equalise and employers start gradually recovering the initial investment in training. Figure 3 shows a stylised cost-benefit relation during and after an apprenticeship programme.

Figure 3. Cost and benefit of apprenticeships to employers



Source: Adopted from Lerman R. (2014). "Do firms benefit from apprenticeship investment?" IZA World of Labour, p. 55.

Most cost-benefit analyses of apprenticeships reveal that companies recoup the cost before the end of the training programme, or shortly after if the companies retain trained former apprentices. For instance, a study in Switzerland that surveyed about 2,500 companies revealed that approximately two-thirds of the companies recouped the cost by the end of the apprenticeship programmes (Strupler and Wolter, 2012). Overall, companies invested 5.35 billion Swiss francs (CHF) in apprenticeships and derived a net benefit of CHF 474 million, which represents a return on investment of 8.9 per cent.

It is important to note that costs and benefits varied by occupation and programme duration. In the case of the enterprises participating in the Swiss study, apprenticeship training for electronics engineers and mechanical engineers were a net cost to companies because of the high costs linked to the technically intensive training, while training for occupations such as electricians, dental assistants and painters generated a net profit to the host companies. In Germany, companies on average bore a net cost of EUR 3,596 per apprentice they trained (Schönfeld et al., 2010).

Three important factors affecting cost recovery are: 1) the engagement of apprentices in the actual production of goods and services and their value added; 2) retention of apprentices after completion of the training programme; and 3) the staff costs of supervisors and apprentices. Obviously, the amount of time apprentices spend on value-adding activities influences cost recovery. Retaining apprentices saves future recruitment and initial training costs (i.e. advertising a vacancy, conducting job interviews and the value of lost production until a new hiree reaches full productivity).

Empirical research on hiring costs is not abundant, but available studies indicate that the hiring and initial training costs are estimated to be 2.4-11.2 per cent of the wage bill in the United Kingdom and 3.3 per cent of the wage bill in Switzerland (Muehleemann and Wolter, 2013). Wages and allowances paid to apprentices vary. The minimum wage rates for apprentices are determined by the age of the apprentice and the years of apprenticeship training (Table 4).

Table 4. Minimum monthly pay rates for apprentices in France (% of the minimum wage)

| | Under age 18 | Age 18-20 | Over age 21 |
|-------------|--------------|-----------|-------------|
| First year | 25% | 41% | 53% |
| Second year | 37% | 49% | 61% |
| Third year | 53% | 65% | 78% |

Source: Smith and Kemmis (2013: Table 3.6).

b. Apprentices

Arguably, the most important appeal of quality apprenticeships to young people is the employment opportunities after training and better career prospects thanks to the skills obtained, although apprentices usually receive lower wages/allowances than full-fledged workers. While it is difficult to determine the cost of undergoing an apprenticeship programme because one cannot establish opportunity costs (i.e. the forgone income which the apprentice would have earned if he/she had not participated in the apprenticeship training), a study in the United States estimated differences in lifetime income between workers with apprenticeship experience and those with similar background but without apprenticeships (Mathematica Policy Research, 2012). According to the study, completing apprenticeships

increases a lifetime income by USD 301,533 (USD 240,037 in earnings and USD 61,496 in fringe benefits). Research in Italy revealed that quality apprenticeship programmes lower the probability of unemployment and increases the chances of obtaining a permanent contract (European Commission, 2013).

c. Government

Given that apprenticeships generally result in lower unemployment and higher earnings for workers, governments save on social security and active labour market policy-related expenditures (e.g. unemployment benefit) and gain more tax revenue (e.g. payroll tax, value-added tax). While the savings effect depends on the cost of labour market policies and welfare schemes, recent studies in the United Kingdom and the United States both confirmed significant economic returns to public investment in quality apprenticeship programmes (National Audit Office, 2012; Mathematica Policy Research, 2012).

Cost distribution

If one applies the beneficiary principle, as explained in the previous section, companies, apprentices and the government are all liable to finance apprenticeships in accordance with the benefit they enjoy. While cost-sharing arrangements vary, the most commonly observed pattern of cost distribution, excluding the allocation of incentives, is the following:

- Employers bear the costs of training, wages/allowances, social security premiums;
- Apprentices receive lower remuneration than skilled workers; and
- The government finances institution-based training (e.g. staff costs and the running costs of training institutions, such as the purchase and maintenance of equipment and materials).

Comprehensive and internationally comparable data on the cost distribution of apprenticeships are not available to date. In Germany, employers bear about three quarters of the cost of apprenticeships and the government agencies take the rest (Federal Ministry of Education and Research, 2003).

Incentives to promote quality apprenticeships

While apprenticeships make economic sense to both employers and apprentices in the long-run as discussed earlier, the benefits of apprenticeships do not materialise in the short-run. This might lead to young people and companies underinvesting in apprenticeship training. Thus many governments provide incentives to companies and apprentices in order to promote apprenticeships in various ways. One should bear in mind that, in Germany, where apprenticeships are well-established, there are no incentive schemes except subsidies given to companies that train disadvantaged groups of workers (e.g. workers with disability). If all the actors see long-term benefits, perhaps at some point no incentives will be needed to promote apprenticeships.

Figure 4 presents some examples of incentives and funding mechanisms in selected countries. Some incentive schemes are funded by a levy on employers (e.g. a certain percentage of the wage bill is taxed away to fund skills development activities). Brazil, Denmark, and Tanzania, for instance, have skills development levies in place. Levies for skills development deem

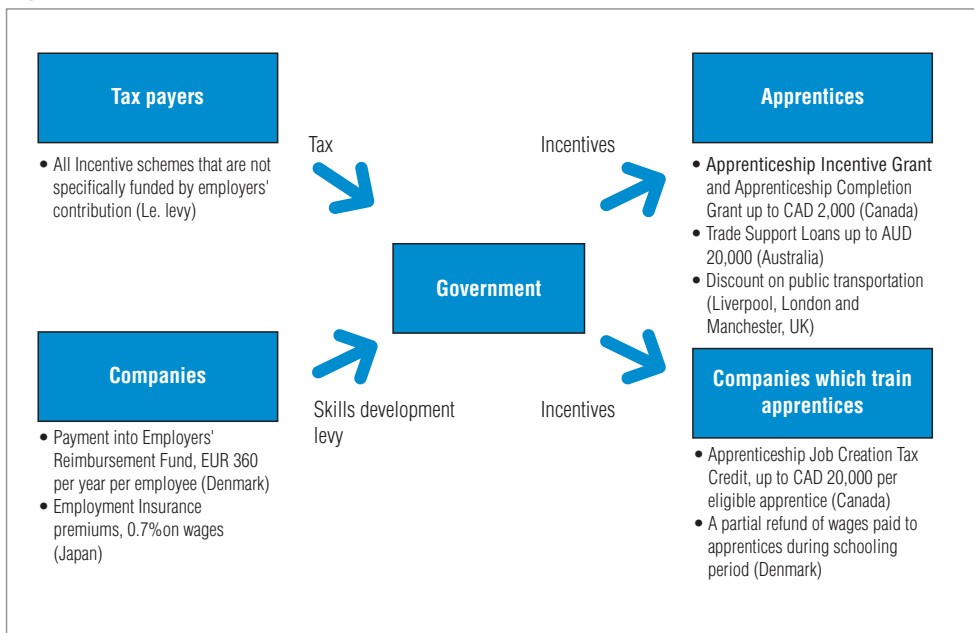
employers as the ultimate beneficiaries and reflect the beneficiary principle. Other incentive schemes are financed by the wider society; governments provide incentives from tax revenue.

Incentives are given to apprentices and/or companies that train apprentices. For instance, Canada offers an 'Apprenticeship Incentive Grant' and 'Apprenticeship Completion Grant' to eligible apprentices. In Australia, apprentices can take out loans on favourable conditions. In fact, successful completion of apprenticeship training reduces the amount borrowed by twenty per cent. Repayment of loans starts when former apprentices begin earning more than a minimum income threshold.⁵ Several large cities in the United Kingdom offer in-kind support to apprentices, such as a discount local transportation card.

Canadian employers who take on apprentices can benefit from a tax credit. The tax incentive is given as a reward for 'job creation' and effectively reduces the cost of training apprentices. In Denmark, all private and public employers are obliged to contribute a fixed amount into the Employers Reimbursement Fund. Employers who train apprentices can claim a partial refund of the wages paid to apprentices during their schooling periods from the Fund.

It is important to note that incentives are often conditional. For instance, governments target certain occupations (e.g. "the National Skills Needs List" in Australia) in providing incentives with a view to addressing skills shortages in priority sectors. Incentives given to apprentices upon successful completion of their training programme (e.g. Apprenticeship Completion Grant in Canada) are another example of conditionality.

Figure 4. Incentives for apprenticeships



Source: prepared by the authors

5 - See Australian Apprenticeships (<https://www.australianapprenticeships.gov.au/content/trade-support-loans>) [accessed on 05 Spetember 2016]

D. Legal framework

Introduction

Quality apprenticeships require a sound legal basis so that the rights and responsibilities of all parties involved are clear and that the minimum standards and conditions of training are respected. The legal framework is of importance since it also defines the governance mechanism of quality apprenticeships. As this section discusses below, one observes no single dominant model but a large variety of legal frameworks and different structures of governance in quality apprenticeships in the world.

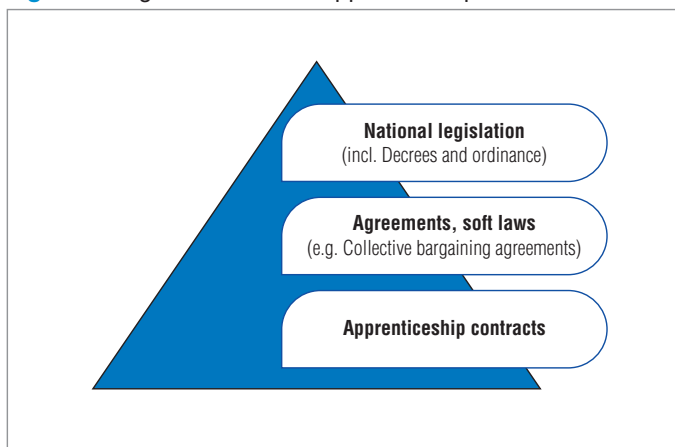
Indeed, regulations on apprenticeships and their scope vary by country. For instance, some aspects that are left to stakeholders' negotiation in some countries are regulated by law in others. This section illustrates the differences in selected legal frameworks and governance models on quality apprenticeships, while noting aspects that are commonly subject to regulation.

Frameworks governing quality apprenticeships

Broadly speaking, legal frameworks on quality apprenticeships consist of three vertical layers (Figure 5). The first layer is laws enacted at the national or state level and enforced throughout the jurisdiction concerned. Laws are often accompanied by ministerial decrees and ordinances which further expand on the regulations on apprenticeships and their application.

Acts, decrees, ordinances, court judgements in countries that adopt the common law system and other forms of rules are part of laws. For instance, the National Apprenticeship Act of 1937 (also known as the Fitzgerald Act) provides the legal basis for registered quality apprenticeship programmes in the United States (US Department of Labor, 2016)⁶. India's Apprentices Act of 1961 is another example of a law on apprenticeships at the national level.

Figure 5. Legal framework of apprenticeships



Source: prepared by the authors

6 - United States Department of Labor (<https://www.doleta.gov/oa/history.cfm>) [accessed on 09 August 2016]

The treatment of apprenticeships in the body of legislation differs by country. Table 5 summarises the differences. Some countries enact a specific law on apprenticeships as the main legal instrument governing this type of vocational training. The aforementioned Acts in the United States and India belong to this category. A law with a broader scope (e.g. the labour code) covers apprenticeships in some countries. For example, Articles 41 to 47 of the Legislative Decree No. 81 of 2015 consolidate regulations on apprenticeships in Italy. Indonesia is a similar case where regulations on apprenticeships are embedded in the Manpower Act of 2013.

■ There exists no separate legislation on apprenticeships in Australia since the same employment conditions as employees apply to apprentices (Smith and Kemmis, 2013). The Australian Government issued a non-legally binding national code of good practices regarding apprenticeships.

Several acts comprise a body of rules governing apprenticeships in France, with each act regulating distinct aspects of apprenticeships. This reflects a gradual evolution of the apprenticeship system and the changing needs of regulations on this type of training over time.

Table 5. Types of legislation on apprenticeships

| Legislation on apprenticeships | Examples of countries |
|---|---|
| Specific law on apprenticeships | <ul style="list-style-type: none"> • National Apprenticeships Act (United States) • Apprentices Act of 1961 (India) • Industry Training and Apprenticeships Act (New Zealand) |
| A law with a broader scope containing regulations on quality apprenticeship | <ul style="list-style-type: none"> • Legislative Decree No. 81 of 2015, of which Articles 41 to 47 consolidate regulations on apprenticeships (Italy) • Manpower Act of 2013, of which Articles 21-30 regulate apprenticeships (Indonesia) • Vocational Training Act (Germany) |
| Several laws comprise a body of legislation on quality apprenticeship | <ul style="list-style-type: none"> • Social Modernisation Act of 2002, Séguin Act of 1987, Gichard Act of 1971 (France) |
| No specific legislation on apprenticeships | <ul style="list-style-type: none"> • The same employment conditions as employees apply to apprentices in Australia |

Source: prepared by the authors

In addition to national legislation, various agreements and self-regulations enrich the body of applicable rules of quality apprenticeship. A collective bargaining agreement on the wages and training conditions of apprentices at the sectoral level is a case in point. It may not be part of the national legal system, but it certainly binds parties to the agreement. A memorandum of understanding on apprenticeship programme implementation between a sectoral business association and a vocational training institution is another example.

Further, “soft” laws are used to regulate quality apprenticeships. Government agencies in charge of vocational education and training (VET), sectoral councils and chambers of commerce and trade sometimes establish codes of conduct and self-regulations on apprenticeship training. These “soft” laws are without legal force but guide the behaviour of stakeholders (e.g. employers and apprentices).

■ The Australian Government published the National Code of Good Practice for Australian Apprenticeships in 2015 with the aim of clarifying the obligations of both parties entering into a training contract.

Last but not least, apprenticeship contracts signed by apprentices, employers and training institutions establish the terms and conditions under which apprenticeship training takes place. Non-disclosure of trade secrets, which may not be explicitly stipulated in applicable laws, may be included in apprenticeships contracts.

The contents of apprenticeship contracts vary but there are commonalities. The ILO has developed a model apprenticeship contract based on a review of the relevant international labour standards and existing apprenticeship contracts in various countries. The model is in the section on “Tools for quality apprenticeships” of this publication.⁷ It can be used with the necessary adaptations to the country context and applicable agreements. The model contract is intended to be signed by the apprentice and representatives of the employer and the training institution; it is valid for the entire period of apprenticeship training.

The following aspects are covered in the model contract:

| | |
|--|---|
| <ul style="list-style-type: none"> • Signatories • Purposes, definition • Training programme • Working conditions: <ul style="list-style-type: none"> - Wages - Social security coverage - Leave entitlement | <ul style="list-style-type: none"> • Roles and responsibilities of the: <ul style="list-style-type: none"> - Employer - Apprentice - Training institution • Dispute settlement and termination of contract • Testing and certification |
|--|---|

Centralised and decentralised governance of apprenticeships

One can also observe centralised and decentralised governance of quality apprenticeship. For instance, training occupations are recognised by ministerial ordinance in Germany, as stipulated in the Vocational Training Act of 2005. In Canada, each province and territory manages its own list of apprenticeship trades, reflecting “the unique needs and expectations of their jurisdiction, and differences in geography, population, industry and economic reality create fundamentally different challenges and opportunities” (Canadian Apprenticeship Forum, 2016⁸). Since skills certification varies across province and territory, there arose a need to generate a nationally recognised certification for certain selected trades known as “Red-seal” trades. Red-seal trades are managed by the Canadian Council of Directors of Apprenticeship, a coordination body among the federal, provincial and territorial governments.

The scope and the degree of detail of laws on apprenticeships vary considerably across countries. Some countries regulate apprenticeships in detail at the national level while others leave wider scope for social partners and other stakeholders to decide at the sectoral or company level. Social partners’ involvement in the governance of quality apprenticeships thus differs across countries. For instance, a strong participation of social partners is a feature of the Danish apprenticeships system. Social partners negotiate at the sectoral level and agree on the conditions and rules governing apprenticeships in the sector including: working hours, training evaluation, wages (including overtime pay), compulsory school attendance, conflict resolution, holidays and days off, as well as work clothing and tools to be provided by the employer (Jeppesen and Siboni, forthcoming). Some of these aspects are regulated by law in other countries, rather than negotiated by social partners.

7 - Apprenticeship contracts in the following countries were reviewed: Botswana, Canada, Denmark, Germany, Lebanon, Morocco, Switzerland, the United Kingdom, and the United States.

8 - Web page: <http://caf-fca.org/apprenticeship-in-canada/apprenticeship-systems/> [accessed on 23 July 2016]

What needs to be regulated and agreed?

As discussed in the previous sections, there exist diverse legal frameworks of quality apprenticeships. The aspects that are regulated by law differ by countries, reflecting differences in the governance and institutional settings surrounding apprenticeships. Obviously, there is no one-size-fits-all model law and legal framework on quality apprenticeships. This Section examines several aspects of quality apprenticeships (e.g. the legal status of apprentices, their wages and contract termination conditions) that are commonly regulated by laws or soft laws and illustrates diverse approaches to regulating apprenticeships.

a. Legal status of apprentices

Some legal systems treat apprentices as employees and entitle them to wages (e.g. Australia, Canada, France, Germany, South Africa, the United Kingdom and the United States), while other systems distinguish apprentices from regular employees, whereby apprentices receive a stipend or allowance (e.g. Egypt, India and Indonesia). The Turkish system finds itself in the middle of the spectrum as it requires wage payment to apprentices, but without granting them employee status (Table 6).

Table 6. Employment status of apprentices and type of remuneration

| Employment status and remuneration | Examples of countries |
|--|---|
| Apprentices paid as formal employees | Australia, Canada, France, Germany, South Africa, UK, USA |
| Apprentices paid, but not as formal employees | Turkey |
| Stipend/allowance only, i.e. not treated as formal employees | Egypt, India, Indonesia |

Source: Smith and Kemmis (2013: p. 14).

b. Termination of the apprenticeship contract

Apprenticeships contracts are often time-bound as the training programmes operate with defined curricula and accompanying schedules. A notable exception is found in Italy, where the apprenticeship contract is open-ended and apprentices become regular employees unless either party to the contract terminates the apprenticeship contract within the notice period at the end of the apprenticeship training programme (European Labour Law Network, 2016).

c. Measures to prevent abusive use of apprentices

Although quality apprenticeships are an important means to equip youth with skills relevant for the labour market and facilitate the school-to-work transition, there have been observed cases of exploitative use of young people under the guise of apprenticeships. Regulations on the use of apprentices seek to avoid abusive practices. For instance, Italy regulates the ratio between apprentices and regular employees by law: companies can hire up to two apprentices for every three regular workers employed. Besides there is a requirement to hire existing apprentices before taking on new apprentices.⁹

⁹ - Companies with more than 50 workers cannot hire new apprentices unless they have employed at least 20% of the company's apprentices in the past three years prior to a new hiring.

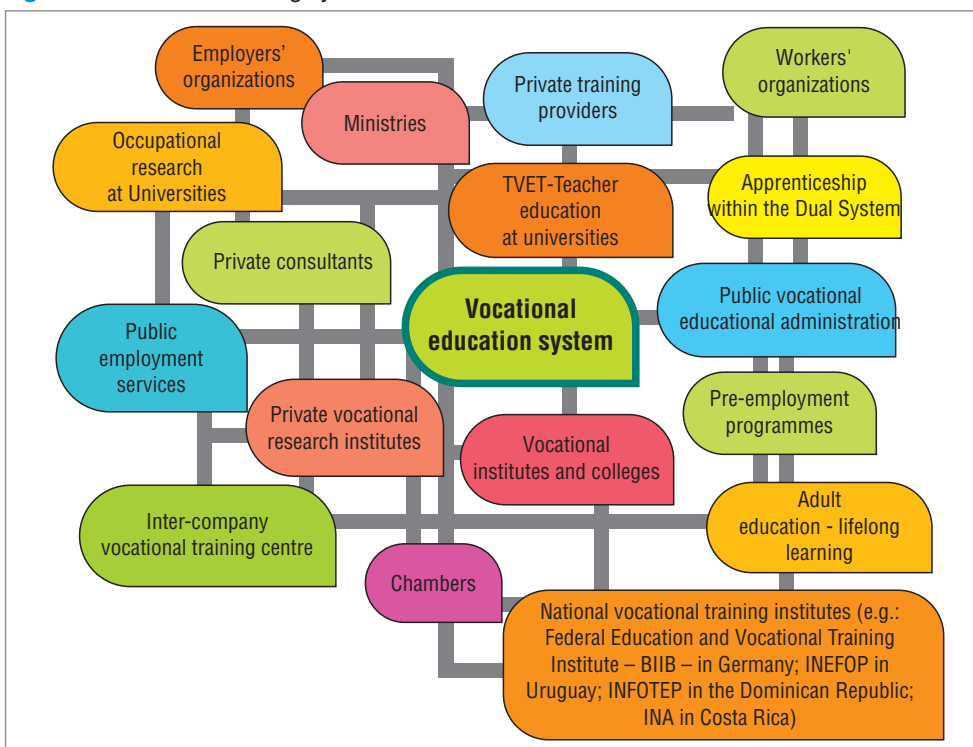
d. Occupational safety and health (OSH)

Since part of apprenticeship training takes place in the workplace, full compliance with the applicable OSH regulations constitutes a common element in regulations on apprenticeships. The Australian soft law on apprenticeships defines “a safe workplace” as also being “free from bullying and verbal, physical, racial and sexual abuse” in addition to the physical safety aspects of a workplace.

E. Topics in Quality Apprenticeships

Curriculum development for quality apprenticeships

Figure 6. Vocational training system



Source: prepared by the authors

The procedure for developing vocational curricula is determined by the constitutive features of quality apprenticeship systems. The curricula for enterprises and schools are, however, only developed when a number of decisions have already been taken; that is, at an advanced stage of the implementation process of quality apprenticeship programmes. Among other things, the following conditions must be taken into account:

I. Classification of occupations

A structured system of vocational training should – at least in the long-term – have an orientation towards the structure of occupations in the national economy as well as a classification of qualifications at the national level. While some countries have developed their own classification systems for occupations and qualifications, the ILO has compiled the International Standard Classification of Occupations (ISCO) and published the latest version in 2008.

The ILO classification includes occupations and qualifications at all levels of the education system. Some countries in Europe that use quality apprenticeship systems have structured the professions into professional areas or sectoral fields.

In the classification of occupational fields, specific professional technical work is classified according to the principal economic sector it relates to – i.e. the professional field. There are, for example, professional fields that relate to electricity, business, chemical engineering and plastics. Professional fields also have the advantage that they are attributable to semi-academic and full academic qualifications, particularly in countries with polytechnic courses.

II. Professional principles and job descriptions

Occupations can be described in terms of the professional tasks that have to be mastered to fulfil them. These descriptions can be obtained completely and authentically by asking those engaged in the occupation, i.e. experienced professionals working in that profession. If, in addition, work and business process analyses can be carried out, the combined findings of the two methods provide a good basis for both the description of the profession, as well as for the development of modern vocational curricula with the aim of increasing the quality of education. If the goal, however, is to develop a new occupational profile, preliminary studies (skills needs analysis) need to be carried out by experts or specialists from different but related professions, or related areas of activity. These are brought together in order to arrive at a description of the new profile and provide the material to develop the professional curriculum.

III. Division of tasks and the role of the two working and learning locations: company and vocational school

The company and VET school have to agree, usually before the development of the curricula, on how the different partners involved in vocational training can fulfil their roles and what tasks they want to take on. During this phase of the implementation process, decisions have already been taken which have a significant impact on the curricula to be developed.

These relate to a distribution of the total training time between the two places of learning: in other words, how often and for how long the students are at the school and company respectively.

After general agreement on this issue, the company and VET school need to agree on further benchmarks. It is important here to negotiate how to integrate technical fields with core and other skills in quality apprenticeships, such as socio-political perspective, physical education, technical vocabulary for languages and entrepreneurship education.

The seasonal impact on the scope of content of vocational curricula is also important: for example, during tourist seasons, the tourism industry in a country may need apprentices to be working in hotels and restaurants, rather than in vocational schools.

Furthermore, regardless of the aforementioned aspects, the vocational school has the special task to promote underachieving and disadvantaged students (in socio-economic terms, or with a disability).

IV. A curriculum for both learning locations or separate curricula?

Both places of learning and working should have the same goal: to support apprentices in developing expertise. In order to approach this common goal, it seems obvious that both places of learning and working should make use of a common curriculum.

Regardless of the broad educational objectives of government – for example in public education – national vocational schools have to meet job training-related tasks and objectives that are different from those of enterprises.

For example, when companies using different technologies, production methods and tools are studied as part of an apprenticeship programme, the vocational school has the responsibility to address these differences and, together with the apprentices, look at them from different perspectives. This means not only looking at the advantages and disadvantages of the technologies, methods and tools presented, but also examining the differences in the organisational structure of the professional and industrial work processes.

As a result, the trainees build up skills that help them cope with occupational requirements in different companies and sectors, but also in dealing with technology from different manufacturers.

A common curriculum relates more to the technical work content, and will also increase cooperation between the learning and working locations as conveyed in quality apprenticeship systems.

The alternative to common curricula is for both learning and working locations to devise separate curricula for schools and companies. However, this also increases the risk that the training is not as holistic and tailor-made as it should be. In order to ensure a minimum level of relevance between school and company training plans, both curricula should be developed in close succession; the school curriculum has to follow the company and not the other way round.

V. A process for the development of business and school curricula

An important prerequisite for the acceptance of vocational curricula is the involvement of social partners in their development. In the long-run, the social partners, together with the government, should jointly take the leading role in terms of the administrative and organisational processes involved in curriculum development.

Before curriculum development can be tackled, employers and employees need to identify the titles of the programme, the duration of the training and apprenticeship salaries, and, if necessary, its assignment to a national level of qualification.

Once all these parameters are agreed upon, the social partners must find a method for the development of the professional, company and school curricula, as well as for the examination and certification procedures. Regardless of whether the curricula are developed using a “developing a curriculum” (DACUM) methodology or another method – for example expert groups and expert consultations – the social partners and government experts need to identify the curriculum content jointly.

For example, when developing vocational curricula for quality apprenticeship they need to create occupational profiles. In these profiles, the job responsibilities of the targeted skilled worker are identified and fully described, as shown in the following statements:

1. A group of experts first develops a training plan for the in-company parts of the quality apprenticeship. In this plan, the content is spread out under didactical principles (from easiest to most difficult) and operationalised for the length of the in-company training.
2. For the development of the school curriculum, a team of experienced and knowledgeable vocational teachers is formed. The school-based part of the curriculum needs to be linked with the in-company part and needs to reinforce the learning that is taking place in the workplace. For example, when apprentices learn how to do house installations as electricians in their companies, this should be reinforced and reflected in school-based learning, ideally at the same time as the in-company house installation training.
3. Both teams develop the curricula in the context of complete phases of learning and working in a professional workflow. For example, the school curriculum content can be divided into 10 to 16 learning or professional fields that are tied to the in-company tasks. The learning fields get identifiable headlines and refer to key work activities and central work objectives. For example in a quality apprenticeship, learning how to develop marketing concepts by real or simulated tasks – such as developing a marketing concept for a new software – instead of learning marketing through lectures.
4. It can happen that, by breaking down the content of an apprenticeship programme into bite-size learning situations, the curriculum development approach also opens up to the above-mentioned possibility of developing a common curriculum for both learning locations. When this happens, the basic framework for curriculum development is strengthened, which has a positive impact on the quality of vocational education in a quality apprenticeship.
5. In a variation of the procedure described here, the professional experts are supported by professional scientists, engineers and other academically trained people. This ideally results in multiple rounds with different groups of experts for elaborate skilled workers' workshops. As a result, at the end of the workshops, a number of professional tasks and detailed information about the dimensions of skilled work have been identified. These new dimensions for skilled apprenticeship work are further supported through work process analyses. All the results will eventually be used to develop a common curriculum for both places of learning and working.
6. The quality of the results of the expert workers workshops entirely depends on their objectives. When it comes to the development of modern work and business process curricula in an existing profession, it can be assumed that identification of the experts of the profession is relatively straightforward.
7. In countries that do not have the necessary skilled workers, the success of the workshops is largely influenced by the successful recruitment of experts whose expertise is strongly related to the targeted job responsibilities for the yet-to-be developed professional profile.

8. Based on the expertise of all experts for the new professional profile that does not yet exist in the real world of work, a new apprenticeship can be developed. For example, this was shown with the new apprenticeship occupations in information technology and for mechatronics, which were introduced in the 1990s in some industrialised countries, and, recently, with the new green or environmental apprenticeships that did not exist before.

Quality apprenticeship trainers in companies

In-company training and trainers

The training and work experience that take place in companies is core to any quality apprenticeship programme. In traditional apprenticeships (i.e. entirely enterprise-based), apprentices are based full-time in companies, on construction sites and on the clients' premises, whereas in "quality apprenticeship", the training and work periods are complemented with external learning in a vocational school and, in some specific cases, also in a higher level or supra-enterprise vocational training centre.

In-company trainers have to be experienced workers, technicians or professionals in order to provide adequate training; they need to possess solid technical competences in the occupational field in which their company trains apprentices, and also have the ability to transmit their knowledge and skills to young learners.

Traditionally, apprentices acquire their professional knowledge and skills through a master-apprentice relation. This relation subsists even in modern apprenticeship systems, at least in the crafts sector. There, masters often combine several roles: owner, general manager, and head trainer of a crafts company. Learning to teach apprentices is part of the learning process the master has to go through himself or herself.

In micro- and small-sized companies of up to 10 staff members, one will often find just one professional qualified to train apprentices. In a crafts company, it may be "the master", whereas in enterprises with more than 10 or 15 staff members, the general manager might designate a professional to:

1. Organise the apprenticeship programme;
2. Train apprentices; and
3. Supervise the work and training processes when apprentices work with others.

The situation is more complex in medium- and large-sized enterprises. In these companies, the roles and responsibilities are shared among different employees (vertically and horizontally).

The trainer is expected to be a pillar, a reliable and approachable person in a dynamic environment. In many cases, it is the trainer in his / her role as a tutor or mentor who gives a potentially threatening environment a human face.

Different responsibilities of trainers

In countries with established apprenticeship systems, employers are obliged to have at least one formally accredited trainer if they decide to train apprentices. Normally, this person has organisational and pedagogical-technological skills.

In well-structured small-, medium- and large-sized companies with a regular human resources department, one can differentiate between at least four different duties of trainers:

1. A responsibility at the management level;
2. A responsibility at the organisational-technical level; also the role of coordinator with the external partners (i.e. the cooperating VET school, institute or training centre, and the local coordinating body such as a chamber of commerce and industry, a chamber of crafts or a professional association, with the local administrations, municipality);
3. A responsibility regarding the implementation of the training programme in the company; and
4. A co-worker relationship – “one worker-one apprentice” – at specific workplaces. The co-workers do not need to have formal trainer qualifications.

Higher levels of trainers

In several countries, one or two additional levels of trainer certification have been added. However, these higher levels are conceived for full-time trainers in higher level or supra-enterprise vocational training centres and private training institutions. A large majority of these trainers have completed higher education, yet do not possess a skilled worker or skilled employee qualification.

Different staff involved in the apprenticeship programme

There can be a division of roles between various actors and levels.

The human resources department will:

- Recruit apprentices;
- Administer their contracts, salaries, social security contributions, holidays and other leave;
- Register the apprentices for examination and certification; and
- Establish, with the training coordinator, the financial plan and report on apprenticeship training in the company.

The training coordinator will:

- Approve the selection of occupations, for which the company trains apprentices;
- Establish, with the principal trainer and relevant colleagues, a specific training plan;
- Inspect and approve the training workplaces for apprentices and ensure that occupational health and safety requirements are met;
- Liaise with the VET school, higher level or supra-enterprise vocational training centre, regional and local education and labour-employment administrations;
- Report to the company management on financial issues and other matters; and
- Establish, with the human resources department, the financial plan and report on apprenticeship training in the company.

The principal trainer will:

- Participate in recruiting the candidates for apprenticeship training in the company;
- Coach the apprentices and facilitate their learning progress;

- Establish, with the training coordinator and relevant colleagues, an occupation-specific training plan.
- Assume the technical responsibility for compliance with the in-company training plan;
- Identify the workplaces where, and individual workers with whom, the apprentices work and learn, ensuring that occupational health and safety requirements are met;
- Follow individual apprentices in their various workplaces, ensuring a smooth interaction and learning process;
- Resolve conflicts;
- Take part in content-related work inside and outside the company; and
- Engage in lifelong learning to update his or her personal and professional competences.

The co-workers will:

- Introduce the apprentices to their specific tasks;
- Assign progressively feasible work tasks to the apprentices they are in charge of;
- Ensure that occupational health and safety requirements are met; and
- Refer at least twice a day to the principal trainer to keep him or her informed.

Box 7. German Apprenticeship Training Aptitude Regulation

The German Apprenticeship Trainer Aptitude Regulation “AEVO” of 30 January 2009 defines the professional and ergo-pedagogical aptitude while differentiating between the four stages in the implementation process of apprenticeship:

Action 1: Aptitude to plan the apprenticeship process

Action 2: Aptitude to prepare the apprenticeship process

Action 3: Aptitude to implement the apprenticeship process

Action 4: Aptitude to finalize the apprenticeship process

Source: AEVO online: <https://www.gesetze-im-internet.de/bundesrecht/...2009/gesamt.pdf>

Key competences of apprenticeship trainers in companies

According to Bahl and Blötz (2012), the identity of in-company training staff can be defined as follows:

The identity of training staff in companies is mainly formed through the individual's professionalism (or work ethos) and technical competence. It is quite different from the identity of pedagogical staff in vocational schools, and it has a high teaching value for the development of the apprentices, in the sense of shaping their working life and professional socialisation. Thanks to its social values, the professionalism exceeds the limits of technical competence. The pedagogical staff in companies are messengers of professionalism and can play a role model. This enables them to transmit to the apprentices professional experience and the understanding for complex relations in an authentic way. [...] This package of professional experience and understanding exceeds the potential of a formalised thesaurus of knowledge. Professional experience and understanding, which have grown in the context of a working life in companies, cannot be verbalised easily. Therefore, an important factor of success of in-company training is direct guidance

in the work process. The drawback is that the high technical orientation of the training staff and their limitations in terms of meta-reflective and didactic competences causes losses regarding the chances for learning. The theories on how, when and why learning takes place result from subjective convictions, which find their justification primarily in the personal life history of the individual and are, therefore, limited in their transferability (Bahl and Blötz, 2012).

Participation of TVET teachers and trainers in the shaping of quality apprenticeship and policy formulation

Axmann, Rhoades and Nordstru (2015) make the point that the participation of TVET teachers and trainers in the decision-making process contributes to improving the quality of the system and adds significantly to the professional motivation of the teaching and training staff:

Effective participation in designing new teaching and learning programmes goes to the core concept of involving teachers as professionals, since they often know what will work best in meeting the particular skills needs for student populations in relation with occupational profiles in their own TVET schools, classroom environments, and the vital networks with employers and unions, parents and local school authorities/municipalities (Axmann, et al., 2015, p. 9).

Based on an Organisation for Economic Co-operation and Development (OECD) study on innovation in TVET, the authors report also that drawing on the insights of front-line actors, such as teachers, trainers, learners and business leaders, will help in generating ideas and designing new approaches, encouraging innovations in institutions and programmes (Ibid, p. 30).

F. Vocational teacher training systems for quality apprenticeships

Contemporary training systems for Technical and Vocational Education and Training (TVET) teachers and trainers in quality apprenticeships face a multitude of challenges. These include unstable financing mechanisms, the lack of a coherent training structure and outdated curricula, mismatches between TVET programmes and labour markets, difficult working conditions, and the lack of meaningful social dialogue in the sector.

This section enumerates and brings recent evidence to bear on these challenges, and outlines a holistic approach to address them. Four pillars and twelve key elements of high-quality teacher training systems are presented and discussed briefly, a framework that comprehensively defines training practices of high-quality and that provides a concrete foundation on which to improve system effectiveness. The section also includes five key policy messages that would go a long way towards enhancing TVET teacher training systems.

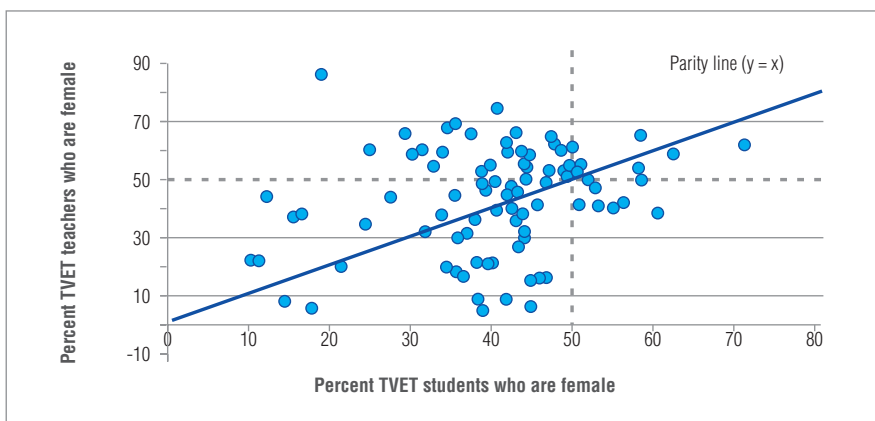
Teachers and trainers in TVET: Current issues and challenges

- **Challenge 1: Financing challenges** – In light of the financial crisis and unstable recovery, TVET financing remains a challenge. Many countries are turning to new funding models, such as public-private partnerships (the United Kingdom), performance-based finance (Bangladesh), cost-recovery and other demand-driven means of service delivery. The implications of these innovative financing tools for TVET teacher training systems is

not entirely clear, but they do open up overall TVET funding to more market-based mechanisms which should be closely monitored.

- **Challenge 2: Teacher training** – Very often TVET teacher training is something that is expected to be picked up ‘on the job’. Approaches to training can often be ad-hoc, incoherent, outdated, with irrelevant curricula and no clear career paths or stages of training for teachers and trainers. Thus, the gap grows between the sort of teachers and trainers TVET teacher training systems provide and what is needed by TVET students. In a highly dynamic sector such as TVET, teacher training should rather be characterised by innovation and driven by technology, particularly when it is focused on preparing teachers and trainers for the gold standard in TVET, in quality apprenticeships.
- **Challenge 3: Skills - training mismatch** – Traditional competency-based TVET puts more emphasis on technical skills, whereas many employers today place equal importance on the future recruits’ communication, problem-solving and collaboration skills. A shift in focus from largely technical knowledge to these ‘21st century skills’ requires innovations in pedagogical approaches as well. Vocational teachers, particularly in quality apprenticeships, need to be provided with the pedagogical tools and supportive professional development opportunities to help their students meet these changing employer expectations.
- **Challenge 4: Employment and working conditions** – Teacher shortages are well-documented at the primary level, but stagnant recruitment patterns extend also to secondary education and TVET, particularly in low-income countries. While demand-driven mechanisms may, in theory, match supply with need, it is not entirely clear that this is the case when it comes to quality teacher training for quality apprenticeships. Gender equality, both in teacher recruitment and remuneration, remains a concern. Figure 7 shows that the majority of countries with recent data have a lower proportion of female TVET teachers than male and that a significant minority have a lower proportion of female vocational teachers than female students, despite low overall female student numbers. The increased frequency of market mechanisms within TVET is likely to create a higher level of diversity within remuneration packages, both between and within countries.

Figure 7. Percentage of female students and female teachers in national TVET systems, 90 countries



Source: UIS databases.

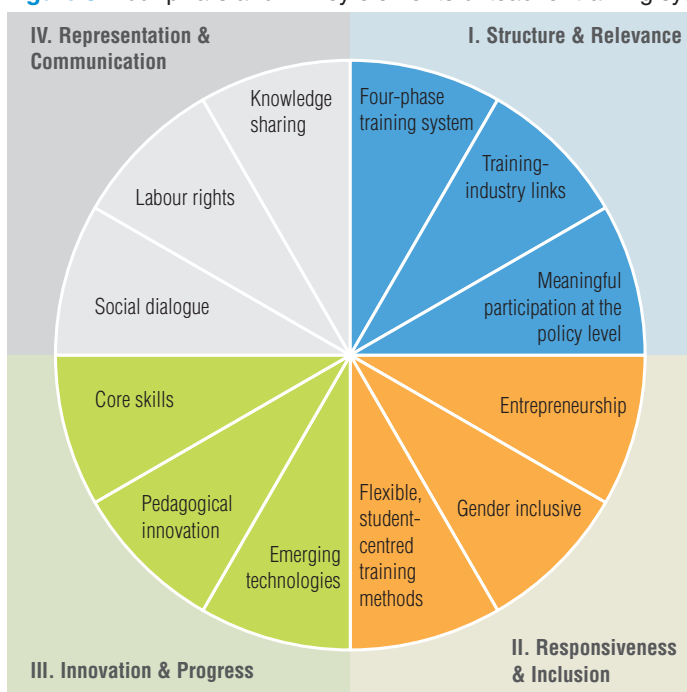
Note: Data are from 2015 or most recent available (2007 or later). Formal public and private institutions are included. Parity line indicates point where percentage of female students equals the percentage of female teachers.

Challenge 5: Social dialogue – Research suggests that, in order for education reforms to be effectively implemented and impact on daily classroom experience, teachers and their organisations need to be engaged as full participants in policy development. However, recent country evidence shows that human resource policy development is something that is instead ‘done to’ teachers and trainers, rather than in collaboration with them. Human resource-related reform movements in TVET, inclusive of but not limited to classic terms and conditions of work (e.g. remuneration, work load), need to be supported from the bottom-up, and therefore need to include teachers and trainers in negotiating policy solutions.

Four pillars and 12 key elements of vocational teacher training systems: Ensuring quality for excellence in quality apprenticeship programmes

The challenges outlined above require a holistic approach to TVET teacher training to enable them to teach in quality apprenticeships, one that comprehensively defines training practices of high quality and can provide a concrete framework to improve system effectiveness. This is encapsulated by the four pillars and twelve key elements of teacher training systems shown in Figure 8.

Figure 8. Four pillars and 12 key elements of teacher training systems



I. System structure and relevance

Effective teacher training systems are those that have a meaningful structure, those that train recruits according to good practice and in ways that are both coherent with and relevant to local labour market contexts. In addition, close training-industry linkages and the meaningful participation of teachers and trainers in policy design and reform are indispensable characteristics of contemporary teacher training systems.

- **Key element one:** Does the system provide four distinct phases of training for teachers and trainers (initial training, requisite non-academic work experience, pre-service training and continuous professional development)?
- **Key element two:** Does the system actively encourage and facilitate the creation of close linkages between training and industry?
- **Key element three:** Are teachers and trainers empowered to meaningfully participate in TVET system design and reform?

Box 8: SENAI's development of teachers, technicians and managers in Brazil

Brazil's National Service for Industrial Apprenticeship (SENAI) recognises that the development of teachers, technicians and managers in TVET is an essential part of modern vocational programmes. As such, teacher training programmes offer pre-service and professional development courses which comprise technical aptitude and pedagogic expertise.

SENAI promotes the continuous evaluation and training of TVET teachers by:

- Implementing a Strategic Planning which includes a BSc system and a PDCA down to the class-room.
- A programme of increasing the quality of education which includes: 1) pedagogic programmes; 2) E-learning programmes for teachers; 3) skills-oriented educational programmes; and 4) continuous evaluation of performance of students and of the teaching-learning process.
- Digital Inclusion -This programme aims at ensuring computer literacy and access to communication media, software and applications.

Source: www.senai.br

II. Responsiveness and inclusion

Students in TVET systems of quality apprenticeships are not identical or replaceable widgets on a linear production line of learning; they are, rather, dynamic individuals with diverse needs and backgrounds. As such, differentiated learning strategies and inclusive programmes that respond to student needs are essential characteristics of modern educational systems. Moreover, these actions are necessary to extend educational and social rights to all persons, including those with disabilities. Entrepreneurship education, equipping students with business and management skills necessary to participate in local markets, is key here.

- **Key element four:** Is entrepreneurship education included in quality apprenticeships?
- **Key element five:** Are teacher training systems in TVET gender-balanced and inclusive?
- **Key element six:** Are flexible, student-centred approaches used to address specific training?

III. Innovation and progress

In order to remain relevant to market demand and technological changes, teacher training systems for quality apprenticeships should incorporate innovative practices, both in course content and instructional pedagogy, into existing programmes. Teachers must be exposed to and trained to utilise emerging technologies in the classroom through systematic and continual professional development. In addition, the concept of innovation should extend to pedagogical practices in the classroom; teachers and trainers should be encouraged and supported as they incorporate innovative instructional methods to meet the needs of trainees and integrate emerging technologies into curricula in new ways. Innovative partnerships between training institutions and industry are also key mechanisms for acquiring practical knowledge and experience.

- **Key element seven:** How readily do training systems adapt to emerging technologies and innovations in the workplaces of apprenticeships?
- **Key element eight:** Are pedagogical innovations incorporated into skills development?
- **Key element nine:** Does the training system focus on core skills of TVET teachers and trainers?

Box 9. Adapting innovation and technology to TVET training, the Netherlands

In the Netherlands, emerging technologies and innovations are incorporated into a structured system of teacher training through the use of industry experts as guest teachers in TVET classrooms. These experts are invited to training centres to share the latest innovations and technology being utilised in the workplace.

Source: ILO, 2012b

IV. Social dialogue

Social dialogue is a central tenet of the ILO and is essential for establishing educational policies and practices that meet the needs and concerns of all stakeholders. It is a positive means by which to develop collaborative solutions to common problems and issues and, by definition, engenders cooperative working relationships between diverse groups of actors. Social dialogue, as conceptualised by the ILO, is understood to mean all forms of information sharing, consultation and negotiation between educational authorities, public and private, and teachers and their democratically elected representatives in teachers' organisations.

- **Key element ten:** Are venues for dialogue among social partners 'on' and 'in' teacher training effectively established?
- **Key element eleven:** Is awareness raised among teachers and trainers about labour market inequalities and their own labour rights?
- **Key element twelve:** Are networks for knowledge-sharing among teachers and trainers developed and maintained?

Enhancing quality apprenticeship teacher training systems: Key messages (5)

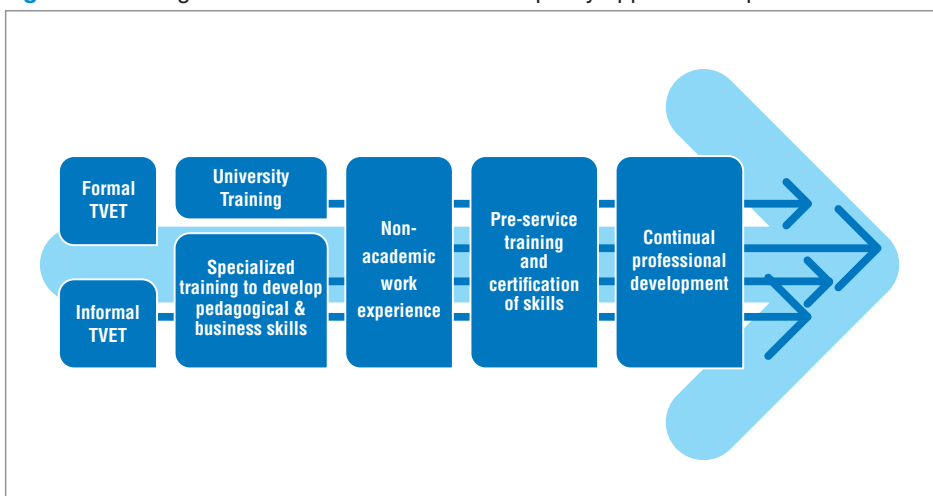


Quality teacher training systems are key to quality apprenticeship programmes and meaningful outcomes

TVET is widely seen to be a critical part of the solution to the global jobs crisis and key to national economic recovery strategies following on from the financial crisis of 2008. Targeted programmes, specifically in quality apprenticeships and coherent and aligned with general education systems, can help address these new societal challenges by bringing together aspects of skills development for employability, broader aspects of lifelong learning and general education for all citizens.

National training systems, therefore, have an important role to play in preparing teachers and trainers to act not only as subject-matter experts but also as professional pedagogues within the apprenticeship classroom. Quality teacher training systems are those that employ a relevant balance between pre-service and in-service training, theoretical and pedagogic preparation, as well as continual professional development and support mechanisms.

Figure 9. Training framework for TVET trainers in quality apprenticeships



Employ a 'systems' approach in teacher training systems for quality apprenticeships

Most personnel policy interventions in TVET apprenticeships tend to be narrowly targeted towards single elements of teacher training systems. However, the key elements of teacher training systems as conceptualised above do not function independently, but rather collectively as an inter-dependent matrix. Policy interventions that target one key element of teacher training will certainly carry implications for others, or may indeed address numerous elements simultaneously.



Employ the four pillars and twelve key elements to assess national teacher training systems

Beyond a theoretical conceptualisation of critical components of effective teacher training systems of high quality, the four pillars and twelve key elements are also designed to serve as a self-assessment rubric against which countries may evaluate their teacher training systems and thereby identify areas for interventions. These tools can also help policymakers, researchers, practitioners and others to evaluate the strengths and weaknesses of apprenticeship teacher preparation.



Strengthen social dialogue mechanisms for meaningful systemic reform

One of the strengths of successful demand-driven schemes in vocational education and training is the active participation of social partners in the design and the implementation of programmes. Involving employers and trade unions in assessing rapidly changing requirements of labour markets and designing programmes that respond to employment and workplace needs is widely perceived to be necessary to TVET system responsiveness, particularly when it comes to quality apprenticeships.



Utilise knowledge-sharing networks for inter- and intra-national exchange

Knowledge-sharing networks and information exchange between practitioners can play a vital role in allowing trainers to exchange ideas on quality apprenticeships. For example: on curriculum design, learn how to integrate new technologies, get feedback on specific challenges, share programme experiences, and develop connections with fellow practitioners. These networks may take the form of simple exchanges of information within a targeted process of social dialogue on TVET reforms or more formal global, regional, national or sub-national mechanisms.

Summary

Teacher training systems for quality apprenticeship face no shortage of contemporary challenges, including tightened government budgets and new demand-driven finance models, incoherent approaches to teacher training with little career advancement, mismatches between training provision and labour market demand, changes in employment and working conditions (including stubborn gender discrepancies) and too few good examples of constructive social dialogue. All of these challenges hold significant implications for quality apprenticeship teacher training systems, as well as for the types of skills teachers themselves should have at their disposal.

This section identifies several key messages to address these challenges and to strengthen vocational teacher training systems: enhance the quality of teacher training systems; employ a holistic 'systems' approach to teacher training; rigorously assess training systems; strengthen social dialogue to promote meaningful reform; and utilise knowledge networks to share innovations and best practices.

Key ILO resources

- ➔ Axmann et al. 2015. Vocational teachers and trainers in a changing world: The imperative of high-quality teacher training systems (Geneva, EMP/SKILLS, ILO).
- ➔ Knapp 2013. Competency-based training: A handbook for Technical and Vocational Education and Training (TVET) institutions in the Arab region (Geneva, ILO).
- ➔ ILO. 2012. Handbook of good human resource practices in the teaching profession (Geneva, ILO).
- ➔ —. 2010. Teachers and trainers for the future: Technical and vocational education and training in a changing world (Geneva, ILO).
- ➔ ILO/UNESCO. 1966. Recommendation concerning the status teachers (Geneva, ILO/UNESCO).

Entrepreneurship Education in Apprenticeship Programmes: A win-win strategy

Entrepreneurship education is a relatively new and dynamic field of research and practice. As it often happens in vibrant fields, no agreed definition exists and it varies depending on the objective, the target (audience), the format (content) and the approach (where and how it is taught). Nevertheless, most definitions envision entrepreneurship education as a means of helping women and men develop, build and strengthen life skills and competencies that are core to entrepreneurial behaviour and/or action. These generally include competencies such as problem-solving, effective communication, negotiation and capacity to innovate, but also more technical business skills like basic financial literacy, marketing, costing etc., etc.



Why offer entrepreneurship education in quality apprenticeship programmes?

In recent years many countries and regions have witnessed an unsettling trend – stagnant or increasing youth unemployment. Besides the problems and repercussions this can have on overall economic growth as big bulks of the population are not contributing productively to the economy, youth unemployment, if not properly addressed, could lead to disenfranchised youth and socioeconomic tensions at national level. Through entrepreneurship education, along with other complementary initiatives to support a healthy and sustainable private sector, national governments aim to create a more accepting society towards entrepreneurship and better equip, in this case, young women and men in TVET, with basic life and business skills that can be of use whether or not they start a business upon graduating from their studies or later in life.

The ILO has, since the late 1990s, actively engaged in and worked on promoting entrepreneurship education in technical and vocational training programmes, with the objective of providing individuals with knowledge, values, attitudes, skills and competencies necessary for developing positive attitudes towards entrepreneurship and business. ILO sees entrepreneurship education as a means of enhancing an individual's employability by strengthening core life skills considered valuable in any working environment. At a societal level, entrepreneurship education contributes to building a more entrepreneurial culture necessary for existing and future entrepreneurs to undertake entrepreneurial activities successfully.

Box 10. ILO's Know About Business

Know About Business is ILO's entrepreneurship education package and programme. The materials were first published in 1996 upon a request from the Kenyan government to support the development of a course on entrepreneurship in vocational and technical schools.

The current package consists of 9 modules offering a body of exercises, games and activities which ensure students own their learning and concepts and knowledge are put into practice, tested, worked on or strengthened. All modules can be covered in 120 hours of class time, but most countries, given their time limitations and national priorities, incorporate between 60 and 90 hours of the 120. KAB is mostly used in TVET and upper secondary education.

ILO puts special emphasis not only on the content of entrepreneurship education but especially on the pedagogy and teaching methods. These are participatory and learner-centred. To ensure quality of teaching, ILO supports the development of a pool of national key facilitators who are the guardians of quality and use of KAB at national level. ILO also supports national stakeholders better understand entrepreneurship education and make the case for why and how it should be incorporated by the Ministry of Education into national curricula. Once it has been nationally taken on, national stakeholders decide how they wish to implement it.

ILO conservatively estimates that over 3.5 million young women and men have taken a KAB-based course in the over 12'000 education centres/schools it is used in.

ILO through its experience, has found that in order for entrepreneurship education to be taken up to its full potential by young women and men, its different components and content must be provided when most relevant to youth and their career plans. Thus, ILO has generally supported that entrepreneurship education be provided in Technical and Vocational training institutes where youth already have or are building a particular technical skill or vocation. Entrepreneurship education can and is, however, included at earlier stages in young people's education with content that is appropriate to the age group and education level. As such, some programmes, for example, start as early as primary education but where these programmes focus primarily on instilling a way of thinking and viewing the world of business.

Through an apprenticeship, a male or female apprentice can benefit from gaining both professional experience and knowledge and skills specific to the tasks at hand which he/she can also transfer to other possible sectors. Given its nature and goals, this kind of on-the-job and sophisticated learning mechanism can find in entrepreneurship education a natural fit.

Box 11. Example of topics covered in ILO's KAB Entrepreneurship Education package:

Module 1: What is Enterprising? (13 hours)

Module 2: Why Entrepreneurship? (13 hours)

Module 3: Who are entrepreneurs? (16 hours)

Module 4: How do I become an entrepreneur? (15 hours)

Module 5: How do I find a good business idea? (8 hours)

Module 6: How do I organise an enterprise? (19 hours)

Module 7: How do I operate an enterprise? (22 hours)

Module 8: What are the next steps to become an entrepreneur? (16 hours)

Module 9: How to develop one's own business plan? (2 hours)



Why should apprentices take entrepreneurship education courses?

It can help apprentices identify, develop and/or strengthen key life skills needed to work in any business (effective communication, negotiation, planning, problem solving, etc.). It also gives them a general understanding and insights into how businesses work, what role they play in the economy and the society at large and finally, basic knowledge on general terms and concepts used within the world of businesses and companies (such as cash-flow, segmentation, profits, etc.).



Why should TVET institutions offer entrepreneurship education courses?

It shows TVET's commitment to innovate, adapt, provide and offer training that is relevant, in line with the current demands by employers for employees with solid life and problem-solving skills. It also shows a commitment and an investment to seeing future entrepreneurs emerge, who in turn may employ future graduates of TVET.



Why should businesses hosting apprentices seek to have their apprentices take entrepreneurship education courses?

If apprentices attend entrepreneurship education courses, they will more easily understand the overall general functioning of a business, have basic understanding and knowledge of key terms and business concepts. Businesses should also see their apprentices being able to more effectively communicate within the working environment, seek to find solutions when faced with challenges, engage more effectively and proactively in group work, etc.



What could it include?

Entrepreneurship education would ideally combine:

- Content directly related to the world of starting and managing businesses such as developing business plans, marketing strategies, costing of products, etc. Also known as the “science of entrepreneurship”
- Content related to skills and competencies needed in the world of work and businesses: communication, negotiation, proactivity, problem-solving skills. Also known as the “art of entrepreneurship”

In short, an entrepreneurship education programme should ultimately seek to balance both basic hard skills around the world of business (as could be marketing, selling, planning, basic cost-calculations, etc.) and life skills aimed at developing in oneself resilience, problem-solving abilities, clarity in communication and team-work among others.

Content and activities should also be gender sensitive, in other words it should be sensitive to the fact that both young boys and girls need appropriate examples, role models and attention when participating in an entrepreneurship education programme. Examples of successful entrepreneurs should include both male and female entrepreneurs. This kind of exposure can be very important further down the road in broadening young women and men's outlook on work and business.

Entrepreneurship education should be organised in modules which could be covered with apprentices during times and topics most relevant to their situation within the quality apprenticeship programme. It should also not be text-book based but strongly rely on being experiential and be close to what matters to the apprentice and the hosting enterprise.



Within formal education: How could it be done?

Entrepreneurship education is currently offered around the world in many shapes and forms. Certain programmes invite young women and men to take part in after-class activities and sessions facilitated by volunteers (e.g. Junior Achievement). In other cases, a programme is carried out in a classroom setting by teachers outside of the formal education system (e.g. NFTE). In other cases, entrepreneurship is a combination of both classroom sessions and extra-curricular activities or workshops. Within an apprenticeship programme, entrepreneurship education would ideally become part of the actual learning programme itself in the vocational institutions. It would be provided as one of the learning courses an apprentice would take. While possibly detached from their technical area of expertise, entrepreneurship education would still remain a hands-on, learning by doing type of course.

Entrepreneurship education cannot be taught the “traditional” way, in a top-bottom approach or solely based on theory. It requires learning-by-doing, practice, exchange, team-work and real-life experiences/examples. Entrepreneurship education teachers should not be teachers, but more facilitators of learning.

In ILO’s experience, entrepreneurship education and learning takes time to be fully assimilated by the student, hence why ILO’s KAB programme is not a short 30 or 40 hour package but three times that. ILO also strongly recommends that sessions be spread over at least one or two years (in sessions of 2 to 4 hours a week), through which it is expected that the student has time to internalise what is being discussed, the activities that are carried out and little by little see his or her attitudes and apprehensions towards the world of business shift towards a more realistic and sometimes more positive view.

Within a quality apprenticeship programme, it would be beneficial that the actual content and roll-out of an entrepreneurship education programme be discussed and planned jointly between the receiving businesses of apprentices and TVET institutions providing the skills trainings and courses to the apprentices.



What can entrepreneurship education help achieve?

There are few rigorous impact evaluations available to date on the longer term effects and impact of entrepreneurship education in relation to knowledge gained, shift in attitudes or gains in confidence and overall resilience.

However, it has been found that students who took part in an entrepreneurship education programme, generally report higher entrepreneurial intent¹⁰ and more positive aspirations towards the future.¹¹ While the search for evidence is still on-going, it is also believed that

10 - The Impact of Entrepreneurship Education on Entrepreneurial Intention by Michael Lorz, Ph.D., University of St. Gallen, School of Management, Economics, Law, Social Sciences and International Affairs, 2010, Dissertation no. 3966.

11 - Entrepreneurship Education and Entry into Self-Employment among University Graduates by Patrick Premand, Stefanie Brodmann, Rita Almeida, Rebekka Grun and Mahdi Barouni, World Development, 2016, vol. 77, issue C, pages 311-327.

courses on entrepreneurship that are also entrepreneurial in the way they are delivered help students improve their self-confidence and their views and performance in team-work activities.¹² All these traits would seem by themselves interesting and attractive to any employer.

Additional Readings:

- ➔ European Commission/EACEA/Eurydice (2016). Entrepreneurship Education at School in Europe. Eurydice Report. Luxembourg: Publications Office of the European Union. <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/images/4/45/195EN.pdf>
- ➔ ILO (2011). Building business and entrepreneurship awareness. SME Unit, ILO. http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_168356.pdf
- ➔ OECD (2009). Evaluation of Programmes Concerning Education for Entrepreneurship. Report by the OECD Working Party on SMEs and Entrepreneurship, OECD. <https://www.oecd.org/cfe/smes/42890085.pdf>
- WEF (2009). Educating the Next Wave of Entrepreneurs Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. http://www3.weforum.org/docs/WEF_GEI_EducatingNextEntrepreneurs_ExecutiveSummary_2009.pdf
- ➔ World Bank (2014). Entrepreneurship Education and Training Programs around the World. Dimensions for Success. Report by Alexandria Valerio, Brent Parton, and Alicia Robb, <https://openknowledge.worldbank.org/bitstream/handle/10986/18031/9781464802027.pdf?sequence=1>

Linkages between apprenticeships and tertiary education (the example of Germany)

“Dual studies” in Germany are a combination of a higher education degree programme (i.e. at the bachelor’s or master’s level) and elements of vocational training. More specifically, this type of programme includes academic studies in applied sciences, as well as technical skills. The key features of dual – or practice-oriented – programmes are that: (i) in-company placements alternate with in-faculty study phases (e.g. 6 weeks / 6 weeks or 3 months / 3 months), and that; (ii) the students have employee status in the company: they obtain a minimum salary and standard benefits such as social security provision and paid holidays.

In a dual studies system, the students enter a regular apprenticeship, but combine it with targeted academic studies instead of off-the-job learning, as in a vocational educational training (VET) school or college. The minimum entry requirement is a secondary education diploma. The programmes are usually longer than a regular apprenticeship, going up to four and a half years, instead of the standard three years. At the end, they obtain a vocational certificate and a bachelor’s degree; sometimes even a Meisterbrief (master of crafts) certificate.

Two new German models

• “Triple Studies” in four and a half years

The chambers of crafts (Handwerkskammern) have created a new “Triple Studies in the Management of Craft Companies” degree. The concept combines an accelerated

¹² - Assessing the impact of entrepreneurship education - from ABC to PhD by Kåre Moberg, Entrepreneurship Research and Education Magazine, Copenhagen Business School, April 2015

apprenticeship in a recognised craft with both (i) Meisterbrief courses (for continuing education and training) and (ii) a full business administration programme at a partner university of applied sciences (Technische Fachhochschule).

During the first two and a half years, students go through a shortened quality apprenticeship programme, with work and training in a crafts company and studies in a university of applied sciences. The university level studies are phased-in right from the beginning with a Friday evening and a Saturday morning class every two weeks. E-learning modules and study materials complete the bachelor studies. The academic studies are offered by the “University of Applied Sciences of the Crafts Sector”, which is owned and run by the regional chamber of crafts.

At the end of four and a half years, the successful candidate will have accumulated three certificates:

- A skilled worker's certificate (Facharbeiterbrief) in a recognised crafts vocation;
- A Meisterbrief certificate; and
- A Bachelor of Arts in “Crafts Management”

By combining these three qualifications, the students acquire a set of knowledge and skills which should enable them to assume management positions in micro-, small- and medium-sized crafts companies.

• “Two-in-one” - Full apprenticeship in industrial mechanics engineering (machine construction) in four and a half years

This is a combination of a full quality apprenticeship with complete dual studies. This programme also requires a secondary school certificate, which allows entry to universities of applied sciences. Companies in high precision manufacturing particularly promote this model. It combines the acquisition of technical skills with engineering competences. Companies try to recruit young people who have solid practical skills as well as a thorough theoretical understanding of production systems, automated processes and individualised customer solutions – i.e. people who close the gaps between low-skilled workers and engineers.

■ List of occupations for which Triple Studies are offered:

- Baker
- Bricklayer and concrete worker
- Cabinetmaker
- Car mechanic
- Coachbuilder
- Dental technician
- Electrician
- Hairdresser
- Heating technician
- IT technician
- Metalworker
- Optician
- Painter and varnisher
- Pastry baker
- Precision engineer
- Road construction worker
- Roofing technician/Roofer
- Tile layer
- Two-wheel vehicle mechanic

■ Example: The company that has taken the lead in this regard is the Schaeffler Group, the largest producer of bearings in the world. The Schaeffler Group directs graduates towards the following areas and departments: construction, research, product development, purchasing department, sales, client solutions or project management.

Source: http://www.schaeffler.be/content.schaeffler.de/de/careergermany/schueler/duales_studium

The organisation of the “two-in-one” model follows the pattern below:

Table 7. Course content of the “Two-in-one” apprenticeship

| Year | Content |
|--------------------------------|---|
| First and second year | Academic studies 4 days a week; In-company training 1 day a week; and Full-time in-company training during academic holiday periods. |
| Third year | Practical training in the company; Preparation for the skilled worker's certificate examination; and Industrie- und Handelskammer (IHK) final examination at the end of the 6th semester. |
| Fourth year | In-depth academic studies at the university of applied sciences in the specialisation; and Placement in the company. |
| Fifth year (first half) | Bachelor thesis while placed in the company. |

Source: Prepared by the authors

The table illustrating the contents of the two-in-one model is only one possible example as the organisation of the programme is quite flexible: it depends on the operational mode of both partners – the company and partner university for applied sciences. The final arrangement is the result of direct negotiations between the parties.

What are the benefits and criticisms of the Two-in-One model?

Benefits for the students

- Most students receive a job offer right after completing their studies;
- Students improve their career opportunities and prospects;
- Students are financially independent;
- The social image and attractiveness of a dual studies programme is very positive – it is perceived as a pathway which combines high quality education with solid practical experience;
- Students will be better equipped to take on challenging tasks early in their professional careers; and
- The provision of key skills, personal development and cross-cultural competences are important building blocks for a comprehensive education.

■ “Dual studies” can serve as a good alternative to both conventional university studies – which have a reputation of being disconnected from practical life – and conventional apprenticeships – which are often perceived as an inferior education option and are not well recognized in many societies.

Benefits for the companies

- By training their own qualified young professionals, companies know what types of professional profiles they can expect to recruit in the future. When graduates enter a new workplace, they already know the specifics of the organisation and have the potential to fill middle management positions in the future.
- By selecting students directly through the dual studies partners, companies can be sure that they recruit highly motivated candidates who have an affinity for a practice-oriented education and a positive attitude towards the company. Therefore, the rate of retention is higher.

- The social image and attractiveness of dual studies programmes are very positive: they are perceived as a pathway that combines high quality education with solid practical experience. In turn, this allows companies to select the best candidates.

The course content is tailored to the changing demands of industry and business. The growing success of these programmes is the result of integrating theory and practical study concepts, small class sizes, and intensive practical work experience in a comprehensive study and training programme, elaborated jointly by higher education institutions and partner companies.

Criticisms

The disadvantage is that students may suffer from the heavy workload, due to the alternation between university studies and company placements. There is a high risk that university departments compress the same quantity of information in half the time. Hence, students need to be very well-organised and disciplined.

Lack of foreign or international exposure: it is more difficult to include study and/or internships abroad in a study-cum-training programme. However, this feature is changing, as participating companies are becoming aware of the opportunities of internationalisation.

■ One solution to address the lack of international or foreign exposure may be for the model to include in-company placements in subsidiaries and partner companies abroad as part of the overall study programme. Work-based training refers to training in certain areas that apprentices receive in different companies, because individual companies are not able to provide such training sections themselves. Training in other companies is firmly anchored in Germany's dual VET system as a part of a company's training stages.

G. Key challenges and suggested actions to address gender bias in apprenticeship systems

What are the factors constraining women at the start of their careers, channelling them into a limited range of occupations, low paid work with fewer opportunities for progress, and restricting their ability to rise up the ranks as easily as their male peers? Inadequate career advice in schools, outdated social stereotyping of jobs and occupations and ingrained gender divisions within education and training systems still hold women back worldwide.

■ The "glass ceiling" is a metaphor used to describe an invisible barrier which prevents women, despite their talent and experience, from reaching the same levels as their male colleagues in the labour market as well as in public life.

Apprenticeship occupations have often followed traditional patterns of gender segregation. The increase in female labour force participation has been primarily driven by opportunities created in sectors with a large female workforce such as retail and business administration, rather than an influx of young women moving into traditionally better paid and male dominated apprenticeships such as engineering, science and technology.

Obstacles to gender equality in apprenticeship systems

Culture and traditional gender roles have a strong influence on occupational choices and participation in TVET. There continues to be widespread perception that there are ‘adequate jobs for girls’ and ‘suitable jobs for boys’. Young women are subject to far greater pressure over their choice of work than boys as the selection of occupations to choose from is limited. Careers advice in schools often does little to encourage girls into traditionally ‘male’ sectors, which could prove transformative for their outlook and future development.

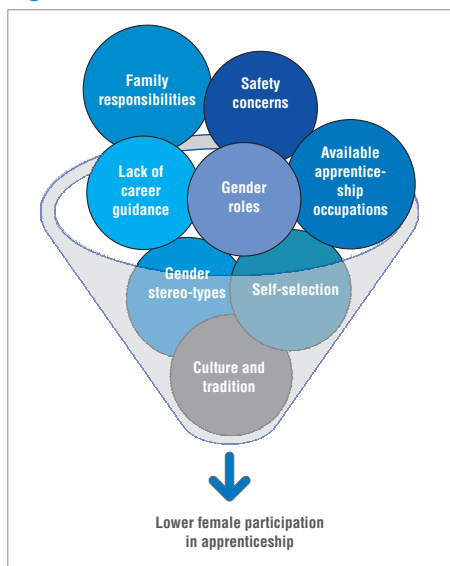
Young women choosing traditionally male-dominated apprenticeship occupations often face strong resistance, while young men choosing traditionally female occupations can be exposed to ridicule.

Entrenched attitudes, often reinforced by family members, make it difficult for young women to pursue career paths in many occupations. It is vital to address the gender imbalances at the start of women’s careers to alter the status quo where high-skill, high-mobility careers are for boys, and low-pay, low-mobility jobs for girls.

Pressures to adhere to strict gender roles are hard to tackle and need a gradual approach, sensitisation and positive role models to motivate young people to “think outside the box,” reflect on their professional aspirations and choose an occupation without feeling limited by gender stereotypes.

In societies with very pronounced gender roles, social norms might limit the ways women and men can interact. This can restrict young women’s transportation options to and from a company or a training school, their interaction with male colleagues and supervisors or participation in school-based study with male apprentices in the same classroom.

Figure 10. Factors that influence women’s participation in quality apprenticeship



Source: prepared by the authors

Sometimes, these limitations are rooted in safety concerns for young women and their families. Simple solutions such as specific transport arrangements, female co-workers and co-trainers or even separate bathroom facilities might help to overcome such concerns and open up young women's options in their choice of apprenticeship occupations.

Gender stereotyping, self-limitation and self-selection: Gender stereotypes can lead to discrimination by employers and career counsellors as well as self-limitation by young women. Even in countries with relatively high gender equality, there are biases in occupational choices of young women and men. Young women's choices of apprenticeship occupations are concentrated in business, service, health, wellness and the care sectors. For instance, in typical male-dominated occupations such as carpentry, a woman can find it extremely challenging to arrive on the job with ten established male colleagues (this would probably put most women off). Whereas if a firm hires six new carpentry apprentices, and under the terms of the scheme, two of them must be women, workplace integration become much more accessible to aspiring women carpenters.

In many of the traditionally female-dominated occupations, such as hairdresser or beautician, wage levels are often low and career development more limited compared to occupations in manufacturing industries. Information about these limitations should be part of career guidance for youth, so that it can be taken into consideration when exploring career and apprenticeship pathways.

Box 12. Gender equality and economic growth: some facts and figures

Among other data and economic arguments in defence of gender equality, we should note that:

- Improving female labour market outcomes is needed for strong, sustainable, balanced economic growth;
- Gender equality in education boosts female labour force participation, productivity and economic growth;
- Discriminatory institutions and cultural norms restrict the economic and social role of women;
- Public agencies to promote and improve gender equality often lack the visibility, authority and resources to operate effectively.
- 124 million children and young adolescents (6-15 years of age) have never started school or have dropped out. Relatively fewer girls enter primary school.
- But boys are more likely to drop out of secondary education than girls. Young women are increasingly better educated than young men, particularly in high-income countries.
- Employment:
 - Women do more unpaid work than men in all countries; the gender gap increases with the birth of children;
 - Women often work part-time as it facilitates combining work and family responsibilities, but this frequently comes at a cost to their long-term career and earning prospects.

Sources: ILO, 2016, ILO 2015, UNESCO July 2015, OECD 2015

While it is important to introduce and encourage young men and women to consider non-typical career choices, it is equally vital to respect women's choices and to improve the social

image, as well as to increase the economic benefits attached to traditional female-dominated occupations by providing high quality training opportunities.

Available apprenticeship occupations: In countries where quality apprenticeship training is not the prevailing way of acquiring vocational skills, the choice of apprenticeship occupations is often limited and concentrated around traditional trades and crafts, many of them in occupations that are regarded as “male occupations.” Some of these apprenticeships imply hard physical work (builders, bricklayers, welders) and, for the above mentioned reasons, most young women dismiss them as career choices.

■ Closing the pay gap while women and men are at the beginning of their careers will help societies move towards a fairer, more gender-equal labour market.

Apart from sensitisation campaigns to attract young women into male-dominated occupations, countries wishing to expand apprenticeship to young women should opt for diversified apprenticeships which respect women’s career choices.

Lack of career guidance: Young persons are exposed to different socio-cultural factors influencing their career choices, the most important being family members and friends, school, the community and the media. These influencers might, however, repeat existing gender stereotypes when giving career advice to girls and boys. Particularly in rural areas and marginalised communities, parents, friends and community members often have a limited vision of the opportunities and prospects available in the labour market. In many countries career guidance services are not well developed or current and often youth make career choices with very limited information.

Safety concerns, sexual harassment and gender-based violence: An essential concern about young women’s participation in apprenticeships in male-dominated occupations is their safety from harassment and sexual violence. A recent UNESCO policy paper (2015) points out that school-related gender-based violence affects millions of young children worldwide. Such violence can take the form of bullying, physical aggression and sexual harassment by fellow apprentices, co-workers, teachers, trainers, instructors or supervisors. As apprenticeship is delivered in two different training places, the company and the apprenticeship school, additional efforts must be made to sensitise staff on equal rights, respectful behaviour and the non-acceptance of any form of gender-based violence. Violations should be neither downplayed, nor tolerated. Guaranteeing a safe work and study environment, as well as assuring safe transport options can be vital factors for encouraging young women to participate in apprenticeship.

■ Supporting schools and public employment services in their efforts to bring gender sensitive career guidance to young women and men can have an important effect on encouraging them to take up apprenticeships that defy gender stereotypes.

Family responsibilities: Some apprentices, particularly young women, might have family responsibilities that can make it difficult for them to participate in TVET. Such responsibilities are usually related to having one or several children or young siblings to take care of during working and training hours. Subsidised childcare facilities at the training school or the company or at a nearby location can support young women (and men) with work-family responsibilities.

Box 13. The ILO mandate on gender equality

The ILO's mandate to promote gender equality in the world of work is embedded in its Constitution and reflected in relevant international labour standards. The four key ILO gender equality Conventions are the Equal Remuneration Convention (No. 100), Discrimination (Employment and Occupation) Convention (No. 111), Workers with Family Responsibilities Convention (No. 156) and Maternity Protection Convention (No. 183). Conventions 100 and 111 are among the eight fundamental Conventions and the principles and rights enshrined in the ILO Declaration on Fundamental Principles and Rights at Work.

ILO's mandate is reinforced by related Resolutions adopted by its highest decision-making body, the International Labour Conference. The most recent of these is the Resolution concerning Gender Equality at the Heart of Decent Work, adopted in June 2009; and the Resolution concerning the Promotion of Gender Equality, Pay Equity and Maternity Protection, adopted in June 2004.

Source: Website of the ILO Gender, Equality and Diversity Branch (GED) visited 11.02.2016: www.ilo.org/gender.

Disability and inclusive apprenticeship

People with disabilities represent 15% of the world's population and are not a homogenous group. They may have physical, sensory, intellectual or psychosocial impairments which, in interaction with societal factors, may or may not disable them from being fully included in the labour market and society at large.

An impairment may have little impact on one's ability to work or it may have a major impact, requiring support and assistance. The degree to which a disabled person can participate in training and work depends largely on an enabling environment. Some barriers relate to inaccessible buildings, workstations, information, communication and transport. Prejudice and discrimination, e.g. by employers and teachers, is an even more important barrier.

Quality apprenticeship programmes have a great potential for benefitting persons with disabilities, because of their practical approach and effective learning transfer. This type of programme gives people with disabilities a chance to prove their abilities to employers and provides employers with the possibility to gauge the potential that disabled workers can bring to their companies.

Learning at a real company, with clear objectives and technical guidance, should ideally be part of any technical and vocational education and training (TVET) programme.

Inclusive apprenticeship at the practical and policy levels

Implementing inclusive apprenticeships requires practical and institutional arrangements, as well as policy measures at the highest level. Impact is more likely to be achieved through coordinated action across all levels. At the practical level, overall coordination through a specific local institution will be highly conducive to a smooth inclusion process.

Companies and employers

Recruitment process of apprentices with disabilities: Companies are key to apprenticeship and ideally the majority of the training takes place there. Recruitment of apprentices for in-

company training can differ. In some cases, apprentices have to actively search and apply with a company. In others, TVET-schools, public employment services or other institutions may identify the training companies. Outreach and recruitment opportunities can be facilitated through job-fairs, social media campaigns and other initiatives that support direct contact between disabled persons and companies.

Workplace matching: A successful apprenticeship depends on a good matching between the job requirements and the candidate's abilities, capacities and interests. Matching between apprentice and chosen occupation should be done on an individualised basis. Public employment services, Disabled People's Organisations (DPOs) and specialised support services can help to find the right match. It might also be possible to adjust a job description by deleting tasks the person is unable to perform and replacing them with other tasks. Assessment requirements might need to be adjusted to the apprentice's abilities and the respective learning objectives.

■ **"Nothing about us without us!"**

Assuming what other people need and want is likely to lead to misconceptions, errors or dysfunctionality of an originally well-intended policy programme or initiative. Representatives of disabled people have the right to participate in all initiatives that concern them. Disabled People's Organisations (DPO) and related institutions (e.g. parent committees of children with disabilities) are strong partners with a great capacity to advise on policy and programme design and sensitisation and information campaigns.

Managing accessibility and accommodation: Changes in the physical infrastructure at the workplace should follow individual needs and should be based on consultations with the apprentice. Specialised services and disabled people's organisations may provide valuable expert advice on providing reasonable accommodation. Basic elements to consider are an easy entrance to and movement around the premises and adaptations to workstation, tools and equipment. Staff rules, security protocols, instructions and other documentation might need to be available.

Creating a positive work environment: Learning can only be successful in a respectful environment. Companies should actively seek to establish a positive and helpful work-culture. Senior managers should signal clearly their commitment to disability inclusion and make information on disability-etiquette available to all employees. Supervisors and co-workers have to be sensitised about disability management in the workplace and the specific needs of the trainees.

Orientation for the apprentices: Apprentices need initial orientation to the company and their workplace, including occupational safety and health procedures. Information should be conveyed in an accessible format. Any special support needed should be analysed and discussed during the orientation phase jointly with the apprentice.

Training supervision and job induction: Apprentices with disabilities may require more in-depth supervision and coaching than non-disabled apprentices, particularly at the beginning of the apprenticeship. If needed, additional assistance might be provided by external temporary job assistants. Such assistants may also provide follow-up and act as counsellors and mediators in case of problems.

Complementary training at TVET colleges

Wherever possible, complementary school training should take place at regular TVET colleges and give access to equal certification. Training in specialised institutions leads to segregation and perpetuates isolation. In contrast, inclusion into regular TVET colleges and alongside non-disabled peers leads to a better participation in all aspects of work and life.

Making regular TVET colleges more inclusive: Accessibility and accommodation is as much an issue for the training-company as it is for the TVET college. In a situation of scarce resources, TVET colleges can adopt a gradual approach, starting with easy-to-modify structures and work-stations and apply universal design principles for renovations and new constructions. Diverting a share of the annual budget to an accessibility fund will generate reserves to finance more costly or ad-hoc interventions. The biggest barriers, however, are to be found in people's mind-sets and pre-conceptions. Teachers and trainers, college-principals and co-students need to become disability-aware and create a respectful and supportive learning culture.

Adaptation of curricula: Accommodating individual needs demands a certain degree of flexibility in the curricula and alternative training and testing methodologies. In strongly centralised TVET-systems it may be difficult and time-consuming to change the curricula. It is therefore recommended to give national curricula the character of a framework curriculum, while leaving TVET colleges the autonomy on how to shape the learning process in practice and allow for personalised learning plans. Teachers and trainers will need sensitisation and training to be able to adapt the training. It is also crucial to keep curricula updated with the needs of the labour market. This requires frequent industry contacts, company surveys and access to the results of national skills needs anticipation.

Strengthening social skills and self-confidence: A main success-factor for inclusive apprenticeship is an adequate preparation for the world of work. Disabled young people may have low self-esteem and limited opportunities for socialising outside their families. Psychological support and training on workplace relations, work hierarchies and customer care should precede company placement.

Policy recommendations to implement inclusive quality apprenticeship programmes

Inclusive apprenticeship needs an enabling environment, policies and laws that put principles into practice and set the basis for mainstreaming disability in the provision of regular TVET. Effective and pertinent policies can only result from the participation of workers' and employers' organisations and disabled people's organisations that truly represent persons with all types of disabilities. National training authorities, TVET colleges and public employment services should also be part of such a process. Meaningful and well-functioning programmes need to include the concerns and experiences of all actors.

Governments: Governments play an essential role in creating a supportive legislative and social policy framework and disability equality should be mainstreamed as a cross-cutting issue among all Ministries and governmental institutions. The Ministry with the main responsibility for TVET should be the main actor for coordinating with the stakeholders the development of an inclusive TVET policy. A legal basis and regulatory framework is essential for mainstreaming disability in regular TVET, facilitating flexible curricula and recognised

certificates. Governmental incentive schemes and assistance services can support reasonable accommodation in companies and TVET colleges. Financial incentives, such as wage subsidies or tax reductions can increase employers' willingness to train persons with disabilities. Adequate budgetary provisions are needed, as well as regular reviews of policies and programmes in collaboration with stakeholders to adequately adjust them.

Disabled People's Organisations (DPOs): Disabled People's Organisations should be consulted from the beginning by the government and they should also pro-actively engage in dialogue at all levels. Apart from their role in advocacy and awareness-raising, they can provide valuable advisory services and capacity building with multiple stakeholders. DPOs should familiarise themselves with the concepts and challenges of TVET and apprenticeship and analyse good practices, lessons learnt and favourable "business-cases" to effectively influence and push forward inclusive policies.

Social Partners: Given the importance of TVET and skills development for employers and workers alike, there are multiple opportunities for their organisations to participate in the governance and implementation of apprenticeships: the design of policies, curricula, examination and certification, the support of TVET schools and participation in their governing boards. This opens a variety of channels through which Social Partner organisations can make apprenticeships more inclusive.

Employers' organisations: Employers' organisations can engage in advocating in favour of disability inclusion among their members. Disability-inclusive apprenticeship requires that companies adopt a disability management strategy as part of their overall HR policy. Employers' organisations can assist their members in drafting and implementing such a strategy and facilitate an exchange of experiences, good practice and lessons learnt among their network of members.

Workers' organisations: Workers' organisations can also advocate for disability inclusion among their members and develop a union-wide strategy for the inclusion of disabled workers in TVET. Workers' organisations should actively represent and protect the labour rights of apprentices with disabilities at the policy and sectoral level, within company work councils and safety committees. They are in a unique position for promoting positive, inclusive and respectful attitudes among co-workers, informing disabled apprentices about their rights and guiding and supporting them in case of grievances.

H. Social protection in apprenticeship

Why is social protection important for apprenticeships?

Quality apprenticeships are an important entry point for young workers into the national social security system,¹³ which ensures that apprentices have access to adequate social protection benefits during their apprenticeship and thereafter. Social protection benefits include social security in case of employment injury, maternity, disability, for retirement, as well as health protection through a health insurance or the national health service. Many enterprises offer an unemployment insurance to ensure income security in case the transition from the apprenticeship programme to the next job does not work out smoothly. In this case

¹³ - The terms "social protection system" and "social security system" can be used interchangeably to refer to a coordinated set of contributory and non-contributory schemes and programmes.

unemployment benefits will provide financial support for a limited time period while searching for a decent job, often linked to job matching, additional skills training and/or career guidance provided by the public employment services.

What do national social security systems consist of?

National social security systems usually combine contributory (including social insurance schemes) and non-contributory (tax-financed) schemes, such as universal child benefits or social assistance. While tax-financed benefits play an important role in ensuring a basic level of social protection, social insurance benefits can guarantee higher levels of protection.

The ILO on social protection

ILO social security standards guide the establishment, development and reform of social security systems, namely the Social Security (Minimum Standards) Convention, 1952 (No. 102), which is complemented by a set of more specific standards providing guidance for higher levels of protection. The recently adopted Social Protection Floors Recommendation, 2012 (No. 202), calls for the establishment of nationally-defined social protection floors, which guarantee at least a basic level of social security for all – including apprentices – as well as effective access to health care and income security, throughout life (ILO, 2012a; 2014).

It is therefore essential that apprentices enjoy social security coverage from the first day of their contract, which should apply under the same rules as other employees. Such coverage is not only essential in ensuring an adequate level of social protection for apprentices, but it also contributes to setting them on the right path for their further career and to smoothing the transition from apprenticeship to regular employment. The examples of Austria, Germany and Switzerland (see Box 14) show how successful apprenticeship systems are linked with the social security system.

Box 14. Mandatory social insurance for apprentices in Austria, Germany and Switzerland

In Austria, Germany and Switzerland, all apprentices are insured under the social insurance system from the first day of their employment, as are all other employees. They enjoy the full range of social insurance coverage, including for health, employment injury, disability, old age, survivorship, maternity, sickness and unemployment. The social insurance contribution is proportional to their wage or salary, and is usually shared between the apprentice and his/her employer.

In Austria, apprentices are insured in the case of employment injuries: both apprentices and their employer are exempted from paying contributions.

In Germany, if an apprentice earns less than EUR 325 per month, the employer covers the full social insurance contribution. While other employees need to be insured for five years until eligible for pensions, in case of employment injury or occupational disease, apprentices will receive benefits from the first day, if necessary.

In Switzerland, apprentices up to the age of 25 are exempted from contributions to the second-tier old age pension scheme.

Sources: Prepared by the authors.

Quality apprenticeships contribute to closing social protection gaps for young people

In many countries, young people find themselves without adequate social protection coverage. The major reason for a lack of coverage is related to the fact that many young people are first-time jobseekers who have not yet contributed to social insurance, and therefore have to rely on social assistance, which often is not adequately linked to employment services such as job matching, training and career guidance. In addition, many young people face difficulties finding formal employment, and often have to rely on precarious or informal employment. With limited contributory capacity and unstable jobs, the extension of social protection coverage to young people is a key challenge in many countries.

Apprenticeship systems can potentially make a positive change in this respect by offering a formal route into decent employment, including social protection coverage (ILO, 2012b). They can contribute to closing social protection gaps for young people by providing apprentices with access to social protection benefits.

This social insurance includes health insurance, unemployment benefits, pension and disability benefits, which ensure income security and access to health care when they become ill, injured, unemployed or retire as they will still have income security and access to health care.

Unemployment benefits: While first-time jobseekers are usually not covered by statutory unemployment insurance (ILO, 2012b), apprentices with previous contribution records will enjoy statutory coverage by unemployment insurance which can facilitate their job search. For example, in Germany, after three years of apprenticeship, jobseekers are eligible for a maximum of 12 months of unemployment insurance benefit at 60 per cent of their last year's salary.

Health protection and sickness benefits: Particular challenges arise for young people who find themselves in precarious employment situations which often lack health insurance coverage. Unless there is a national health service in place which ensures effective access to health care for young people, young workers will need health insurance coverage for effective access to health services. Where health insurance coverage is voluntary, many young people will not insure themselves (even where subsidised coverage mechanisms are available), wrongly believing that they will not need health coverage. Apprenticeships can help them overcome this challenge by providing mandatory health protection through social health insurance or other means. In addition, cash sickness benefits are also an important means of ensuring income security during illness.

Employment injury, disability and old age pensions: In many countries, the benefits level of contributory pensions strongly depends on for how long and how much people have contributed during their working careers. As many young people enter formal employment at a later stage, their future pensions may be very low and even not sufficient to secure a basic income in old age. In addition, many pension schemes usually provide not only old age pensions, but also disability, employment injury and survivor benefits, which provide important protection early in the career, before retirement. With apprenticeship systems, young people can be covered by pensions and disability benefits at an early stage of their careers to ensure income security and access to health care in the long run.

Maternity protection and family benefits: Maternity benefits, as well as child/family benefits, are important means of social protection for those apprentices with family responsibilities.

Social protection for apprentices can prevent informality

Quality apprenticeship systems are therefore not only an important means to acquire the necessary skills for a successful career, but also an important element of a broader strategy to promote young people's access to formal employment and social protection.

These systems ensure that social protection coverage will benefit not only the apprentices themselves and their employers, but also contribute to a broader strategy of investment in people (human capital), improving productivity and competitiveness, promoting transition from the informal to the formal economy, thereby strengthening the country's tax base, fiscal space and the sustainability of the social security system in the longer run (ILO, 2014).

Box 15. The key concepts on social protection

Social security: Social security has two main functional dimensions, namely (i) “income security” and (ii) the “availability of medical care”, reflected in the Declaration of Philadelphia (1944). The ILO Social Protection Floors Recommendation, 2012 (No. 202), sets out that, at least, access to essential health care and basic income security over the life cycle should be guaranteed as part of nationally defined social protection floors, and that higher levels of protection should be progressively achieved by national social security systems in line with the ILO Social Security (Minimum Standards) Convention, 1952 (No. 102), and other ILO instruments. Access to social security is typically provided through public institutions, financed from either contributions, taxes or both. However, the delivery of social security can be and often is mandated to private entities. Moreover, there exist many privately run institutions of an insurance, self-help, community-based or mutual character. Entitlements to social security are conditional either on the payment of social security contributions for prescribed periods or on a requirement, sometimes described as “residency plus”, under which benefits are provided to all residents of the country who also meet certain other criteria (non-contributory schemes). Such criteria may make benefit entitlements conditional on age, health, labour market participation, income or other determinants of social or economic status and/or even conformity with certain behavioural requirements.

Social protection: The term “social protection” is used in institutions across the world with a wider variety of meanings than “social security”. It is often interpreted as having a broader character than social security, but it is also used in some contexts with a narrower meaning. Thus, in many contexts the two terms, “social security” and “social protection”, may be largely interchangeable.

Social protection floor: ILO Recommendation No. 202 sets out that member States should establish and maintain national social protection floors as a nationally defined set of basic social security guarantees which secure protection aimed at preventing or alleviating poverty, vulnerability and social exclusion. These guarantees should ensure at a minimum that, over the life cycle, all in need have access to at least essential health care and basic income security. These together ensure effective access to essential goods and services defined as necessary at the national level. More specifically, national social protection floors should comprise at least the following four social security guarantees, as defined at the national level: (a) access to essential health care, including maternity care; (b) basic income security for children, providing access to nutrition, education, care and any other necessary goods and services; (c) basic income security for persons in active

age who are unable to earn sufficient income, in particular in cases of sickness, unemployment, maternity and disability; and (d) basic income security for older persons.

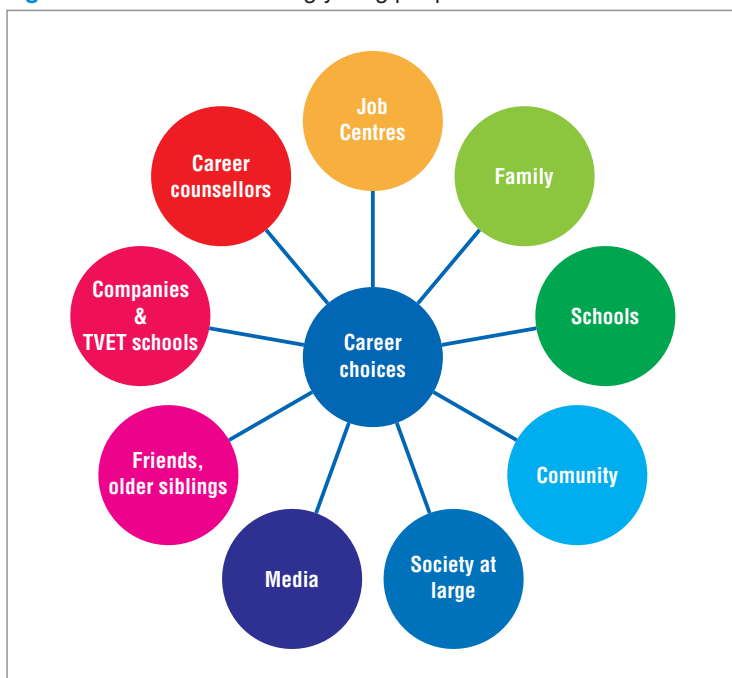
Source: ILO (2014).

I. Social image and attractiveness of quality apprenticeship

In many countries across the world, TVET is struggling with a relatively low social image. This is even more the case for apprenticeship which is usually being associated with “manual” activity and therefore often regarded as a less desirable work or “inferior” quality of training vis-à-vis TVET delivered in a school-only setting. In addition, apprenticeship is often used as a training option for young people with low academic achievements who face challenges following classroom-based schooling. Frequently, apprenticeship is also associated with exploitative working conditions. Therefore, parents and students often prefer higher education options or school-based vocational education.

The low social status of TVET can be attributed to a combination of different inter-related reasons and misconceptions:

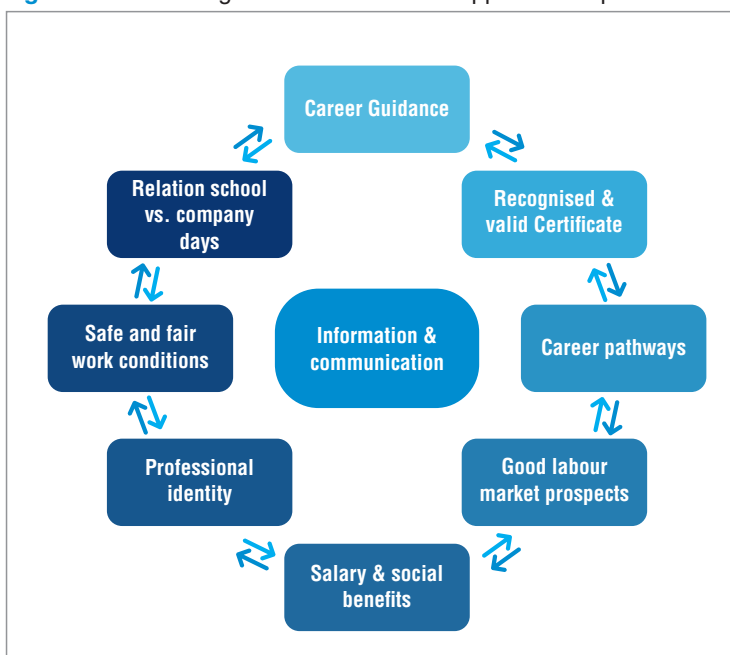
- **Lack of career guidance:** young people tend to base their career choices on the expectations of family and society without having opportunities to properly reflect on their interests and aptitudes and without any information about the skills needs and earning opportunities in the labour market. The graph below gives an overview over some of the most important factors influencing young people's career choices and the areas that a comprehensive career guidance system needs to address.
- **Lack of career and progression opportunities:** In many countries, TVET is considered a “dead end” without possibilities for further career development and progression into higher education. In countries where these opportunities exist, TVET (including quality apprenticeship) has a higher social status and more young people opt for TVET as a (first) career step.
- **False perceptions about company-based training:** Achievements at school tend to have a higher social status, while on-the-job training is recurrently considered to be for “under-achievers”. People tend to ignore the methodological advantages of structured in-company training, as well as the value of first work-experience acquired during a quality apprenticeship.

Figure 11. Factors influencing young people's career choices

Source: prepared by the authors

Measures to increase the attractiveness of quality apprenticeship

The following graph presents a number of options that can help increase the social image of apprenticeship. It is not a comprehensive list, many more options are available. Depending on the national context, some measures might be more effective than others. The success of those measures will depend on the use of adequate information and communication strategies to reach a critical mass. Information campaigns need easy-to-understand materials and use adequate media, including social media, websites and mobile applications popular among youth. Likewise, information needs to be tailored to different target groups, e.g. youth, their families, school teachers, career counsellors and other relevant actors and youth influencers.

Figure 12. Increasing the attractiveness of apprenticeship

Source: prepared by the authors

Career Guidance: Career Guidance services can play a vital role in helping young people to understand their own professional interests and aptitudes as well as the labour market and the available careers and the training pathways to a fulfilling career. Career Guidance can be delivered through many channels and modalities. Job Centres, schools, private or public counselling services, company visits with trial workshops, internet or social media are just some of the options to inform young people. Including information on apprenticeship training in existing and new emerging career guidance modalities is a way of reducing stigma and raising the social acceptance of apprenticeship.

Recognised certificate with national validity: Certification is a crucial issue for increasing the attractiveness of apprenticeship. A valid certificate that responds to national skills standards and is recognised by employers provides apprentice-graduates with a guarantee that their qualifications will be valued in the labour market. An ILO study¹⁴ showed that in countries with unified certification, apprenticeship has a better and nationwide “standing” among employers. In contrast, where certificates have limited geographical validity, or other problems concerning recognition, the value of qualifications can create problems in finding or changing jobs. Such practices undermine the social acceptance of quality apprenticeship as a valid career option.

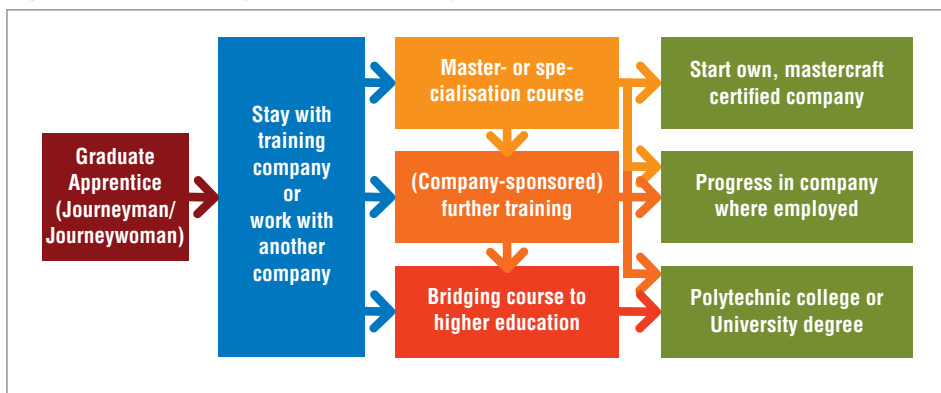
Career options and pathways into higher and further education: If the educational system provides only limited or no options for progression into higher education, apprenticeship will be considered as a “dead end” and fail to attract large amounts of applicants, nor necessarily the most qualified ones. In a “permeable” system, where progressing and shifting both ways

14 - Axmann, M.; A. Rhoades; Nordstru, L. 2015

between vocational and academic streams is possible, apprenticeship can yield the potential of a “stepping stone” for building a career later in life. Young people might be more willing to opt for an apprenticeship if they know that they will still have multiple possibilities for career development at a later stage, in particular if it includes the option of progressing into higher education. More “permeable” education systems therefore increase the acceptance of quality apprenticeship as a (first) career step.

In countries with well-developed apprenticeship systems, the education system usually provides options for professional development, including master-craftsperson training. Also, privately run training institutions, professional associations, chambers of commerce, sectoral trade unions and employers’ associations can be providers of further professional career training or offer bridging courses to access higher education. Large companies may also offer multiple possibilities for the professional development of their workers, including access to polytechnic colleges or university studies besides working at the company.

Figure 13. Permeability of the education system offers multiple options after apprenticeship



Source: prepared by the authors

Good labour market prospects: The likelihood of finding a stable job greatly increases the attractiveness of any training programme. Apprenticeship is frequently used by employers as a recruitment strategy for anticipated skills needs in their companies. Whether an apprentice stays with his training company will depend on company needs and the company’s satisfaction with the apprentice’s work performance during the apprenticeship. Compulsory recruitment and job guarantees after completing the apprenticeship will, however, be counterproductive and should be avoided at all cost. It is important that the offer of apprenticeship vacancies should depend on the demand by employers.

Salary & social benefits: One attractive feature of an apprenticeship scheme is the salary the young person earns. In addition to providing the apprentice with an initial income, it is also a means of reducing drop-out rates, particularly in situations involving financial constraints, in low-income families. It is also a way to get unemployed and inactive youth into a paid work scheme that enables them to “learn while they earn”. Although apprentice salaries are usually a percentage of the minimum salaries (or only an allowance), the availability of a remuneration might greatly increase the possibilities of low-income families to “afford” to have their children participate in TVET, as opposed to sending them to work as unskilled labourers.

Professional “identities”: A well-developed “professional identity” can contribute to increasing the social image of a sector or occupation and thereby of quality apprenticeship as a training choice. “Professional identity” means the identification with a group of professionals or workers within a particular industry and inspires a sense of pride and belonging among this group. Employers’ and workers’ organisations can foster the identification with an occupation or professional group and thereby inspire young people to take up quality apprenticeship training.

Safe and fair work conditions: One of the stigmas attached to quality apprenticeship is that of hard manual work, often associated with exploitative work conditions. Quality Apprenticeship advocates for the application of Decent Work principles within apprenticeship. A public commitment by Government and Social Partners in assuring apprentices that they will be trained under safe and fair work conditions will increase the reputation of apprenticeship. This includes the absence of any forms of exploitation and the observation of the mutual roles and responsibilities in the training contract. In many countries, training companies must undergo accreditation and quality control processes before they are entitled to accept an apprentice, as well as regular inspections to ensure adequate conditions are maintained. Accreditation bodies should be neutral institutions that proceed according to transparent rules and regulations.

Induction into occupational safety and health at the company and the TVET school and their strict observation needs to be given absolute priority. Apprentices should be informed about their rights and responsibilities and be provided with means to formulate complaints and seek mediation in case of mistreatment and disputes. Trade Unions and other stakeholders can undertake such a role. Company and school staff need to be adequately sensitised, so as to create a working environment that is safe for all apprentices alike.

Relation between company days vs. school-days: The stigmatisation of manual work and the high social status of school-based learning has led in some countries to resistance of having apprentices spend the majority of their training at the company. Such concerns have often been raised by parents. Following this social perception, some countries have opted to reduce the number of company-training days and increase the amount of school training, in order to make apprenticeship more “socially acceptable.” Other countries have decided to initiate the apprentices with an initial phase of school-based training before initiating the company-based training. Such arrangements are sometimes also favoured by the training companies, which prefer that apprentices have some initial training before they join the company. This shows that the adaptation of apprenticeship to the local conditions and the perceptions of the involved stakeholders is a critical aspect.

Box 16. Role of Public Employment Service in quality apprenticeship – an example from Germany

The objective is to improve employability through skills upgrades as well as vocational training leading to a certified qualification. The duration varies depending on the objective and the jobseeker’s existing qualifications. The programme (BIZ) includes occupational re-training, which usually takes about two years. Jobseekers are given a voucher and can choose a (certified) training provider. In 2013, this programme had an average duration of 5.4 months and cost a total of €4,600 per participant. Nearly half of the participants (44.9 per cent) who successfully completed the programme were employed six months later.

Source: ILO, 2015. Note on Public Employment Services in Germany. Available at http://www.ilo.org/empolci-units/country-employment-policy-unit-empcepol/WCMS_434599/lang--en/index.htm

Part 2:

Tools for Quality Apprenticeships



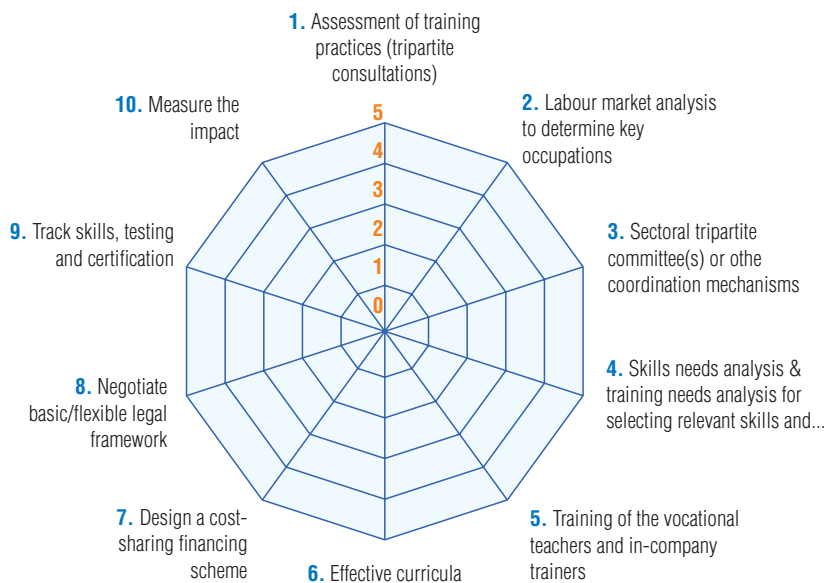
Attributes of various work-based learning schemes

| | WAGE | LEGISLATIVE FRAME-WORK | WORK-PLACE BASED* | EMPLOY-MENT CONTRACT | STRUCTURED, FULL LEARNING PROGRAMME | ON THE JOB TRAINING | OFF THE JOB TRAINING | SOCIAL SECURITY | FORMAL ASSES- MENT | RECOGNISED CERTIFICATION | APPROX. DURATION |
|--|----------------------------------|---------------------------|----------------------|----------------------------------|---|------------------------|-------------------------|-----------------|-----------------------|-----------------------------|---------------------|
| TRAINEESHIP/ INDUSTRY ATTACH- MENT | YES | NO | YES | YES | NO | YES | NO | MAY- BE | NO | NO | 12 MON- THS |
| INTERNSHIP | MAYBE | NO | YES | NO | NO | YES | NO | NO | NO | NO | 3-6 MONTHS |
| INFORMAL APPRENTI- CE-SHIP | POCKET MONEY OR IN KIND | NO | YES | INFOR- MAL AGREE- MENTS | MAYBE | YES | NO | NO | NO | NO | 1-4 YEARS |
| WORK-PLA- CE LEAR- NING | YES | MAYBE | YES | NO | MAYBE | YES | MAYBE | NO | MAYBE | MAYBE | VARIA- BLE |
| QUALITY APPRENTI- CE-SHIP | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | 1-4 YEARS |
| DUAL UNIVERSITY STUDIES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | 2-3 YEARS |

*Workplace = a real work environment, not a simulated environment or a “company” set up primarily for training purposes



Key elements of quality apprenticeship systems



Criteria

1. Do not exist in my country
2. Might have happened in the past
3. Poor mechanism in place
4. Fair mechanism in place
5. Good mechanism in place



Checklist: Key elements of quality apprenticeship systems

| Key Elements | Applicable | Not Applicable | Shortcomings or observations |
|--|------------|----------------|------------------------------|
| Participation of stakeholders | | | |
| <p>Are the following institutions involved in the design and implementation of the programmes:</p> <ul style="list-style-type: none"> •Ministries (Ministry of Labour, Education, others)) •Employers' organisations •Chambers of industry, commerce or other professional chambers •Workers' organisations •Employment services •Instructors and master craftspersons •Vocational training institutes and colleges •Sector- or industry-based organisations <p>Are sector- or industry-based boards/advisory committees participating or advising on:</p> <ul style="list-style-type: none"> •The anticipation and identification of the required skills and competencies •Establishment of new programmes •Apprentices' rights •Regulations for accreditation of companies | | | |
| Rights at work | | | |
| <p>Do apprentices have the same benefits as other workers, e.g., full social security coverage, holidays, sick leave?</p> <p>Are apprentices covered by social protection, such as health and invalidity insurance?</p> <p>Are apprentices provided with training on occupational safety and health at the workplace? Do they receive protective gear?</p> <p>Do women, disadvantaged youth and persons with disabilities participate in apprenticeships of their choice?</p> <p>Are there barriers or stigmatisation preventing women, disadvantaged youth and persons with disabilities to participate in apprenticeship? Are adequate remuneration levels for apprentices established and ensured?</p> | | | |
| Legal and contractual issues | | | |
| <p>Is there a legal framework to regulate quality apprenticeships (National Labour Law, Apprenticeship Law, TVET law, Work-based Learning Law, etc.)?</p> | | | |

| | | | |
|---|--|--|--|
| <p>Do apprentices sign an official contract? Is it an employment contract, giving the apprentice the legal status of a worker with the entitlement to social protection and labour legislation like regular young workers?</p> <p>Is the employment contract signed by the employer and the apprentice? Does the training provider sign the contract as well?</p> <p>Are there regulations and mechanisms for the recognition of skills that were acquired informally / in informal sector?</p> <p>Are there any entry criteria for starting a quality apprenticeship programme (e.g. school literacy and numeracy skills)?</p> | | | |
| Funding | | | |
| <p>Are there regulations on the funding schemes for apprenticeship?</p> <p>Is the cost shared between Employer, Government/ training provider, and apprentice?</p> <p>Do the programmes include tax incentives or other government-supported financial incentives?</p> <p>Do the programmes include assistance or incentives for training disadvantaged groups?</p> <p>Is there another source of funding apart from public funds?</p> | | | |
| Skills training, tracking and testing | | | |
| <p>Does the current system in place include both, on-the-job-training and school-based learning components?</p> <p>Does the current system have nationally defined competencies, occupational profiles or other instruments providing nationally valid guidelines on the contents of the apprenticeship programmes (NQF, occupational standards, etc.)?</p> <p>Is the assessment and certification widely recognised and accepted by Employers?</p> <p>Is regular skills up-dating available for TVET school-teachers to further develop their skills?</p> <p>Is training available for in company instructors to develop pedagogical and supervision skills?</p> <p>Do instructors and master craftspersons have to go through official certification to train apprentices?</p> <p>Do apprentices, master craftspersons and school instructors use a logbook or other tools for tracking the training progress and for coordinating between company-based and school-based learning?</p> | | | |

| | | | |
|---|--|--|--|
| <p>Are soft skills and entrepreneurial skills part of the curricula?</p> <p>Does the system take into consideration an appropriate balance between theoretical, specialised and core work skills?</p> <p>Are apprenticeship programmes available for higher skills training (e.g. university-level degrees)?</p> | | | |
| Employment services and career guidance | | | |
| <p>Do prospective apprentices have access to good quality career guidance information and counselling on quality apprenticeships?</p> <p>If yes, is such information available in schools?</p> <p>Do apprentices have access to:</p> <ul style="list-style-type: none"> •Employment services •Career guidance •Continuous training •Further educational pathways <p>Are labour market information systems available to assist youth to make informed decisions and to inform them about the conditions and modalities of apprenticeships?</p> | | | |



A model employment contract for quality apprenticeship programmes

This apprenticeship contract template has been developed by the ILO to provide a model for policy makers, the private sector and vocational institutions in order to ensure that the roles and responsibilities of all the parties involved are respected (Employer, Training Institution and Apprentice). It is based on existing apprenticeship contracts from various countries worldwide (Germany, United Kingdom, Canada, United States, Denmark, Switzerland, Lebanon, Morocco and Botswana) and on a thorough review of relevant International Labour Standards.

Even in countries where apprenticeship systems are not regulated by law, an apprenticeship agreement can become a legally binding document between the parties involved. It should be considered also as an employment contract that gives the apprentice the status of “employee” (as opposed to a student status), in line with International Labour Standards.

The articles presented in the template should be used as a model that may be adjusted as appropriate. For instance, a Government can decide to institute a national apprenticeship contract, based on consultations with employers and workers. Alternatively, the contract can be used as part of apprenticeship programmes agreed between employers and training centres. Elements may also be added depending on the local context, the work’s environment and the type of apprenticeship.

Three copies of the contract should be prepared (one for each party). The contract should be signed by the apprentice, the employer and the training centre at the beginning of the quality apprenticeship and remain valid for the whole duration of the training.

Article 1 - Signatories

This employment contract is signed by three parties, hereinafter referred to as “the Employer,” “the Training Institution” and “the Apprentice”:

a. First Party

Name of the Employer (company): _____

Name and title of the signatory: _____

Address: _____

Phone number: _____

b. Second Party

Name of the Training Institution: _____

Name and title of the signatory: _____

Address: _____

Phone number: _____

c. Third Party

Name of Apprentice: _____

Date of birth: _____

Sex: _____

Address: _____

Phone number: _____

If below 18 years old*, name and contact details of the legally responsible parent/guardian:

Emergency contact person (if different from Guardian): _____

Highest diploma: _____

**Should not be below the age at which school attendance ceases to be compulsory, which shall not be less than 14 years.*

Article 2 - Purpose of the Employment Contract

The parties have agreed upon the following:

“The purpose of the contract is the training of the apprentice in the following occupation: _____, through an apprenticeship programme jointly implemented by the Employer and the Training Institution.

For this contract, “apprenticeship” is defined as a unique form of vocational education, combining on-the-job learning and training with school-based learning and training. The apprenticeship programme is designed specifically on defined skills, knowledge and competencies linked to occupational work processes.

The apprenticeship programme is regulated by national law; namely the following laws / decrees:

_____ that the present contract can in no case overrule. In addition, the following collective agreements also apply to this apprenticeship: _____.

It focuses on competencies previously agreed jointly by the Employer and the Training institution, which should be annexed to the contract.

The duration of the apprenticeship (determined in advance) is the following _____ (at least 1 year), with the following schedule:

On a weekly or monthly basis (please describe the exact arrangement):

Time spent in the training institution:

Time spent in the company:

Other:

A probationary period of _____ (maximum 6 months) should also be predetermined.

Any prior training undergone by the apprentice in a technical or vocational school should be duly taken into account.

The on the job component of the apprenticeship programme will be implemented in no more than 40 hours per week. Apprentices under 18 years of age will not be allowed to learn and work overtime. The apprentice is entitled to sick leave, up to ____ days per year. The Employer provides the apprentice with regular leave on par with other workers, i.e. ____ leave days per year in addition to national holidays.

If for extraordinary reasons, the apprentice was asked to work overtime, the maximum hours of work in the week may be so arranged that hours of work in any day do not exceed 10 hours. The rate of pay for the additional hours of work permitted shall not be less than one-and-a-quarter times the regular rate. In addition, the apprentice should receive compensatory time off for the work done in overtime if he/she worked during the weekly rest period.

This training includes a remuneration, to be paid by the Employer to the Apprentice, on a weekly / monthly basis for his or her time at the company and at the training institution. The remuneration shall increase by a previously defined percentage per year and move toward the wage of a regular worker; preferably close to the minimum wage (if in place) in the last year of the apprenticeship.

The remuneration is the following:

| Year 1 | Year 2 | Year 3 | Year 4 |
|--------|--------|--------|--------|
| | | | |

The apprentice will benefit from social protection at the same level of other workers, namely of the following insurances: _____

Other in-kind support provided by the Employer to the Apprentice will include the following (accommodation, transport, food): _____

A formal assessment of the apprentice's skills and competencies will be jointly implemented by the Employer and the Training Institution at the end of the training; other parties might be involved such as employers and workers organisations. At the end of the apprenticeship programme the apprentice will be granted a certificate of achievement signed by Employer and Training Institution.

The Employer does not have an obligation to offer employment to the apprentice after the completion of the apprenticeship.

Article 3 - Roles and responsibilities of the Employer

The Employer undertakes the following responsibilities:

- The Employer agrees to ensure that a qualified trainer is available to train the apprentice. In some cases, more than one trainer might be responsible for the training of the apprentice. The responsibilities of the trainer within the training programme are stipulated in his/her job description. The name and contact details of the trainer(s)/supervisor(s):

Name: _____

Title: _____

Name: _____

Title: _____

Name: _____

Title: _____

- The Employer agrees to provide a safe and healthy environment to the apprentice and to provide Occupational Safety and Health training relevant to the occupation.
- The Employer agrees to provide a suitable working environment and decent working conditions, which do not discriminate against anyone and are free of harassment. The Employer agrees to act immediately on harassment cases when they occur.
- The Employer provides the apprentice with the relevant clothes, equipment and tools required to perform his/her duties.
- The Employer agrees to pay the apprentice a fair compensation for the work done, as stipulated under article 2 of the present contract. The Employer will continue to provide the apprentice with this allowance in case of absence due to an illness or injury for the full period of allowed sick leave specified in article 2 above.
- The Employer agrees to release the apprentice for off-the-job learning in the Training Institution as established in the training schedule defined under article 2. Arrangements should be made to facilitate the transfer of an apprentice from one institution to another in cases where transfer appears necessary or desirable in order to avoid interruption of the apprenticeship or to complete the training of the apprentice or for some other reason.
- The Employer agrees to inform the training institution of any accidents or illnesses of the apprentice.
- The Employer agrees to ensure the apprentice will benefit from the relevant insurance policies like other workers.
- The Employer monitors the apprentice's progress against the agreed elements and competencies annexed to this contract linking with the training institution when necessary.
- Together with the Training Institution, the Employer agrees to facilitate the implementation of the learning process with other companies for learning activities it cannot directly handle.

- The Employer agrees to contribute to preparing and implementing the final testing and certification.
- The Employer agrees not to demand payment from the apprentice for any material that he/she might have broken or damaged accidentally.
- The Employer agrees to accommodate the possible disabilities of the Apprentice through the following workplace arrangements and changes to the learning processes:

Article 4 - Roles and responsibilities of the Apprentice

- The Apprentice agrees to come to the workplace on time, to respect and implement internal company rules and to comply with the instructions given by the Master craftsperson supervising him/her. In particular, the Apprentice agrees to comply with all regulations related to Occupational Safety and Health (e.g. wearing protective clothing and implementing safety measures).
- The Apprentice agrees to take care of materials, tools and equipment of the company he/she is using to ensure they will be neither stolen nor damaged.
- The Apprentice agrees not to share any confidential information he/she might have learned about during the course of the training.
- The Apprentice agrees not to engage in other working/financial activities outside of the firm unless otherwise agreed with the employer.
- The Apprentice agrees to provide a certificate of Good Health to the Employer at the start of the apprenticeship. Where the work in view calls for special physical qualities or mental aptitudes these should be specified and tested by special tests. The cost of medical examination should be paid by the Employer.
- The Apprentice agrees not to miss days of work without a valid reason and to notify immediately the employer of any absence. In case of illness, the Apprentice agrees to provide a doctor's certificate to justify his/her absence.

Article 5 - Description of the roles and responsibilities of the Training institution

- The training Institution agrees to nominate the following focal point for the implementation of this apprenticeship programme:

Name: _____

Title: _____

- The Training Institution agrees to provide the theoretical and practical learning components of this apprenticeship programme, to support the performance of the apprentice within the company.
- The Training Institution agrees to review the progress of the Apprentice, together with the Employer on a regular basis against the list of agreed competencies, and to keep the Apprentice informed of his/her performance and of areas that require improvements.

- The Training Institution agrees to provide additional support, if and when necessary, to apprentices with disabilities.
- Together with the Employer, the Training Institution agrees to facilitate the implementation of the learning process with other companies for learning activities the Employer cannot directly handle.
- Together with the sectoral organisations, the Training Institution will facilitate the examinations.

Article 6 - Settlement of Disputes and Early Termination of the Contract

- The three parties agree to attempt to settle possible disputes amicably. If a mutually agreeable solution cannot be found, a mediation process will take place between the opposing parties, managed by a mediator of their choice. Engagement of the mediation process shall not preclude resort by either party to judicial means if no solution can be reached by mediation.
- The initial training relationship may be terminated without notice at any time during the probationary period by either the employer or the apprentice. After this period, the contract can be broken by either party only with a 4 weeks' notice, and for valid reasons. Notice of termination must be given in writing and shall state the reasons for termination.

Article 7 - Testing and Certification

- Unless nationally accredited assessors are available for the targeted competencies, the Employer and the Training Institution will select test designers and assessors for this process.
- The test designers will be responsible for the test contents, based on the agreed competencies and national standards for testing and certification. The assessors will be responsible for the implementation of the test that the apprentice will undertake.
- The practical part of the tests will be implemented within a standard work environment for all trainees.
- The following specific accommodation will be made for the possible disability of the Apprentice: _____
- If the Apprentice fails the final test, he/she will be given the opportunity to try it again after a period of _____ months.
- The Training Institution shall prepare a personal file for every trainee, enclosing all technical reports from the moment the trainee joined the training institution until the end date of the training period.
- The apprentice will either write down in a book his or her daily tasks and activities, or a skills tracking tool will be prepared by the Training Institution and the Employer to verify if the apprentice has learnt the skills and competencies.

Signatures

By signing this contract, all parties accept its terms and conditions and agree to abide by them.

This contract is written in triplicate and each party receives a copy.

Apprentice _____ Date _____

Employer _____ Date _____

Training Institution _____ Date _____

The following institution / organisation also signs as witness to this Apprenticeship Contract:



Apprenticeship employment contract: An example from Germany¹⁵

Quality apprenticeship systems and international labour standards

Initial Training Contract (Sections 10 and 11 of the Vocational Training Act - “BBiG”)

The following initial training contract for training for the training occupation

as provided in the initial training regulations¹⁶ was concluded

between

(Name and address of the training employer (company providing the training))¹⁷

and

(Name and address of the trainee)

born on

legally represented by¹⁸

Section 1 - Duration of training

1. Duration

In accordance with the initial training regulations, training shall last _____ years/months.

a) A total of _____ months' credit for vocational training for the occupation

¹⁵ - Source: Deutsches Berufsbildungsinstitut, 2015 Ausbildungsvertragsmuster auf Englisch, https://www.bibb.de/dokumente/pdf/ab12govet_ausbildungsvertragsmuster_englisch.pdf.

¹⁶ - Under section 104, subsection (1) of the Vocational Training Act and section 122, subsection (4) of the Crafts and Trade Code, regulatory instruments that existed prior to 1 September 1969 are to be used in the absence of training regulations.

¹⁷ - Several natural persons or legal entities may cooperate within the framework of a collaborative training venture to discharge the contractual obligations of training employers as long as responsibility for the individual stages of initial training and for the period of initial training as a whole is ensured (collaborative training, section 10. subsection (5) of the Vocational Training Act).

¹⁸ - Both parents acting together are authorized to act for and on behalf of the trainee insofar as the authority to represent the trainee is not restricted to just one parent. Should a guardian have been appointed, this person must have the approval of the guardianship court for the conclusion of a training contract.

_____ ¹⁹or prior vocational training in _____ as the case may be. shall be granted toward the training period.²⁰

b) The period of training shall be reduced by _____ months on the basis of _____ subject to the decision of the competent body.²¹

This initial training relationship shall commence on _____ and end on _____²²

2. Probationary period

The probationary period shall last _____ months²³. Should training during the probationary period be interrupted for more than one third of this time, the probationary period shall be extended by the period of the interruption.

3. Premature termination of the initial training relationship

Should the trainee pass the final examination before the end of the training period agreed under No. 1, the initial training relationship shall end upon the announcement of the results by the board of examiners.

4. Extension of the training contract

Should the trainee fail the final examination, the initial training relationship may be extended, at the trainee's request, until the next possible date for repeating the examination, up to a maximum of one year.

Section 2-Training premises

The training shall be held, except as provided in Section 3, No. 12, at (training premises)

and at the construction, assembly and other work sites generally connected with the principle place of operations of the company providing the training.

¹⁹ - Prior vocational training may be credited towards the period of training when the training regulations on which the contract is based provide for this possibility under section 5, subsection (2), number 4 of the Vocational Training Act.

²⁰ - The federal ordinances governing basic vocational training years and full-time vocational schools apply until 31 July 2006 for granting credit for prior vocational training acquired through the attendance of a course of training at a vocational school or vocational training acquired at another type of facility. After this time, the states may stipulate by means of an ordinance that applicants have a legal claim to receiving credit for such training or that credit be granted automatically. Starting 1 August 2009 at the latest, credit may be granted only upon joint application by the trainee and the training employer (section 7 of the Vocational Training Act).

²¹ - Under section 8, subsection (1) of the Vocational Training Act, the competent body must, upon joint application from the trainee and the training employer, reduce the period of training when it is likely that the objective of the training will also be achieved in the shorter period of time.

²² - When the training regulations provide for initial training to be conducted in progressive stages according to specific syllabuses and timetables, provision is to be made at the end of each stage for a certificate of competence qualifying trainees to engage in a form of skilled occupational activity (so-called "real" multi-stage training, section 5, subsection (2), number 1 of the Vocational Training Act). The contract must however be concluded for the entire period of training in this case as well (section 21, subsection (1) of the Vocational Training Act).

²³ - The probationary period must last for at least one month and may not exceed four months.

Section 3 - The training employer's obligations

The training employer shall undertake to

1. (Objective of the training)

ensure that the trainee is taught the vocational competence necessary for achieving the training objective and to conduct the training according to the attached instructions regarding the syllabus and timetable in such a way that the objective of the training can be achieved within the foreseen training period.

2. (Trainee)

provide the initial vocational training itself or to expressly entrust such training to an instructor who has the personal and technical qualifications for this and to inform the trainee of this in writing;

3. (Initial training regulations)

provide the trainee the initial training regulations free of charge prior to the start of training;

4. (Training aids)

furnish to the trainee free of charge the materials, in particular tools, supplies and technical literature, that are necessary for the initial training received at company training facilities or intercompany training centres and for sitting interim and final examinations²⁴, including those that are held within a short time after the end of the initial training relationship;

5. (Attendance of part-time vocational school and participation in training measures outside the training premises)

urge the trainee to attend part-time vocational school and grant him/her the necessary time off from work to do so. The same shall apply when initial training measures outside the training premises are prescribed or are to be conducted pursuant to No. 12;

6. (Keeping written records of initial training)

insofar as written records of the initial training are to be kept by the trainee, issue to the trainee at no charge the forms that are needed for keeping a record of his/her vocational training and initial them in regular intervals to ensure they are being properly kept;

7. (Training-related activities)

entrust the trainee with only such tasks that serve the purpose of his/her initial training and are commensurate with his/her physical abilities;

8. (Obligation to care)

ensure that the trainee is encouraged to develop his/her character and is protected from physical and moral danger;

²⁴ - Including the first part of the final examination, when provided for in the training regulations.

9. (Medical examinations)

insofar as the trainee is not yet 18 years of age, require certificates pursuant to sections 32 and 33 of the Act on the Protection of Young People at Work [Jugendarbeitsschutzgesetz] to the effect that he/she

- a) has undergone a medical examination prior to starting training and
- b) has been re-examined following completion of the first year of training;

10. (Application for registration)

apply to have the initial training contract entered in the register of initial training relationships kept by the competent body immediately following conclusion of the contract, attaching the contract documents and - in the case of trainees who are under 18 years of age - a copy or duplicate of the medical certificate regarding the initial medical examination in accordance with section 32 of the Protection of Young People at Work [Jugendarbeitsschutzgesetz], the same shall apply, mutatis mutandis, to subsequent amendments to the contract's essential stipulations;

11. (Registration for examinations)

register the trainee in good time for the scheduled interim and final examinations or for the first part of the final examination, grant him/her time off to take the examination and attach a copy or duplicate of the medical certificate concerning the first 'e-examination pursuant to section 33 of the Protection of Young People at Work [Jugendarbeitsschutzgesetz] when registering a trainee who is not yet 18 years of age for the interim examination or the first part of the final examination;

12. (Training measures conducted outside the training premises)

Section 4 - The trainee's obligations

The trainee shall make every effort to acquire the vocational competence that is necessary to achieve the objective of his/her initial training. He/She shall in particular undertake to

1. (Obligation to learn)

perform carefully the tasks entrusted to him/her as part of his/her training;

2. (Instruction at part-time vocational school, examinations and other activities)

attend classes at part-time vocational school, take examinations and participate in training measures held outside the training premises, for which he/she will be granted time off pursuant to Section 3, Nos. 5, 11 and 12;

3. (Duty to comply with instructions)

follow instructions given him/her in the course of the his/her initial training by the training employer, instructors or other persons entitled to issue instructions insofar as their authority to issue instructions has been made known;

4. (Company rules)

comply with the rules of conduct to be observed on the training premises;

5. (Duty of care)

handle tools, machinery and other equipment with due care and use them only for the work he/she has been assigned;

6. (Trade secrets)

not reveal any trade or business secrets;

7. (Keeping written records)

keep properly written records of the initial training and submit them on a regular basis;

8. (Notification)

notify immediately the training employer, citing the reasons, in the event of absence from in-company training, classes at part-time vocational school or other training measures. In the event that the trainee is unable to work for more than three calendar days due to illness, he/she shall submit on the following working day at the latest a medical certificate confirming that he/she is unable to work and the anticipated duration of his/her inability to work. The training employer is entitled to require the trainee to submit the medical certificate sooner. Should the trainee be unable to work for longer than indicated on the certificate, the trainee shall be required to submit a new medical certificate;

9. (Medical examinations)

insofar as the provisions of the Act on the Protection of Young People at Work [Jugendarbeitsschutzgesetz] apply to the trainee, undergo, in accordance with sections 32 and 33 of said law,

- a) a medical examination prior to the start of training and
 - b) a re-examination prior to the end of the first year of training
- and submit certificates regarding them to the training employer.

Section 5 - Allowances and other benefits

1. Amount and date of payment

The training employer shall pay the trainee an appropriate allowance; this allowance is currently

€.....(gross) during the first year of training

€.....(gross) during the second year of training

€.....(gross) during the third year of training

€.....(gross) during the fourth year of training.

Insofar as allowances have been arranged under collective agreements and are applicable or have been agreed under Section 11, the collectively agreed rates shall apply.

Employment that exceeds the agreed number of normal daily hours of initial training shall be remunerated separately or compensated by a corresponding amount of time off.

Allowances shall be paid on the last working day of the month at the latest. Payments for holiday leave (holiday pay) shall be disbursed before the start of the leave.

The parties to this contract shall bear the contributions to social insurance in accordance with the legal provisions.

2. Benefits in kind

Insofar as the company providing the training grants the trainee costs and/or provides housing, the arrangement outlined in the enclosure shall apply.

3. Costs for training measures conducted outside the training premises

The training employer shall bear the costs for training measures conducted outside the training premise under Section 3, No. 5, unless they are covered otherwise. Should out-of-town accommodations be necessary, trainees may be charged a prorated amount for the cost of their meals. This prorated amount shall be based on the costs that the trainee saves due to the fact that he/she is not eating at home. The prorated costs and benefits in kind that are charged under section 17, subsection (2) of the Vocational Training Act may not exceed 75 per cent of the trainee's agreed gross allowance.

4. Working clothes

In the event that the training employer requires the trainee to wear special working clothes, it shall provide them.

5. Continued payment of allowance

The trainee shall also be paid an allowance

- a) for time off he/she is granted under Section 3, Nos. 5,11 and 12 of this contract and in accordance with section 10, subsection (1), number 2 and section 43 of the Act on the Protection of Young People at Work [Jugendarbeitsschutzgesetz]
- b) for a period of up to six weeks when he/she
 - aa) is available for initial vocational training but it is not provided,
 - bb) is prevented for any other personal reason beyond his/her control from discharging his/her obligations under the initial training contract.
 - cc) is ill, under the terms of the Continuation of Wage Payments Law [Entgeltfortzahlungsgesetz].

Section 6 - Training hours and holiday leave

1. Number of daily training hours²⁵

Regular training shall last _____ hours a day.²⁶

2. Holiday leave

The training employer shall grant the trainee holiday leave in accordance with current regulations. Holiday leave entitlement shall be

_____ business days or _____ working days in the year _____
 _____ business days or _____ working days in the year _____
 _____ business days or _____ working days in the year _____
 _____ business days or _____ working days in the year _____
 _____ business days or _____ working days in the year _____

3. Timeframe for holiday leave

Holiday leave should be granted and taken in one piece during the vocational school holidays. The trainee may not undertake any gainful employment during his/her holiday leave that would contradict the purpose of the leave.

²⁵ - Under the Act on the Protection of Young People at Work [Jugendarbeitsschutzgesetz], the maximum permissible number of daily working hours (training time) for persons who are not yet 18 years of age is eight hours in principle. When however the working time on individual working days is shortened to less than eight hours, young people may work up to 8.5 hours on the other working days during that particular week (section 8 of the Jugendarbeitsschutzgesetz). The provisions of the Jugendarbeitsschutzgesetz regarding the maximum permissible number of weekly working hours are otherwise to be observed.

²⁶ - In the event of legitimate interest, the training may also be conducted as part-time training upon joint application from the training employer and the trainee (section 8, subsection (1) sentence 2 of the Vocational Training Act).

Section 7 - Termination

1. Termination during the probationary period

The initial training relationship may be terminated without notice or without having to cite the reason during the probationary period.

2. Reasons for termination

After the probationary period, the initial training relationship may be terminated only

- a) for good cause²⁷ without notice,
- b) by the trainee under observance of a four-week period of notice when he/she wishes to discontinue his/her initial training or undergo initial training for a different occupation.

3. Form of termination

Notice of termination must be given in writing; in cases covered by No. 2 it must also state the reasons for termination.

4. Invalid termination

If the initial training relationship has been terminated for good cause, the termination shall be null and void if the circumstances upon which it is based have been known for more than two weeks to the party entitled to terminate. In cases where conciliation proceedings have been instituted under Section 9, this period of notice shall cease to run until such proceedings are concluded.

5. Damages in the event of premature termination

If the initial training relationship is prematurely terminated after expiry of the probationary period, the training employer or trainee shall be entitled to seek compensation for damages if the other party is responsible for the cause of termination. The foregoing shall not apply to termination due to the discontinuation of the initial training or a switch to vocational training for a different occupation (No. 2b). Such entitlement shall lapse if it is not asserted within three months after termination of the initial training relationship.

6. Discontinuation of the company, cessation of the capability to provide training

If the initial training relationship is terminated due to the termination of the business or the cessation of the capability to provide training, the training employer shall undertake at an early point in time, with the help of the occupational guidance service of the competent Employment Agency, to find another course of training in the present occupation at another suitable training facility.

²⁷ - Good cause is given when in light of existing facts the party giving notice cannot be expected, considering all the circumstances of the particular case and balancing the interests of both parties to the contract, to continue the initial training relationship until the end of the training period.

Section 8 - Company certificate

At the end of the initial training relationship, the training employer shall issue the trainee a certificate. Issuing a certificate in electronic form is not permissible. If the training employer has not provided the initial training itself, the certificate shall be signed by the instructor as well. The certificate must contain particulars regarding the nature, duration and purpose of the initial training as well as the vocational skills, knowledge and qualifications acquired by the trainee. If the trainee so requests, it shall also include particulars of his/her conduct and performance.

Section 9 - Settlement of disputes

In the event of a dispute arising from the present initial training relationship, it shall be brought before the conciliation committee established under section 111, subsection (2) of the Labour Courts Act [Arbeitsgerichtsgesetz], insofar as one exists at the competent body, before recourse to the labour court may be taken.

Section 10 - Place of performance

Place of performance for all claims arising out of this contract is the place of the training premises.

Section 11 - Other provisions²⁸; information regarding collective agreements and plant / service agreements

Legally effective supplementary provisions regarding the initial training relationship may be made only by supplementing Section 11 of this training contract in writing.

The above contract has been made out in.....copies (....copies in the case of wards) and personally signed by the contracting parties.

| | |
|-----------------------|--------------------------------------|
| _____ | _____ |
| (City) | (Date) |
| Training employer: | Trainee: |
| _____ | _____ |
| (Stamp and signature) | The trainee's legal representatives: |
| | Father: |
| | _____ |
| | and mother: |
| | _____ |
| | or guardian: |
| | _____ |

²⁸ - As an example, training segments abroad lasting up to one fourth of the training period may be stipulated as integral elements of the training. Furthermore, additional qualifications may be agreed. Such qualifications may take the form of optional modules provided for in new initial training regulations or parts of other initial or further training regulations. Separate examinations must be held for additional qualifications which must also be separately certified



Quality apprenticeship systems and international labour standards

| Categories | Checklist | The national legal framework reflects this? YES / NO |
|--------------------------------------|---|---|
| Definition | The definition of apprenticeships: "system by which an employer undertakes by contract to employ a young person and to train her/him or have her/him trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service" | |
| | Apprenticeable trades (i.e. trades for which apprenticeship system can apply) are defined | |
| Governance | Tripartite supervision of national apprenticeship system, and coordination with training authorities are in place | |
| Number of apprentices | Minimum and maximum number of apprentices in companies | |
| Entry requirements and processes | Requirements to enter apprenticeship include age above compulsory school attendance, education levels, medical tests, and registration of apprenticeship contract with relevant authority. | |
| | Provisions should be made for adequate recognition of prior learning | |
| Compulsory contract and registration | Standard rights and obligations of apprentices to be included in contracts to be signed by (a) the employer or several employers or a national institution in charge of apprenticeship, (b) the apprentice, or his/her parent / legal guardian if below adult age, (c) the training centre. The contract should be registered at a specified institution. | |
| | Contracts should include (a) sectoral standards and regulations (collective agreements etc.), (b) responsibilities related to OSH, (c) mechanism for settlement of disputes. | |
| Contents of the apprenticeship | It should be designed to develop personality as well as increase employability, within a lifelong training process, free from discrimination, and as part of a coordinated tripartite set up. | |
| | Work given as part of apprenticeship should be restricted so that it remains mainly of an educational nature. | |
| | Minimum and maximum length of apprenticeship, taking into account sector requirements. The minimum / maximum share of the time spent in school and in companies should also be defined. | |
| Remuneration | Remuneration levels in cash or kind and potential for increase (scale). | |
| Occupational Safety and Health | Apprentices are entitled to OSH protection, and to application of standard OSH rules. | |
| | Provisions on limitation of night work, protection from hazardous tasks, work with dangerous machinery, manual handling and transport of heavy loads, work in high latitudes, work for excessive periods of time and other occupational safety and health issues. | |
| | Working hours for apprentices below 18 years of age should not exceed eight hours a day, and overtime only when unavoidable for safety reasons. | |

| | | |
|------------------------------------|---|--|
| | Apprentices should have access to OSH instructions / equipment, and respect OSH rules and regulations. Safety, lifesaving and survival equipment should be appropriate for the size of apprentices. | |
| | Young persons – 16-18 years of age – working in mines should have proper training preparation, especially through quality apprenticeship, below and above ground with due caution exerted to their protection from occupational hazards. | |
| | Apprentices are involved painting tasks – with white lead paint – only after consultation with workers representatives. | |
| Social security | Apprentices are entitled to compensation for accidents | |
| | Apprentices are covered by sickness insurance, in industry and agriculture. | |
| | Apprentices are covered by pension schemes and exempt from contributions. | |
| | The invalidity insurance applies to apprentices that are also exempt from contributions. Apprentices with chronic illness or disabling impairment should be entitled to medical care and benefits. | |
| | Apprentices should have access to unemployment benefits. | |
| Leave | Apprentices are entitled to life insurance and exempt from contributions. | |
| | Apprentices are entitled to paid annual leave, in addition to weekly rest, public holidays and sick leave. | |
| | Apprentices should be given preferential treatment when granting number of days of paid holidays. | |
| Working hours | Apprentices and cadets at sea should not work more than 8 hours a day and 48 hours a week. Weekly day of rest shall be respected, and overtime for routine work during this day should be deducted from the 48 hours ceiling. Exceptions for safety reasons can be prescribed by national law or collective agreements. | |
| Migrant workers | Lawful immigrants should have access to apprenticeship programmes in conditions no less favourable than those of nationals, without discrimination based on nationality, race, religion or sex. | |
| Labour Inspection | Apprenticeship should be included in the scope of the Labour Inspection work. | |
| Vocational Guidance | Apprentices should have access to vocational guidance, including (a) user friendly info on sectors and occupations, (b) visits to workplaces, (c) individual and group based counselling to define abilities and preferences in relation to job opportunities and requirements, (d) medical and aptitude tests + advice on possible remedial action, in order to define an individual vocational plan and implement it. | |
| Masters | Standards of the technical qualifications of employers and masters who undertake apprenticeships are defined. | |
| Transfer | Rules for transfer of an apprentice from one employer to the next, based on mutual consent, to the advantage to the apprentice. | |
| Skills tracking and certification | Supervision processes over apprentices, skills tracking during apprenticeships, and testing / national certification at the end, based on agreed competencies. | |
| Minimum age of apprenticeship | Minimum age of apprenticeship should not be lower than age of compulsory education, or of the age specified as an entry requirement of the apprenticeship. | |
| Informal apprenticeship | Trainees in informal apprenticeship should be given sufficient time to be trained by training institutions. | |
| Data requirement for policy making | Sex disaggregated data on apprenticeship to help design strategies for its promotion, and promotion of gender equality. | |
| HIV status | There should be no discrimination against or stigmatisation of apprentices, and applicants, on the grounds of real or perceived HIV status. | |



Role play: Social dialogue

This exercise is a role play in which you will work on the case of a fictitious country, “Saturnia”. Players will form groups to take on, respectively, the role of representing the Ministry of Labour, the Trade Union, or the Employers’ association.

Please choose a role that is different from your actual role (e.g. if you are a government official, please choose either trade union or employers’ association).

A) The Saturnia Case: basic facts about the country and set-up

- Saturnia is a developing country. Key industries are natural resources and mining, agriculture, fishery, textile, and automobiles. Saturnia has attractive tourist destinations. Service sectors have been expanding rapidly.
- There is widespread poverty: 30% of the population live below the national poverty line
- High youth unemployment (27%), especially among those with low education and university graduates.
- Low labour force participation of women in spite of their greater education attainment
- Most parents prefer sending their children to general high school and then university. Around 15% of young people go to university. Many university graduates wish to work in the public sector or find an office job.
- About 25% of students go through Technical Vocational Education and Training (TVET).
- Enterprises often complain that young people do not possess necessary skills, knowledge and attitudes.
- Many large companies hire foreign skilled workers (e.g. managers, engineers and technicians in factories, skilled construction workers etc.).
- The rates of school and TVET drop-out rates are high: at least 30% of those who start vocational training drop out. 40% of all secondary school students do not finish school. Workers in Saturnia have therefore modest formal schooling levels on average.
- Micro, small and medium enterprises are the backbone of the economy, both in rural and in urban areas.

Set-up:

The Vice President of Saturnia is concerned about high youth unemployment and intends to convene a tripartite Task Force that will be responsible for setting up an apprenticeship system for young people in Saturnia. You have received an invitation from the Office of the Vice President to participate in the first Task Force meeting with the following questions:

1. What should be the rights and obligations of the employers and those of the apprentices?

- a) Should all enterprises train apprentices? Should the owner of enterprise have the right to choose apprentices whom he/she will train?

- b) What are the rights of the apprentice? Should apprentices be covered by insurance against health and occupational injuries? Who should bear the costs of insurance?
- c) Should some kind of contract be established between employers and apprentices?

2. How should the training be financed?

- a) Should apprentices receive a salary, a training allowance or pocket-money? Who should pay for it?
- b) Should employers receive a financial incentive (e.g. training grant, tax credit) when they train apprentices?
- c) Who finances the complementary training at vocational training institutions?

3. How can we assure labour market relevance of the quality apprenticeship programme? Who should formulate the curriculum and the training standards, do examinations and provide certificates?

The Vice President requests each party invited to the meeting to: a) present opinions on the quality apprenticeship system, b) engage in tripartite dialogue, and c) come to a tripartite agreement on a

quality apprenticeship system.

B) Instructions and duration of play

Each group will represent a different institution (i.e. Ministry of Labour, Trade Union, or Employers' association). Each institution will have a different opinion, interests and concerns as to how to set up an apprenticeship system as described in information sheets (see below).

Please:

- Read carefully the information sheet and truly internalise the “role,” the interests and concerns of the institution you will represent in this role play. Act out your role as best you can.
- Discuss in your group the three questions from the Vice President from the viewpoint of your organisation with the help of the information sheet. For each question, please come up with the official position of your group.
- If you don't have sufficient information on a specific point you would like to make, feel free to be creative and “invent” some facts.
- Select two spokes-persons who will represent your group at the “Task Force” meeting.
- At the “Task Force” meeting, your representatives will present the positions of your group and negotiate with representatives of the other groups. Representatives are expected to find a common ground that is agreeable to all parties. Please be aware that you might need to adjust your positions and make concessions, if no agreement is reached with the other groups.
- The other group members who will not participate in the “Task Force” meeting will observe

the discussions between the different groups.

Time

- 10 minutes for reading instructions and the information sheet of your organisation
- 30 minutes group discussion on the three questions from the Vice President. Select two representatives.
- 40 minutes “Task Force” meeting and discussions
- 10 minutes for feedback

C) Information sheets to be used in role play

Information sheet 1: Employers’ Organisation

Most employers see public training institutions as “out-dated”. Many of them are not well-maintained due to budget constraints, except for a few centres of excellence. Vocational education focuses too much on theories and practical training is a minor part of vocational education. Formal enterprises pay training levy but they feel that the training fund is not well managed and used. Saturnia has decentralised governance, but there is not much practice in social dialogue and tripartite decision making at the local level. Thus employers do not always participate in important decisions concerning vocational training.

The private sector and the enterprises are generally a bit sceptical about the new proposal to introduce apprenticeships in Saturnia. They see a great potential in this new system and they think it will ultimately benefit enterprises in the future. However, they are also afraid that it might impose high costs on enterprises, especially small and medium ones. They are also afraid that the system will be badly managed. Employers think that the Government does not understand the needs and concerns of the private sector and that they give in too much to the demands of the trade unions. Employers think that trade unions only want to participate in the process, because they want to recruit more members, but apart from that they don’t have much to offer.

If a quality apprenticeship system is to be established, the employers want to be part of the main decision-making processes and the governance of the system. They want to play a role in determining training standards, participate in the development of the curricula, the examination and skills certification in order to make sure that training will respond to the needs of the enterprises. In principal, the employers’ organisation is willing to apply an apprenticeships scheme in some economic sectors, but they want to take it slowly.

Particular concerns of the employers are the following:

- Employer or master-craftsperson has the right to decide whether or not to accept an apprentice based on the enterprise’s mid-term staffing needs and also depending on the aptitudes and personal traits of applicants for apprenticeship positions.
- If an apprentice performs well, the enterprise might offer him/her a full job after completing the apprenticeship. There should not be, however, any obligations for the employer to hire apprentices after the apprenticeship programme.
- Enterprises shall not be forced to train apprentices. Training an apprentice in times of economic crisis could put a severe burden on the enterprise. Especially small enterprises

(5 – 10 employees) and medium enterprises (11 – 50 employees) have to be very careful about costs.

- The relationship between the apprentice and the employer should be determined by a contract. This contract should vary according to the industry and job: in some industries or jobs it might be necessary to work nightshifts, work over-time or to operate in dangerous working conditions or use dangerous equipment and chemicals. If the apprentices are to be truly trained on the job, they need to work under the same conditions as all other workers.
- The financial burden on the enterprises should be kept to the minimum. Since enterprises provide training to young people, the government should bear the costs. Further, enterprises should not be financially liable for occupational injury, thus apprentices should be covered by social insurance. Apprentices themselves who benefit from training or the government should bear the insurance premium.

Employers think that apprentices should be prepared as much as possible in school and that this training should be as practical and “realistic” as possible so apprentices can learn through trial and error and later correctly apply their newly learned skills in the enterprise. School-based training should be strictly work-related. This way, the master-craftsperson does not need to spend too much time with supervising and training the apprentice; the apprentice will not waste too many training materials and is less likely to break machines and other equipment.

Information sheet 2: Trade Unions

Saturnia has decentralised governance, but social dialogue and tripartite decision making is weak at local levels. Trade Unions have been largely excluded from many reforms in the area of employment and vocational training.

Trade Unions believe that skills development is important and that workers should be given adequate training by companies or the government. At the same time, trade unions know that some companies use interns as cheap labourers, to do the work that employed workers could be doing. Thus they want to be involved in the decision-making process of the new apprenticeship initiative. Trade Unions especially want to protect the rights of the apprentice and prevent labour exploitation. They also want to avoid apprenticeship contracts being abused in order to replace workers' contracts. They believe that apprenticeship is a good mechanism to provide youth with practical training, as long as decent working conditions during the apprenticeship are guaranteed. From Trade Unions' perspective, the apprentice should get a job with the enterprise after completing the apprenticeship programme.

The Trade Unions see the first Task Force Meeting as an opportunity to make it clear to Employers' Organisations and the Government that Trade Unions have important things to contribute to the process of setting up a quality apprenticeship system:

- Contributions to curriculum development. Workers know very well what skills are needed at the workplace and they want to participate in defining training standards and curriculum contents.
- Improving Occupational Safety and Health and preventing work accidents: Trade Union members could help to train apprentices at the workplace on these. Trade Unions have training manuals that could be used in the school-based training part of apprenticeship programmes.

- Developing training modules (for the school-based training) on labour rights in order to inform apprentices about their rights and prevent exploitation.
- The Trade Union's Legal Office wants to be involved in formulating and supervising the apprenticeship contract, in order to guarantee that good working conditions will be reflected: decent working hours, effective training, adequate pay, a meaningful training process at the workplace, no over-time work. Work on dangerous tasks and sensitive equipment and substances should only be permitted during the last year of the apprenticeship, preferably when the apprentice has reached the age of 18 years at least.
- They would also like to provide mediation services in case of work disputes.

The Trade Unions are especially concerned about the following aspects:

- Apprentices should receive a salary: ideally the minimum salary. At least, a training allowance that covers transport, food and gives them a small extra-salary should be provided by employers. A financial remuneration would give apprentices incentives to complete the apprenticeship and also to contribute to their families' income.
- Apprentices should be covered by health insurance, accident insurance and invalidity insurance. If an apprentice suffers a work accident, they should receive a financial compensation by the employer.
- Master craftspersons should give apprentices a "real" training, which should correspond to a well-structured learning plan in the enterprise. It should by all means be avoided that apprentices be given only routine manual labour without any learning objectives.
- Master craftspersons' responsibilities should be properly acknowledged and valued in terms of wage levels.
- Similarly, the shift from a usual training approach to the quality apprenticeship system will impact the workload of instructors, and this should be reflected in their job descriptions and wages.
- Workers often know best what tasks are needed at the workplace and they therefore consider that they should take part in: structuring the practical training at the workplace; developing the school curricula; setting quality standards; holding examinations and issuing certification of apprentices.
- The training at school should give apprentices a good theoretical knowledge in the technical field that they are being trained in. In addition, it should include core skills like communication, team work, mathematics, computer and foreign language skills. It should also include training on occupational safety and health and labour rights. Apprentices should have a complete set of skills that will enable them to find a job and to professionally develop within their work.

Information sheet 3: Ministry of Labour

The Government is very keen on establishing an apprenticeship system for three reasons:

- a) Reducing youth unemployment and giving as many young people as possible access to vocational training that takes place in a real work environment and that reflects the needs of the labour market.

- b) While national Skills development policy exists, budget allocation to TVET is determined at the provincial level. Some provinces, states or departments invest a great deal in skills development, but many of them cut TVET budgets. Thus, the Ministry intends to develop national apprenticeship standards and rely on companies to deliver more work-based training.
- c) Due to budget constraints, it is important for the Government that the new apprenticeship system does not lead to having to hire more teachers and instructors in public training centres and vocational schools.

From the perspective of the Government, the best way to introduce a new quality apprenticeship system is that the Government keeps control over the main aspects of the system. In fact, discussions with Employers' Organisation and Trade Unions in the past were always a very long process and it was hard to find compromises. Experience has shown that employers are usually reluctant to finance training and that Trade Unions did not bring many useful proposals to the negotiation table. Therefore, the Ministry of Labour wants to use the occasion of this "Task Force" meeting to establish a Government-driven process. In particular, Government should be responsible for the following areas:

- Defining the training curriculum. All learning contents should best be defined by the vocational training specialists in the Ministry of Labour. People in the Ministry of Labour know best what the labour market needs.
- It is important for training standards to be uniform and of high quality all over the country. Thus it should be the vocational training specialists of the Ministry who develop uniform standards. Examination, testing and certification should be done by qualified labour officials in order to assure training standards nation-wide.
- An apprenticeship contract should be established between the apprentice and the enterprise and a local labour office should supervise this contract and intervene in case of labour disputes.
- Since local labour offices provide employment services, these offices can choose and refer jobseekers to enterprises in order to join a quality apprenticeship system.
- Ideally, apprentices are covered by insurance against health risks, occupational injury and invalidity. However, the government cannot bear the costs of insurance. The government can subsidise 20-50% of the insurance cost, provided that employers cover the rest.
- Since the Government cannot increase vocational teachers and trainers due to budget constraints, the school-based curriculum should be reduced to some very few subjects and focus on theories that would give students some background knowledge. The more theoretical the training is, the less needs to be spent on training materials, which would save costs.

In order to encourage enterprises to accept apprentices, the Government considers providing a tax incentive to enterprises that train apprentices, on condition that they pay a training allowance to the apprentices, to cover transportation, meals and a small salary. This is important in order to prevent drop-outs and to motivate apprentices to complete the training.

The relationship between the enterprise and the apprentices should be governed by a contract. Since apprentices are too young to be able to negotiate working conditions for themselves, the Ministry of Labour will determine standard working conditions and a model contract for apprentices in all occupations.

To effectively combat youth unemployment, the government plans to impose training quotas. Enterprises with 5 employees or more shall take on apprentices in accordance with the enterprise size (see the quota below). Apprentices shall be offered a job with the enterprise after successfully completing the quality apprenticeship programme.

Training quota:

- Small enterprises (5 – 10 employees) should be training at least one apprentice per year
- Medium-sized enterprises (11 – 50 employees) should train at least two apprentices per year
- Large enterprises (51 and above) should train three apprentices per year



Social dialogue activities in quality apprenticeship (QA)

| | Governments and Labour Ministries | Employers' Organisations | Workers' Organisations |
|--------------------------------|---|--|--|
| At national and/or macro level | National QA regulatory framework bargaining | National QA regulatory framework bargaining | National QA regulatory framework bargaining |
| | Bargaining related to funding mechanisms | Bargaining related to funding mechanisms | Bargaining related to funding mechanisms |
| | Organising QA marketing campaigns | Organising QA marketing campaigns | Organising QA marketing campaigns |
| | Establishing means of support for QA for minors | Establishing means of support for QA for minors | Establishing means of support for QA for minors |
| At industry level | Mediating, if necessary, in collective wage bargaining | Mediating, if necessary, in collective wage bargaining | Mediating, if necessary, in collective wage bargaining |
| | Conducting skills needs analysis at the sectoral level | Defining skills needs analysis at sectoral level | Providing input for skills needs analysis at industry level |
| | Bargaining related to industry funding initiatives | Bargaining related to industry funding initiatives | Bargaining related to industry funding initiatives |
| | Conducting training needs analysis | Defining training needs analysis | Providing input for training needs analysis |
| | | Establishing means of support for SMEs | |
| | Establishing QA follow-up systems | Establishing QA follow-up systems | Establishing QA follow-up systems |
| At company level | Courses and standards for QA instructors | Setting up a curriculum framework for companies | Participating in the curriculum framework for companies |
| | Apprenticeship contract bargaining | Apprenticeship contract bargaining | Apprenticeship contract bargaining |
| | Involvement in capacity-building events for instructors | Involvement in capacity-building events for instructors | Involvement in capacity-building events for instructors |
| | | Representation on QA board at company level | Representation on QA board at company level |
| Vocational training centres | Courses and standards for QA teachers | Taking part in curriculum development | Taking part in curriculum development |
| | Participating in QA evaluations | Participating in QA evaluations | Participating in QA evaluations |
| | Regular information sharing within the system | Regular information sharing within the system | Regular information sharing within the system |
| | Open youth activities on QA in training centres | Taking part in open youth activities on QA in training centres | Taking part in open youth activities on QA in training centres |



Developing quality apprenticeship (QA): a model one-week workshop agenda

| | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--------------|---|---|---|--|---|
| 9.00-10.30 | Opening session Opening remarks Icebreaker and expectations Introduction to the agenda | Roles and Responsibilities Who does what in an apprenticeship? | Legal Frameworks International Labour Standards Contract template | Curricula development | Preparation of Action plans |
| Coffee break | | | | | |
| 11.00-12.30 | Introduction to Quality Apprenticeships Characteristics and building blocks of quality apprenticeships | Social Dialogue and coordination mechanisms | SMEs and Quality Apprenticeships | Defining training standards, testing and quality assurance for a nationally recognised certification | Presentation and review of Action Plans Evaluation Concluding Remarks |
| Lunch | | | | | |
| 14.00-15.30 | Developing and implementing quality apprenticeship programmes | Social Dialogue: A role play | Quality Apprenticeships in developing country contexts Tanzania, Mexico etc. | Training of TVET teachers and company trainers | |
| Coffee break | | | | | |
| 16.00-17.30 | Analysis of the current state of apprenticeship system | Financing apprenticeships Costs and Benefits, financing models, and incentives | Case studies | Quality apprenticeships and social inclusion Gender, disability and social security | |



Developing quality apprenticeships: agenda for 1-day workshop

| Agenda | |
|-----------------------------------|--|
| 8:30 – 9:00 | Registering of participants Participants sign their attendance and are provided with all necessary workshop documentation |
| 9:00 - 10:30 | Opening remarks Workshop objectives & programme Short Icebreaker Defining apprenticeship (Table of Attributes) |
| 10:30 – 11:00 Coffee break | |
| 11:00 - 13:00 | The four pillars of modern quality apprenticeship: Social Dialogue Roles and Responsibilities Financing Legislation Case studies: Good practice and lessons learnt in applying the four pillars |
| 13:00 – 14:00 Lunch | |
| 14:00 – 15:30 | Developing quality apprenticeship programmes Flow of QA programme development |
| 15:00 – 15:30 Coffee break | |
| 15:30 – 17:00 | Analysis of apprenticeship in participants' countries and work-place based learning (SWOT analysis exercise) Final discussion: necessary actions to start with an apprenticeship pilot programme Priorities and key Actions required |



Regional training on apprenticeship systems, Jordan

| | Day 1 – Understanding apprenticeship | Day 2 - A fair package: apprentices, companies and family businesses | Day 3 - Designing Quality Apprenticeships for Decent Work | Day 4 - Governance | Day 5 - Inclusive apprenticeships |
|---------------------------------|---|---|--|---|---|
| 8.30 – 9.00 | Opening remarks by the Regional Director and the Secretary of ETVET Council | Feedback of the previous day: Group 1 | Feedback of the previous day: Group 2 | Feedback of the previous day: Group 3 | Feedback of the previous day: Group 4 |
| 09.00-10.30 | Presentation of participants (4 corners game) Seminar expected outcomes, Validation of ground rules Feedback sessions Presentation of background docs | The role of the master craftsman: tacit knowledge coaching feedback skills tracking presentation + Story telling from the participants | Social impact of apprenticeship: Who is included and how? What is the resulting job? What are pathways to higher education? Presentation on core Identification of problem trees per country (group work + presentation) | Tripartite governance for decent work outcomes: Role of Gvt / Employers and TUs in the governance, and administration of apprenticeships. Role play | Group work preparation of action plans: What could and should be done after 1 month, 6 months, 1 year + ILO assistance required. |
| 10.30-11.00 Coffee Break | | | | | |
| 11.00-12.30 | Introductory game: T-shirt folding - Defining apprenticeship Characteristics of apprenticeships Cooperative learning process Q & A | Addressing employers' concerns (cost, liability, trade secrets, adaptations, pre-conditions for hosting...) Panel Discussion + Plenary Discussion. | Group work – drafting of a solution cloud to improve the social impact of apprenticeship systems Presentation of the solution cloud. | Legal and policy frameworks for apprenticeships Panel discussion Group Work Main elements that need to be improved in participants' countries. | Presentation of Action Plans: 7 - 10 minutes per country |
| 12.30-13.30 Lunch | | | | | |
| 13.30-15.00 | Case study: Germany 15' Case study: Denmark 15' Case Study: Jordan 15' Case study: OPT 15' World café format | Social Protection + ILS Occupational Safety and Health Social Protection Respect of ILS (hazardous work, gender concerns, child labour) Checklist + country group work & presentation | Role of well-prepared teachers participating in apprenticeship programmes Presentation of an ILO paper + spiderweb exercise – | Financing apprenticeships – who pays for what? Levies, apprenticeship funds. | Evaluation Concluding Remarks |
| 15.00-15.30 Coffee Break | | | | | |
| 15.30-17.00 | SWOT Analysis in small groups + plenary reporting Country groups: What are the strengths, weaknesses, Opportunities and threats for the expansion of apprenticeship systems in the Arab Region? | Understanding workplace and business processes / competency based training: Game - Opening an internet café Workplace processes / CBT - SWOT analysis Concluding remarks | Competency standards Testing and certification 15 min. Presentation + Fishbowl discussion: on Jordan + Lebanon Plenary discussions | Group work on Country Profiles | |



Exercises for the analysis of quality apprenticeship (QA)

Purpose and participating countries

The intention of this exercise is to help stakeholders move forward in their thinking and their plans to introduce apprenticeship in their countries. These exercises are intended for a one-day training which will most likely be a national workshop (for one country only). However, the methodologies can be adapted for workshops with an international audience.

Three different methodologies are suggested here, in order to better adapt to where the country (or countries) stand in terms of the development of an apprenticeship programme or system:

1. Countries wishing to introduce apprenticeship
2. Countries currently introducing apprenticeships
3. Countries wishing to improve or upgrade existing apprenticeship or workplace learning

If participants are all from the same country choose one option for the whole group.

For an international workshop where small groups of at least three representatives per country can be formed, you may choose to assign them different exercises, according to the progress with the development of apprenticeship in their national context. Depending on the overall number of countries represented, some group-presentations might be merged under the same type of exercise, to keep the overall time for reporting back in plenary to a reasonable level.

In international groups where some countries might be represented by less than three participants, merge single participants into groups corresponding to their stage of apprenticeship development.

EXERCISE NO. 1: SWOT-Analysis

Target group: Countries wishing to introduce apprenticeship

• Purpose

This exercise makes participants think about the pre-conditions for developing apprenticeship in their country (or enlarging an existing initial apprenticeship system). Participants will identify the internal and external factors that can promote or hinder the development of apprenticeship.

Internal factors are: Strengths and Weaknesses

External factors are: Opportunities and Threats

• The SWOT methodology

A SWOT analysis is a structured planning method used to evaluate the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats involved in a project, business or a product, place,

industry or person. It involves identifying the helpful and harmful, as well as the internal and external factors that are favourable and unfavourable to achieving that objective.

Strengths: Internal characteristics of your country and your training systems that represent an advantage for introducing apprenticeship.

Weaknesses: Internal difficulties that could be an obstacle or cause apprenticeship not to function well.

Opportunities: External elements that could be exploited to the advantage of introducing apprenticeship

Threats: External factors that could cause difficulties for setting up or further developing apprenticeship

| SWOT analysis: Developing apprenticeships in your country: Template for group work | | |
|--|------------|------------------|
| Strengths | Weaknesses | Internal factors |
| Opportunities | Threats | External factors |
| positive | negative | |

• Preparation

- Each group should receive a large piece of paper (ideally the double size of a flipchart) or a large whiteboard to write on.
- Handouts with the SWOT diagram and the explanations of the single categories of analysis
- A volunteer to help taking notes during participant-feedback

• Instructions

1. Participants are divided into different groups – either country groups or three to four different groups of the same country.
2. Each group receives a handout of the SWOT diagram and a handout with the explanations of the four factors in a SWOT-Analysis
3. Explain the categories to the groups (Strengths, Weaknesses, Opportunities, Threats)
4. Each group selects a facilitator who will also report back in class on their results
5. Participants are requested to draw the diagram on their paper /whiteboard, to discuss the categories and take notes directly in the respective space of the diagram.
6. The facilitator of each group reports back in class.
7. Record the results (take a picture or write them in a word document) and give them to participants for post-workshop follow-up.

| | | |
|---|--|--|
| Strengths Qualities that enable to accomplish the mission or to build up new structures. When acknowledged and maximized, these factors contribute to success and sustainability. Examples: •Single experiences with apprenticeship or workplace learning already existing | Weaknesses Qualities that may prevent from fulfilling the mandate and achieving full potential. Examples: •School curricula are not meeting labour market needs | Internal factors: the relations between the participating stakeholders or the way a programme or system is organised |
| Opportunities Favourable conditions in the external environment that can be helpful to plan and execute strategies and to enable new developments. Examples: •Favourable donor policies •Adequate funding mechanisms | Threats Unfavourable conditions in the external environment beyond the control of the project, which can have a significant negative impact on stability, quality, performance or survival. Examples: •Low social status of apprenticeship in the society | External factors: e.g. rules, institutions, regulations, processes |
| positive | negative | |

• Notes for the facilitator

- Time: Depending on the number of groups, 35 – 50 minutes, out of which 20 – 30 minutes for the analysis and 3 – 5 minutes per group for feedback (= 12 – 20 minutes feedback in total).
- Emphasise the “internal” and “external” dimensions and give participants some (hypothetical) examples, so that they are able to distinguish them well and formulate pertinent points.
- If participants are from the same countries, during the feedback ask participants from the first group to present their whole SWOT analysis and from the forthcoming groups to add the points that have not been raised by the first group. On the flipchart of the first group, take notes of the additional points raised by the other groups under each SWOT category. This procedure will save you time and produce a more complete picture in one single graph.
- Participants might spend too much time on discussing the first category. Divide the time available for discussion into four even slots and ask them to be aware of the time available.
- Participants should first draw the diagram and write their ideas directly into the diagram on the paper or the whiteboard.

EXERCISE NO. 2: Review of the apprenticeship checklist

Target group: Countries currently introducing QA.

• Purpose

With this exercise, participants are being made aware of a set of elements that ideally should be present in a quality apprenticeship programme or system. The checklist is being introduced as a tool to regularly help them monitor and revise their system and to discuss progress with the different stakeholders involved.

• Preparation

- Six flipcharts or whiteboards (or alternatively six big pieces of paper) and markers.
- To speed up group work, draw the checklist structure and write down the single points each group is supposed to discuss on their flipcharts (or provide printouts of the different points, to be glued by the group into the checklist structure). Alternatively A2 – A1 format photocopies of the checklist, each of them displaying one of the six sections of the checklist, can be provided.
- The groups correspond to the different sections of the checklist. Group 1: Cooperation with stakeholders, Group 2: Rights at work, Group 3: Legal and contractual issues, Group 4: Funding, Group 5: Skills training, tracking and testing, Group 6: Employment services and career guidance.
- Copies (normal A4) of the checklist for each participant.

• Instructions

1. Each participant receives a copy of the checklist
2. The checklist is briefly introduced and explained to participants
3. Participants are divided into six groups
4. Each group gets assigned a flipchart (or alternative material, as mentioned above).
5. Each group is supposed to work on a different section of the six sections of the checklist. They should draw the checklist on their flipchart and write
6. In an international workshop you can choose to assign each section to a different country group or to mix countries across groups, so as to exchange experiences and compare practice between different countries.
7. For the debriefing, all six flipcharts or pieces of paper are put (or hung on the wall) in a row next to the other, to reflect the sequence of the checklist. Participants quickly explain their findings.

• Notes for the facilitator

- Time: Consider a total time of 40 – 50 minutes, with an estimated distribution of: introduction: 5 minutes; group work 15 – 25 minutes; reporting back: 3-4 minutes per group = 20 - 25 minutes feedback.
- Remind participants to be brief in their feedback. If every group takes 5 minutes, the complete feedback round will take 30 minutes.
- Ask participants if they think anything is missing in the checklist.
- Conclude by emphasising that this checklist is a helpful tool that should be frequently used for monitoring and follow-up.

EXERCISE NO. 3: Peer review

Target group: Countries wishing to improve or upgrade existing apprenticeship or workplace learning.

• Purpose

Participants formulate recommendations on how to improve some critical points of their apprenticeship programme or system. This exercise can be used to identify concrete

country-specific recommendations, provided all participants are from the same country or if the audience consists of groups with at least six participants from the same country. If the audience is more varied, discussions and recommendations will have a more generalised knowledge-sharing character.

- **Preparation**

- Flipcharts and markers for each group

- **Instructions**

1. Collect proposals from the audience on aspects of their quality apprenticeship system or programme that need improvement. Collect proposals from the audience and note them on a flipchart. If you want participants to work in country groups let them brainstorm in country groups.
2. After participants have come up with a list, they should identify a few priority topics for discussion. The number of priorities should be limited depending on the number of participants and the time available for the exercise. E.g. in a workshop with ca. 30 people you can take minimum three and maximum seven priorities (= 7 groups of 3-5 persons per group).
3. Participants should form groups, one for each priority identified, with at least three members per group. Each group should identify a chairperson.
4. The groups have 15-20 minutes to propose and discuss recommendations and solutions. The chairperson facilitates and takes notes on the flipchart (or assigns a note-taker). All members participate in the discussion.
5. After the first discussion round, the chairpersons stay where they are. The other participants can decide freely which topic to discuss next by joining a different chairperson. They should mix with as many new people as possible, as long as there are at least three persons per group. (If you want them to discuss in country groups, they should join a group referring to their country)
6. The chairperson will now present to the new group members in five minutes the problem and the recommendations previously discussed. The new group members have three minutes to ask the chairperson questions for clarification.
7. After this, they have 15 minutes to “peer-review” the recommendations found by the first group: commenting, confirming, questioning, making additional or alternative proposals. During this time, the chairperson listens, but has to remain silent and is not allowed to interfere with the discussion, nor to “defend” the previously found recommendations.
8. After the peer-review, the chairperson has the opportunity to discuss with the “reviewers” their comments and, on this basis, improves and adds more elements to the list of recommendations on the flipchart.
9. All chairpersons are asked to briefly report back by reading the list of recommendations. Their flipcharts should be recorded (pictures or write-up in a word document).

- **Notes for the facilitator**

Time: 90 minutes (10 minutes brainstorming proposals, 5 minutes for prioritisation, 15 minutes for discussion round one, 30 minutes for peer-review, 15 – 25 minutes for feedback).



Solution TREE exercise²⁹

A problem tree provides an overview of all the known causes to an identified problem. Understanding the context helps in planning successful change. A problem tree involves writing causes in a negative form (lack of knowledge, not enough money, etc.). Reversing the problem tree, by replacing negative statements with positive ones, creates a solution tree. This provides an overview of the range of interventions that need to occur to solve a core problem.

Step 1 Settle on the core problem

The first step is to identify the problem the participants seek to overcome. Note that a vague or broad problem will have too many causes for an effective and meaningful solution to be developed. The core problem is written down in the middle of the paper, or on a sticky-note that is placed in the middle of a wall.

Step 2 Identify the causes of the problem

Once the core problem has been identified, participants should consider what the direct causes of the problem are. Each cause statement needs to be written in negative terms. Participants brainstorm in groups about the problem at hand and write each negative statement down on a piece of paper. The statements would then be placed on a wall, for the participants to analyse and reorder. It is important to ensure that there is agreement among the participants (prioritise).

Step 3 Develop a solution tree

A solution tree is developed by reversing the negative statements that form the problem tree into positive ones. For example, a cause such as “lack of knowledge” would become a means such as “increased knowledge”.

Step 4 Select the preferred intervention

The final step is to select a preferred strategy for the intervention. This step is designed to allow the participants to select and focus an intervention on a preferred strategy. The solution tree may present a number of separate or linked interventions to solve a problem. Depending on funding, time, relevance, a planned intervention may not be able to tackle all the causes, therefore the priorities should be clearly defined.

²⁹ - Source: http://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=28&Itemid=134



Action Plans

Please list up to three priorities for concrete actions you will undertake in your country related to quality apprenticeship. It is understood these activities may require higher level agreement / clearance and that your responsibility is limited to advocate for these changes to happen.

Activities may include (but not be limited to) the following:

1. Undertake a Rapid Assessment of workplace-based learning in the country, including of its employment impact.
2. Start a pilot apprenticeship programme with competencies jointly agreed with employers, instructors and learners, with skills testing and certification, and recognised assessment at the end.
3. Strengthen capacity of trade unions and employers' organisations to contribute to the design and governance of a quality apprenticeship system.
4. Undertake a legal review and propose legal amendments to the labour code to include a chapter on quality apprenticeship.
5. Advocate for the adoption of a national template for apprenticeship contracts.
6. Replicate and expand a project on upgrading informal apprenticeship.

| Country: | | | |
|----------|----------|----------------|--|
| | Priority | Reporting date | ILO technical support required Yes/No |
| 1 | | | |
| 2 | | | |
| 3 | | | |



Rapid Quality Apprenticeship (QA) appraisal

The “Rapid Apprenticeship Appraisal” serves as an ex-ante analysis of the apprenticeship situation in a specific county using the following ten tools.

Tool 1: The rapid QA outcome performance questionnaire

Once your apprenticeship programme is up and running, you may seek to track outcomes for the programme and continuously assess the impact of the apprenticeship schemes. This will help you determine whether apprenticeship programmes lead to increased employability, facilitate the transition from school to work and ensure that youth acquire the relevant skills which meet labour market demands.

Therefore, a rapid apprenticeship outcome performance questionnaire was developed to help meet these objectives while making adjustments for continuous programme improvements over time. In addition, this tool may serve as an example of how to track outcomes and assess impact for employers, workers, and the government.

This sample shall be customised and adjusted to the national context to capture the goals of stakeholders involved, and to reflect the shared vision statement and goals that were created at the beginning of the planning process.

The Rapid apprenticeship outcome performance questionnaire

| Indicators | Outcomes for total numbers | Year 1 | Year 2 | Year 3 |
|---|----------------------------|--------|--------|--------|
| Number of people trained in apprenticeships in different occupations? Please indicate the total number of people trained per occupation and year. | | | | |
| Please indicate the total number as well as the percentage of people who drop out and indicate in which year (or month) they dropped out in total numbers and in percentages. | | | | |
| List the different business sectors that offer apprenticeship places. Please indicate the total numbers and percentages. | | | | |

Tool 2: Causes for increase or decrease of total number of apprentices

This matrix shall be distributed amongst government officials, employers and workers' representatives with the goal of gaining an insight on reasons why the total number of apprentices may have increased or decreased in the past years.

Why do you suppose that the number of apprentices will increase or decrease? Please consider whether you agree or disagree with the following statements and circle YES or NO in the list below.

| Question | Please circle either yes or no | |
|--|--------------------------------|----|
| Business is growing/expanding | YES | NO |
| Business remains the same | YES | NO |
| Business is not growing nor expanding | YES | NO |
| Level of satisfaction of the demand for skilled workers | | |
| QA programmes help to meet demand for skilled labour | YES | NO |
| QA programmes have no impact on demand for skilled labour | YES | NO |
| QA programmes do not help to meet demand for skilled labour | YES | NO |
| Training quality with the QA model | | |
| High quality of QA training and easy to recruit apprentices | YES | NO |
| Medium quality of QA training but easy to recruit apprentices | YES | NO |
| Low quality of QA training and difficult to recruit apprentices | YES | NO |
| Financing | | |
| QA programmes are mainly financed by employers or through an apprenticeship levy | YES | NO |
| QA programmes are partly financed by employers and partly by the government | YES | NO |
| QA programmes are financed by the government exclusively | YES | NO |
| Funding agreements | | |
| Funding arrangement has or will be increased | YES | NO |
| Funding arrangement remains unchanged | YES | NO |
| Funding arrangement has or will be decreased | YES | NO |
| Supply of training providers | | |
| Offer of training providers is expanding and has become more diverse with adjusted curricular plans | YES | NO |
| Offer of training providers may be changed but with high uncertainty on scope and timing | YES | NO |
| Offer of training providers won't be diversified and no adjustment is foreseen in the curricular plans | YES | NO |
| Number of young people in QA programmes | | |
| Number of youth in QA programmes is increasing | YES | NO |
| Number of youth in QA programmes remains unchanged | YES | NO |
| Number of youth in QA programmes is decreasing | YES | NO |
| Social image of QA | | |
| The social image of QA is good or very good | YES | NO |
| The social image of QA is rather neutral | YES | NO |
| The social image of QA is rather bad | YES | NO |
| Employers' opinions | | |
| Feedback of employers is collected and implemented in a structured and regular manner | YES | NO |
| Feedback of employers is collected but not necessary embedded | YES | NO |
| Feedback of employers is not collected nor implemented in a structured and regular manner | YES | NO |
| Apprentices' employability | | |
| Most apprentices are employable and find suitable jobs after completing the QA programme | YES | NO |
| Most apprentices are employable but cannot find suitable jobs after completing the QA programme | YES | NO |
| Most apprentices are not employable and cannot find suitable jobs after completing the QA programme | YES | NO |

Tool 3: Assessing the quality of indicators

Developing indicators to measure impact, outcome and output is key for conducting a rapid apprenticeship appraisal. However, the challenge is not only to develop a series of indicators but rather to assess the quality and scope of such indicators. To do so, a separate tool, the so-

called SMART method, is introduced, highlighting the need to pre-select relevant indicators along these five elements:

The five SMART³⁰ criteria to assess the quality of indicators:

Specific

An indicator must measure exactly one area and always render the same result despite changes in other adjacent areas.

Mesurable

It should be possible to measure an indicator with sufficient precision and with a reasonable effort.

Achievable

An indicator should provide sufficiently precise results that are useful for the pursued purpose.

Relevant

An indicator should provide results that are sufficiently exact for the (sub-) area it is set to describe.

Timebound

Finally, an indicator should be able to provide the results in time for their utilisation.

Tool 4: The monitoring plan

Example of applying SMART on indicators:

Quality indicators that measure impact, outcome and output and which fulfil the standards of SMART are listed in this tool.

Once you have set up a new quality apprenticeship programme or once you decide to improve ongoing apprenticeship programmes, it is recommended to create a monitoring plan. The matrix below shall serve as a template to use and adjust to your own country-specific context. By doing so, please identify the results level along impact, outcome, use of outputs and outputs. Next, you set the objectives for each result level and develop indicators. Finally, look for the most suitable method of measurement.

| Results level | Objectives | Indicators | Measurement |
|---------------|---------------|--|---------------------------------------|
| Impact | Employment | Proportion of graduates from new QA programme who are employed as result of completing QA training | Employed graduates |
| Outcome | Employability | Proportion of graduates from new QA programme who have received an offer of employment in their age cohort compared to youth who did not attend or complete the QA programme | Successful graduates with a job offer |

30 - SMART method developed by George T. Doran in 1981 and published in Management Review Journal

| | | | |
|---------|---|--|--|
| Outputs | Quality apprenticeship programmes are implemented at VET centres and at workplace | Proportion of VET centres and workplaces where apprentices get training along the standards and curricular plans of newly developed QA programmes compared to ordinary VET programmes & Proportion of apprentices who have successfully completed QA programmes, i. e. success rate and Proportion of apprentices who have not completed the QA programmes, i.e. drop-out rates | Total amount of VET centres and workplaces participating in new QA programmes per region |
|---------|---|--|--|

Tool 5: Data-collecting tool

After the creation of a monitoring plan, you should focus on collecting data that will help you to gain a better overview of the opportunities given to apprentices to develop their skills and to enable them to find a suitable job in the labour market. Tracer studies and sectoral studies provide information that is valuable to all business actors and help to inspire, improve and adjust education, training and employment policies, as well as the curricular plans of education and training courses. These types of studies further identify the scope of guidance to help apprentices and young graduates to decide on their education or training paths, and arrive at clearer judgements about skilling or re-skilling the labour force.

In addition, the collection of data helps to better capture apprentice numbers in absolute and relative terms and gives useful information on apprentices who graduated in the medium to long-term. It is essential to determine the right method of measurement since this can help to analyse the effectiveness and efficiency of current QA programmes, to improve the transition of graduates from education to the labour market, while sectoral studies help to ensure skills match in sectors with high demand for new staff, growing sectors and demand for replacement. Therefore, the data-collecting tool can be filled in by using the template below and adjusting it to your own context.

| Unit in percentages | Source | Method of measurement | Time & regularity |
|--|--|-------------------------------------|---|
| XX per cent of graduates find employment within the first six months after completing the QA programme | Own generated data via a questionnaire | Tracer studies | 6 months after graduation and repeated yearly |
| XX per cent of graduates received at least one offer of employment within the first three months after completing the QA programme | Own generated data via a questionnaire | Tracer studies | 3 months after graduation and repeated yearly |
| At least XX per cent of VET centres in region YY offer QA training in the field/sector of ZZ | Local, regional or central government data | Sectoral studies, public statistics | Quarterly or yearly |
| At least XX per cent of the VET centres in region YY offer QA training in the sector of ZZ and target disadvantaged groups | Local, regional or central government data | Sectoral studies, public statistics | Quarterly or yearly |

Recommended methods for data collection

1. Tracer Study: This may be used to trace other economic and social impacts beyond actual employment. Weak point: very expensive in countries with poor infrastructure. Tracer studies are too costly for short courses.

2. Survey among the participants about the benefit/advantages that the acquired competencies have when seeking employment. Weak point: subjective perception leads to distortions.
3. At labour market level: either survey among staff of employment agencies about the participants' placement ratio in the labour market in comparison with other job seekers; or survey among entrepreneurs or managers who employ graduates or interns of reformed training courses or survey among customers/clients of self-employed graduates, to compare their performance with that of their competitors. Weak point in all cases: None of the groups has comprehensive knowledge (bias due to subjective perspective).
4. At the level of the employment system: Statistical data on employment and unemployment. Weak point: official data are often not differentiated enough, issued too late and not reliable, especially regarding hidden or partial unemployment.

Tool 6: Indicator checklist³¹

Once you have completed tools three to six, you should use this checklist to assess whether your developed indicators fulfil high quality standards and contain all relevant points for consideration as mentioned below, such as the insertion of decent work indicators, the quick check against SMART goals or alignment with national employment measures, strategies and reforms.

| YES | NO | Question |
|-----|----|--|
| | | Are the indicators selected defined in a proper and clear way? |
| | | Do the indicators cover all measures of the monitoring plan, i.e. results level, objectives, indicators and measurement? |
| | | Do the proposed indicators follow the SMART method to assess the quality of indicators? |
| | | Are the indicators clearly linked to the actual issue that is being measured? |
| | | Have you included an indicator to measure decent work ³² ? |
| | | Have you included an indicator to measure sustainability? |
| | | Have you included an indicator to measure gender? |
| | | Have you included an indicator to measure green jobs ³³ ? |
| | | Have you included an indicator to measure rural population? |
| | | Have you included an indicator to measure informality level? |
| | | Are the indicators at the outcome and impact level aligned with national youth employment strategies and reform plans? |

31 - Based on the GIZ report Monitoring and measuring the results of interventions related to technical and vocational education and training and the labour market A guideline for practitioners by Wolfgang Meyer and Stefan Thomas.

32 - According to the ILO definition decent work "sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men."

33 - According to the ILO definition of green jobs: "Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency." For example, jobs in the renewable sector, waste management, energy auditing, etc.

Tool 7: Rapid evaluation checklist along the classical evaluation criteria which is adjusted to VET programmes

| Relevance | Effectiveness | Impact | Efficiency | Sustainability |
|---|---------------|--------|------------|----------------|
| Relevance | | | | |
| <p>Is the learning content adjusted to the actual market needs, to the level of competencies that the target group has and competencies that VET centre can teach?</p> <p>Is the apprenticeship programme embedded in a wider national context and aligned with national standards, employment policies and programmes?</p> <p>Are programs aligned with VET provisions and proven job opportunities or even job guarantees after successful completion of the programmes?</p> <p>Have you selected relevant business sectors? Have you set a focus on targeting SMEs?</p> <p>Have you developed and implemented QA programmes due to the strong need (i.e. high unemployment rates, dropouts, skills mismatch, etc.) of the country, especially high demand for skilled labour by employers?</p> | | | | |
| Effectiveness | | | | |
| <p>Is the target group represented in the development of the programmes and is there space to embed their feedback, recommendations and points for improvements?</p> <p>Have you considered integrating the strengthening of labour market services such as job guidance and counselling and job placement?</p> <p>Have you checked the commitment of all relevant stakeholders?</p> <p>Have you ensured a certain level of flexibility in the programme design?</p> <p>Have you ensured the active involvement of private sector actors in programme planning?</p> <p>Is there a possibility to pilot the QA programme at a small scale, learn from the first round cohort and adjust it where necessary before the programme expands nationwide?</p> | | | | |
| Impact | | | | |
| <p>Do you follow a coherent and consistent approach of intervention?</p> <p>Do your programmes have a sufficient duration over more than 11 months?</p> <p>Are disadvantaged groups targeted?</p> <p>Have you developed a mechanism to measure the performance of your target group before, during and after the apprenticeship training?</p> <p>Have you conducted tracer studies?</p> <p>Did you select relevant indicators for monitoring and evaluation purposes?</p> <p>Did you conduct employer surveys to track whether companies recognise the economic potential of a better qualified, trained and skilled workforce?</p> <p>Have you investigated the role and impact of VET centres to function as a role model for the target groups?</p> | | | | |
| Efficiency | | | | |
| <p>Have you explored synergies to bring different companies and VET centres together to exchange and learn from each other, e.g. community of practice?</p> <p>Did you ensure having a consistent funding framework with transparent and comprehensible resource allocation?</p> <p>Have you thought of potential spill-over effects, i.e. that non-target groups may also benefit from measures indirectly?</p> <p>Do you follow a detailed schedule accessible to all with clear deadlines and a timeline?</p> | | | | |
| Sustainability | | | | |
| <p>Is there a consensus among stakeholders for recognising costs and benefits as well as returns of investment of the apprenticeship programme?</p> <p>Do you have a strategy aiming at continued diversification and professionalisation of VET offers?</p> <p>Is there an intrinsic motivation to continue develop and improve programmes? Are there incentives offered for improving the system, e.g. tax breaks, access to continuous training, etc.?</p> <p>Is the cooperation and coordination with the private sector sustainable? Have you signed a contract or an agreement with employers?</p> <p>Have you ensured accreditation and certification of newly introduced VET programmes?</p> <p>Have you developed a channel to inform politics, society, the business sector and the media about the progress and success of the programmes?</p> | | | | |

Tool 8: Questionnaires for VET centres³⁴

1. Operations of the Centre:

- How long has this centre been established?
- How are you financed?
- What training programmes are provided? What occupations or trades?
- What is the duration of the programmes and the skills level associated with them?
- How many apprentices enrol on an annual basis?
- How many teachers/staff do you have?
- How is the centre managed? Is there a board of directors? Does it report to a ministry?

2. Quality of training

- Are the facilities and equipment used adequate?
- Are the courses based on using different modules?
- Are the courses and curricula based on national, regional, or international standards?
- Does the VET centre use performance indicators to monitor progress? In particular, does it monitor:
 - Drop-out rates?
 - Graduation rates?
 - Employability rate of trainees who complete the programmes?
 - Unit cost of training? Average training cost per student?
- Does it report on these indicators? Example: does it have an annual report? To whom is it submitted?

3. Training funding

- How are the training costs covered? By government? Through fees paid by students?
- Is the budget sufficient to cover training costs and update equipment?
- Is the centre allowed by law to generate its own revenue in the market? Through fees or by charging companies for the services performed by students?

4. Private-sector links

- Does the centre have partnerships with private-sector companies?
- Do the partnerships entail agreement on employment guarantees?
- Does the private sector participate in the development of curricula?
- Does the private sector provide any funding or support through donations of equipment and other items?

³⁴ - Based on recommendations from the ILO assessment studies on technical vocational education and training Lao People's Democratic Republic, Mongolia, the Philippines, Thailand and Viet Nam/ ILO DWT for East and South-East Asia and the Pacific. Bangkok: ILO, 2016

5. Access and equity

- What is the profile of apprentices? Do you have information about their social background?
- Does everybody have equal access to the training provided? Are there any groups that are excluded or disadvantaged (for example, women or ethnic minorities)?
- Is gender equality ensured?
- Can you describe the disadvantaged groups you support in more detail?

6. Laws and legislation

- Are the labour and education laws clear when it comes to VET and issues that concern the centre?
- Do these laws provide an enabling environment for the centre to operate?
- Do the laws pose any challenges, or are there elements of the laws that should be changed?

7. Trends

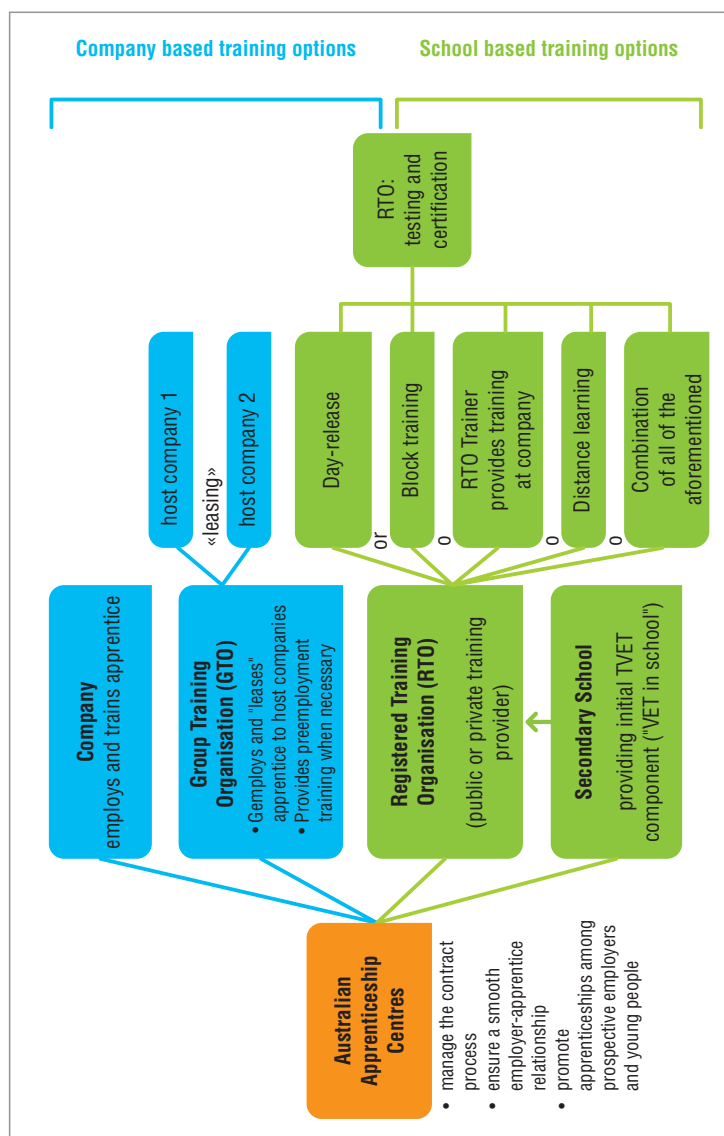
- What trends have you observed in recent years in terms of enrolment rates?
- Have the programmes of study changed?
- Do you have tracer studies, i.e. what are the graduation rates?
- Have you introduced method to measure employability rates?

Do you do skills forecasting?

Part 3:

Good practices

A. Case study Australia



Background

In Australia, the institution of quality apprenticeship is very strong. Traditionally apprenticeships were confined to a defined number of, mainly manual, occupations. In the 1980s “traineeships” were introduced for additional occupations, thereby expanding both the number of apprentices, as well as the types of jobs, in what is called “contracted training.” Traineeships expanded into occupational areas such as retail, tourism and hospitality.

In 1997, the traditional apprenticeship and the traineeship system were brought together under the umbrella of the “Australian Apprenticeship.” Usually people refer to them separately although sometimes it is difficult to provide an accurate demarcation between the two systems. Generally, quality apprenticeships are for “trades” like construction and manufacturing. Traineeships, which tend to be shorter than QAs, are used for “non-trade” occupations, like services and business-related occupations.

Trades and training occupations

Apprenticeships and traineeships are available in a large range of occupations across the Australian economy. Some occupations require a license in addition to the diploma to practice that occupation, (for example, electricians). In other occupations though, licensing is disappearing. There is no licensing associated with traineeships, although regulations of employers may produce a quasi-licensing condition.

Duration

QAs are generally three or four years in duration. E.g. hairdressing is usually three years while fitting and machining is four years long. Traineeships generally have a duration of 12 to 18 months. Contracts may be completed earlier if the qualification is achieved. The government has introduced a range of incentives to reduce the training period. However, there is some resistance: many believe that the extended period is necessary to attain full proficiency.

Apprentices

Australian Apprenticeship is open to all ages of workers (min. 15), from students who are still at school to workers on different types of contracts (including part-time). Some companies use traineeships as a career advancement route for existing workers. Apprenticeships and traineeships are available to Australian citizens and migrants who have the right to work in Australia.

The employer-apprentices relationship is monitored by the Australian Apprenticeship Centres, which also oversee the apprenticeship quality and report problems to the appropriate authority. States and Territories, through their local offices, investigate complaints from apprentices / trainees or employers.

Retention and completion rates of apprentices and trainees vary considerably across occupations. Just over 50% of apprentices and trainees complete their training. These rates seem to be due to problems with the employment conditions rather than with the training. These figures also include changes of employers during the apprenticeship. As there is a tendency of “job-hopping” in some occupations, the real drop-out rates are lower. To increase

retention, it has been suggested that pre-apprenticeship training should be expanded (three to six months), to better prepare applicants for the work environment.

Although males and females can apply for any job, occupations are quite gender specific, with few female construction apprentices and few males working in the care industry. The overall gender distribution is somewhat skewed to males, with, for example 56% of commencements in 2011 being males.

There are no figures on what proportion of apprentices and trainees continue working for the same employer after completing their training. It is generally accepted that most stay with their employers and employers are keen on retaining their apprentices or trainees, having invested so heavily in their training.

Apprenticeship has a good image in Australia, but the image of traineeship tends to be less attractive. Completion of an apprenticeship is either mandatory or expected if entering a career job in most traditional trades. Generally, employers do not demand the completion of a traineeship from job applicants.

Contract

Apprentices and trainees must be employed and their contract of training registered with the relevant State Training Authority. Contracts of training contain details of employment and of training. They must be signed by employers, by the apprentice and the parents if the apprentice is under 18 years old and by the Registered Training Organisation (RTO) that will provide the complementary training.

Wage or allowance

Apprentices and Trainees receive wages according to the relevant industrial relations agreements. Wage rates may increase with each year of the apprenticeship. In these, typically, first-year trades-apprentices receive less than half the “adult” rate, and this rate gradually increases each year.

Companies are allowed to pay a training wage which is lower than the “normal” wage, because approximately 20% of the learner’s time is spent in training rather than working. While this is written into the agreements, in the majority of cases, companies do not reduce their rates. Many companies even pay higher than the required rates to attract and retain apprentices and trainees.

Training organisation and delivery

The Australian system is based on the principles of the German Dual System, with a combination of on- and off-the job training. Apprentices and trainees are expected to spend around 20% to 25% of their working week in formal training. Registered Training Organisations (RTO), oversee the delivery of the school-based component of the apprenticeship training. It is possible to progress through successive apprenticeships or traineeships into a higher level of education.

Company-based training

Employers are expected to provide an adequate training and learning environment and on-the-job instructions to apprentices. No specific regulation is attached to the nature of employers who take on an apprentice or trainee. No supervision ratios are set, but the Australian Apprenticeship Centres, which organise and oversee training contracts, are meant to confirm that supervision by qualified staff is adequate. There are ongoing discussions on whether it is desirable and possible to regulate training companies through a registration process and whether companies should provide evidence of adequate training provision as part of it.

■ Most GTOs are not-for-profit and are often industry-based, specialising in specific sectors. Others are run as generic commercial or community-based operations that service a range of industry-areas in a particular geographical area. GTOs receive a small amount of government funding, which is allocated based on completion rates.

Company-based training can also be organised through a “Group Training Organisation” (GTO). They act as “mediators” for companies and employers for apprentices and trainees, “leasing them out” to host companies. They thereby relieve the host companies of the risk of taking on an apprentices for a lengthy period and of the paperwork associated.

Many GTOs employ specialised workers to handle welfare issues, support and counsel apprentices and trainees, as well as provide pre-employment training for applicants who lack the core skills to perform on the job (e.g. literacy, numeracy, assistance with access to financial support services). In addition, GTOs provide professional development for employers, keeping them up to date with the latest developments in the national training system and with the industries.

School-based training

The school-based part of the training is provided by public and private training providers who are known as Registered Training Organisations (RTOs). RTOs include public training providers which are also called TAFE (Technical and further Education) Institutes. In addition there are around 4000 registered private training providers. It is often stated that the advent of large numbers of private providers has led to lower quality in the TVET system, associated to poor business practices, and low-quality training and teacher qualifications.

The majority of the RTOs are non-profit and run by community and welfare organisations, although there are also private RTOs which are commercial in nature. In addition, there are around 250 companies and other organisations, which are registered as “Enterprise RTOs”

Traditionally, apprentices would attend one day per week school-based training. Nowadays, there are different options: “block release” or “alternating” training, distance or on-line learning, as well as full “on-the-job” training with an RTO representative visiting the workplace from time to time to deliver training and carry out assessments. There may also be a combination of these various delivery models. In some States and Territories, RTOs must prove that they maintain a minimum level and frequency of training and contact with the apprentices.

■ Training Packages are being developed, and regularly updated by the Industry Skills Councils, following wide consultations with the relevant industry and training providers and must be approved by the National Skills Standards Council.

In some occupations, young people can start apprenticeships and traineeships while at secondary school; they need to work part-time to do so. These “VET in schools” qualifications and are known as “School-based apprenticeships and traineeships”. Training is implemented following “Training Packages”, which are primarily collections of competency standards or units of competency. Qualifications contain specified core and elective competencies: they are a set of competencies gathered together to form a qualification.

Testing and certification

All Australian apprenticeships and traineeships have a qualification outcome and must comply with the Australian Qualifications Framework³⁵. Qualifications in apprenticeships are usually provided through the Training Packages which must be achieved by apprentices or trainees enrolled in the relevant qualification. These Training Packages are recognised at national level and therefore provide consistency and recognition across Australia.

The Registered Training Organisation’s teachers and assessors are responsible for assessment and there is no final examination. State Training Authorities and other bodies were formerly responsible for final examinations, but this practice has lapsed, as it was considered that national Training Packages provide sufficient quality assurance. Critics point out that standards have slipped as a result.

Institutional arrangements and administration

The Australian Apprenticeship system is highly regulated with a diversity of institutions and actors intervening at different points in the system. TVET is overseen at national level by the Commonwealth Department of Innovation, Industry, Science, Research and Tertiary Education (DIISTRE). State training authorities and the federal government maintain regional and local offices. They promote apprenticeships and manage the quality of the programmes.

States and Territories retain responsibility for managing major components of the system, including setting and managing the public TVET system, namely the publicly financed training institutions (over 4000 public and private training organisations). The major institutional players are listed below:

| | |
|---|---|
| Commonwealth (national) Government: Department of Innovation, Industry, Science, Research and Tertiary Education (DIISTRE) | <ul style="list-style-type: none"> → Provide, jointly with the State Training Authorities, the overall regulation of the system → Promote QA and traineeship in school education |
| State Training Authorities (State and Territory Governments) | <ul style="list-style-type: none"> → Set funding rates for TVET delivery → Manage public training providers (TAFE institutes) → Manage training quality through regional/local offices → Promote QA and traineeships → Provide secondary school teachers qualified to teach vocational courses |
| Social Partners | <ul style="list-style-type: none"> → Participate in the development of training packages → Participate in nation-wide consultations on the QA system. Employers may decide to establish a “licence” for practicing occupations gained through traineeship |
| Industry Skills Councils (ten councils in all of Australia) | <ul style="list-style-type: none"> → Participate in the development of training packages → Determine trades eligible for apprenticeships / traineeships |

35 - The AQF covers certificate I (level1) through to doctoral level (level 10). TVET qualifications cover levels 1 to 6

| | |
|--|---|
| National Centre for Vocational Education Research (NCVER) | <ul style="list-style-type: none"> → Collect and manage statistics → Carry out research |
| Registered Training Organisations (RTOs) | <ul style="list-style-type: none"> → Are responsible for school-based training (public or private) → Are responsible for assessments and certification |
| National Skills Standards Council | <ul style="list-style-type: none"> → Approve training packages |
| Technical and Further Education Institutes (TAFE) | <ul style="list-style-type: none"> → Are public training institutions carrying out school-based part of the apprenticeship training |
| Private Companies | <ul style="list-style-type: none"> → Provide the company-based part of the training |
| Group Training Organisations (GTOs) | <ul style="list-style-type: none"> → Act as employers of apprentices and trainees, "leasing them out" to host companies. → Provide pre-employment training |
| Australian Apprenticeship Centres | <ul style="list-style-type: none"> → Market apprenticeship to potential employers and apprentices/trainees → Manage the training contract process → Ensure payment of appropriate employment and completion incentives → Make employers aware of special incentives for disadvantaged groups → Ensure a smooth employer-apprentice/trainee relationship and report problems to the authorities → Oversee apprenticeship quality |

It has often been stated that the system is overly complex and that employers are confused by the different approaches from multiple bodies and organisations. Issues being discussed include the role of the support services, arrangements for mentoring for first year apprentices, the Australian Apprenticeship Centres and the division of labour between the Commonwealth Government and the States/Territories. Also, there is a move to harmonise arrangements across the States and Territories.

Governance and participation of Social Partners

Regulation of the system is provided by the Commonwealth Department and the State Training Authorities. Any national and state-level consultations regarding changes to the apprenticeship system involve employers' associations and workers' organisations. Such consultations are usually held at national and State or Territory level. Local employers' groups (the equivalent of chambers in many countries) do not have a special role to play. Likewise, different specialised institutions intervening in the apprenticeship system (e.g. the Australian Apprenticeship Centres and the Registered Training Organisations) are represented in all national or state-level discussions about changes of the system.

Funding

To encourage participation in the QA system, there is a series of funding incentives from different governmental sources. Incentives are available for employers, training providers and individual apprentices and trainees. The federal government supplies funding to employers on commencement (after six months of training) and on completion of the apprenticeship. From time to time, these amounts can be subject to variations for certain groups of learners, e.g. incentives may

- The Australian Apprenticeship Centres make employers aware of special incentives available for employing apprentices from disadvantaged groups.

be reduced for a specific category of learners or extra incentives may be offered to ensure that the supply of apprenticeships and traineeships is sustained. School-based training is funded by the State Training Authority to the Registered Training Organisation. There may be variations according to the jurisdiction of a particular State or Territory. The commonwealth government provides some extra funding for individuals, e.g. for tools or to cover the cost of living away from home, as well as for indigenous people and persons with disabilities. Such funding may take the form of wage support or assistance for tutorial, interpreter and mentor services.

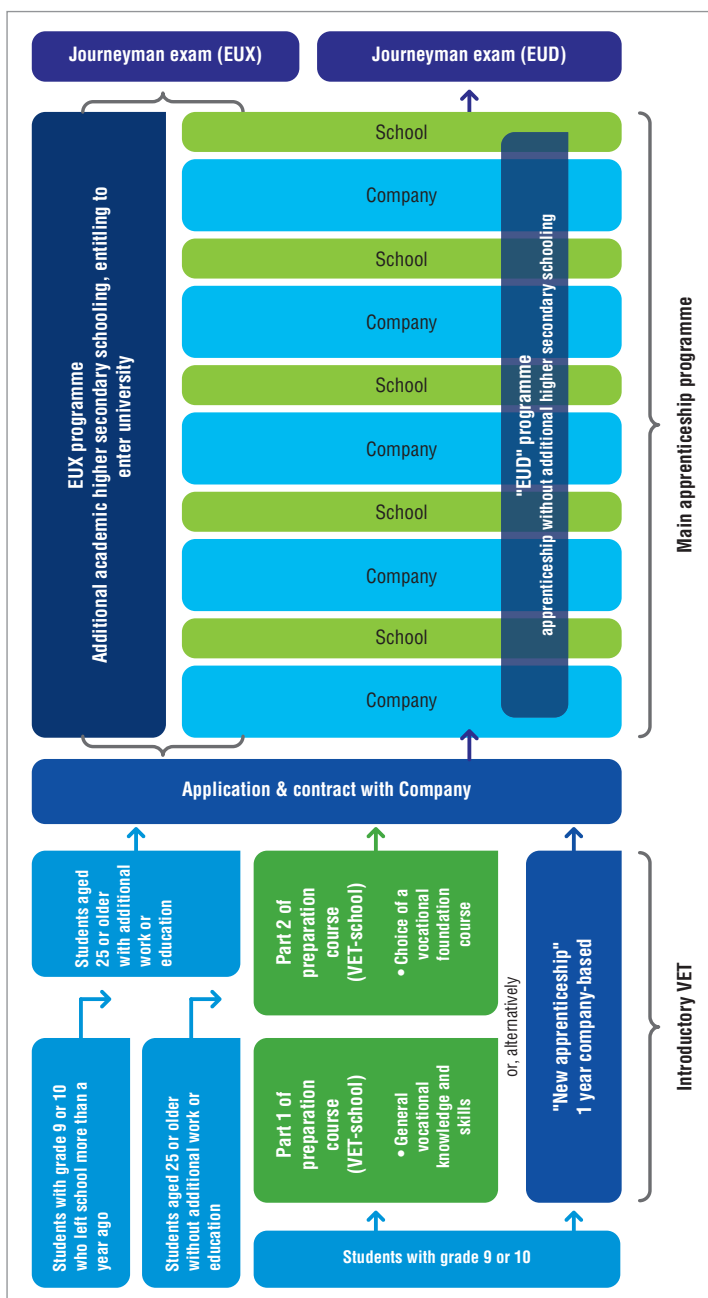
Some companies and some private training providers do not claim all the different possibilities of the available funding. They reported finding the system too complex and preferred to remain independent of government funding. In 2011, a controversial report sponsored by the Australian government advocated removal of all employment incentives for traineeships, but its full provisions have not been enacted.

Critical policy developments

Policy developments that have proven helpful for the development of the system are the government's commitment to its massive expansion through the introduction of traineeships and the continued willingness of the Commonwealth and State / Territory Governments to fund employment and training for many years. The development of the national Training Packages is considered to provide consistency in qualifications recognised at national level. Also the existence of a large body of research due to the presence of the National Centre for Vocational Education Research (NCVER) is seen as a positive factor influencing the system.

On the downside, the system of financial incentives to employers and frequent changes in financial incentives available are seen as well-intended but confusing. Also, some policy decisions made at the State and Territory level may create divergence among apprentices, training policies and arrangements and there is a need for more harmonisation.

B. Case Study: Denmark



Background

The Danish apprenticeship system has its roots in the 18th Century and earlier, in the system of the guilds regulating the trades and crafts. Over the centuries, the system evolved and in 1921 a law was passed setting the basis for the current quality apprenticeship system with a strong participation by the social partners. As the system developed, legislation was also successively adapted.

Trades and training occupations

There are around 108 apprenticeship occupations. The number of occupations varies according to new occupations being registered and obsolete occupations being closed. Like in other countries with apprenticeship, in times of economic growth or recession the Danish VET system is sensitive to economic developments with imbalances in the number of apprenticeship places available vis-à-vis the number of apprentices.

Duration

The overall duration varies between three to five years and there are several routes in and out of apprenticeship. For most occupations, these include (1) a one-year preparation training in VET schools for apprentices below the age of 25, which for some groups can be reduced to half a year; and (2) the main apprenticeship training which lasts between two and four years.

Apprentices

Commonly, young people start vocational training after finishing compulsory education at grade nine or an additional tenth grade. This group can be complemented by upper secondary graduates or polytechnic graduates. Candidates of 25 years and older are called “adult apprentices”. To cope with this heterogeneity, different entry routes exist. However, the majority of apprentices take the one-year preparation course before starting the apprenticeship. Recently, entry requirements into VET have been introduced to ensure that all VET entrants meet minimum educational requirements, in particular in maths. Measures to reduce the drop-out rate, which is around 30%, and to increase students’ readiness for entry into VET include:

- A VET-oriented 10th grade in the general school system, before entering the preparation course.
- An alternative to the preparation course - the “new apprenticeship”: a one-year practical, company-based induction programme with minimal school attendance.

In absolute numbers, gender participation is relatively balanced, however there are differences according to occupation, with young women favouring apprenticeship in commercial, social and healthcare occupations and young men tending to go into crafts and trades.

Contract

Apprentice candidates have to proactively look for a training company. Many do this before or during the preparation year, often assisted by the training school. The contract states items such as the training duration, salary, the relevant entry path into apprenticeship, the VET

school, options for attending European exchange programmes and a mutual trial period of three months.

Wage or allowance

Apprentices receive a monthly wage which depends on the wage levels negotiated by the social partners in the respective industry and occupation.

Training organisation and delivery

Company-based training

In the company, a supervisor is responsible for the apprentice's work and learning progress and the apprentice is induced in the job by co-working journeymen and journeymen.

School-based training

Training at school is theoretical and practical. VET schools keep well-equipped workshops, however visits to employers are added to introduce apprentices to "state of the art" equipment. Jointly with the Local Education Committee (described below), schools develop and update the curricula. All schools have a system for internal quality and performance assessment, including self-evaluation. Training schools enjoy a high degree of autonomy. Many do not only cater for initial, but also further vocational training and labour market programmes, which increases heterogeneity of learners in the same course.

Coordination between company and school

Apprentices have individual Education Plans. A detailed logbook for each apprenticeship programme is also used to record the apprentice's progress. It is regularly filled out by the employer, the apprentice and the school. In some occupations apprentices receive a "School Declaration" and a "Practice Declaration" after each training block, informing the company and the school about the learning progress and setting learning objectives for the next training block. Many VET schools also organise coordination meetings with companies and apprentices.

"School-based apprenticeship" to mitigate a lack of apprenticeship places

To compensate for the lack of available apprenticeship places, a "school-based apprenticeship" modality was created. It replaces company-based training by simulating a work environment at school, including "wages" and teaching through retired journeymen. It is also used if an SME cannot cover all the necessary training contents. However, there is a consensus by all stakeholders that "school-based apprenticeship" cannot replace the company experience and should be avoided as much as possible.

Testing, qualification and certification

During the apprenticeship, a continuous assessment of the apprentice's achievements takes place and by the end a final exam, the "journeyman test" is carried out. The exam can be written, oral, practical or a combination of the three. The general structure is a theoretical exam based on questions, exercises and assignments, complemented by a practical test including work demonstration.

■ The Ministry of Education sets out the general laws and regulations for the journeyman test, the Trade Committees decide the contents and Local Education Council search for external assessors. The VET school organizes the test in its premises and the final certificate is valid at national level.

Governance and participation of Social Partners

The Danish apprenticeship system is decentralised with a high degree of social partner involvement. The overall responsible body is the Ministry of Education. It lays down the rules for quality assurance, school plans and teacher qualifications. In addition, it establishes the Advisory Council for Initial Vocational Education and finances its secretariat. Social partners collaborate at two main levels:

- The QA system level: assessing the effectiveness, impact and labour market relevance of each apprenticeship programme;
- The institutional level: identifying the contents of each training programme, ensuring training quality and delivery by the VET schools, including testing and examinations. They also participate in the financial supervision of the training schools.

Social partners are represented in four main institutions at national, sectoral and local levels:

• *Advisory Council for Initial Vocational Education and Training*

The Council provides general advice and recommendations to the Ministry on policies, strategies and priority setting. It includes 24 members: 10 employers' representatives, 10 trade union representatives, two from local governments and two students' representatives. Additionally, school representatives attend the Council. The Ministry appoints the chairperson but has no voting rights.

• *Trade Committees*

Employers' associations and trade unions establish a number of industry-based Trade Committees. Students are represented, but have no voting rights. The Trade Committees supervise training in all apprenticeship occupations, determining their contents and ensuring labour market relevance.

• *Local Education Committees*

Each training school establishes several Local Education Committees which cover all training programmes offered by the school. The committees are made up by an equal share of employers' and trade union representatives and are assisted by members of the school

management, teachers, students and local employment services. Their main purpose is to revise and provide inputs into the curricula, increasing their labour market relevance.

• *School Boards*

Each school has a governing board. A majority of the voting members are external members from the school's local area. Members appointed by employers and trade unions hold an equal share. Other members include a representative appointed by the municipal councils, two school staff and two student representatives. The school director is the board secretary but has no voting rights. Board members contribute with their experience and professional expertise to the school's strategic planning.

Institutional arrangements and administration

The QA system is constantly updated and legislations change accordingly. Different Acts define:

- The roles and responsibilities of all involved stakeholders at the national and local level;
- The quality assurance of education programmes and the rights of apprentices;
- The rules for governance, funding, the control of public funds and the operation of VET schools.

The principal actors in the Danish QA system are:

| | |
|--|---|
| Ministry of Education | <ul style="list-style-type: none"> → Is the responsible body for VET and approves the establishment of new and the closure of existing QA programmes. → Lay down the rules on quality assurance and control, school action plans and teachers' qualifications. → Lay down rules on the form and content of apprenticeship training as proposed by the Trade Committees. → Establish the Advisory Council for Initial Vocational Education and Training and finances their secretariat. |
| Social Partners | <ul style="list-style-type: none"> → Complement the Ministry's role in governing the QA system. |
| Advisory Council for Initial Vocational Education and Training (IVET) | <ul style="list-style-type: none"> → Provide general advice and recommendations to the Ministry on policies, strategies, assessment and school governance. → Recommend content review, reform and closure of existing training programmes and the establishment of new programmes. → Establish regulations for teacher recruitment, qualifications and educational plans. → Advise on financial priorities and Ministry funding. → Set apprentices' legal rights and the rules for resolving disputes. |
| Trade Committees | <ul style="list-style-type: none"> → Supervise apprenticeship training in all occupations; determine entry levels, objectives, structure, duration and contents of each apprenticeship and ensure their labour market relevance. → Advise on introducing new apprenticeships and the upgrading or closing of existing programmes, based on labour market trends. → Develop guidelines, assessment plans and contents of final exams. → Handle disputes between apprentices and training companies. → Coordinate and consult with the Ministry, the Advisory Council and Local Committees. → Approve training companies and ensure the provision of adequate work and learning environments in companies. → Develop a yearly report, action plan and proposals to the Ministry on training programme relevance, quality and required changes. |

| | |
|---|---|
| Local Education Committees | <ul style="list-style-type: none"> → Advise training schools and provide inputs on the contents and labour-market relevance of the training programmes. → Provide support for cooperation between the school and local labour market on the current and future skills needs. → Seek to ensure a sufficient number of training companies and approve training companies. → Report to the Trade Committees on training implementation. |
| Governing Board of the training school | <ul style="list-style-type: none"> → Is responsible and accountable for the overall school management. → Establish work procedures and approve the annual work plan. → Ensure that the school's training programmes meet the needs of the local labour market. → Determine, based on the school director's advice, the school's training offer and the implementation of other educational activities, e.g. income-generating and other relevant activities. → Appoint and dismiss the school director, the school auditor and, based on the director's recommendations, other school staff. → Approve the school budget and accounts, administers the school's resources, including government grants. |

Funding

The Danish apprenticeship system is co-funded by the government, training companies and social partners. The expenses for their participation in the different councils and committees are self-financed by the social partners. The cost of the company training, including salaries, is financed by the companies. They can claim a refund for wages paid during school-based training periods from the "Employers Education Contribution Fund" (funded by all private and public companies).

The training schools are independent and self-governing entities. Funding comes from the Ministry of Education on the basis of a cost-per-unit system called "taximeter" which is calculated on the average cost of one apprentice per year. There are several categories of taximeters, relating to educational expenses (e.g. teachers' training and salaries, textbooks, materials), general expenses (administration, management, etc.) and building maintenance, rent and facilities. In addition, schools receive additional subsidies; e.g. for student hostels, accommodating apprentices with special needs and for development and innovation. Schools are required to market their activities, including goods and services produced by apprentices. In spite of these arrangements, many seem to face difficulties in covering running costs.

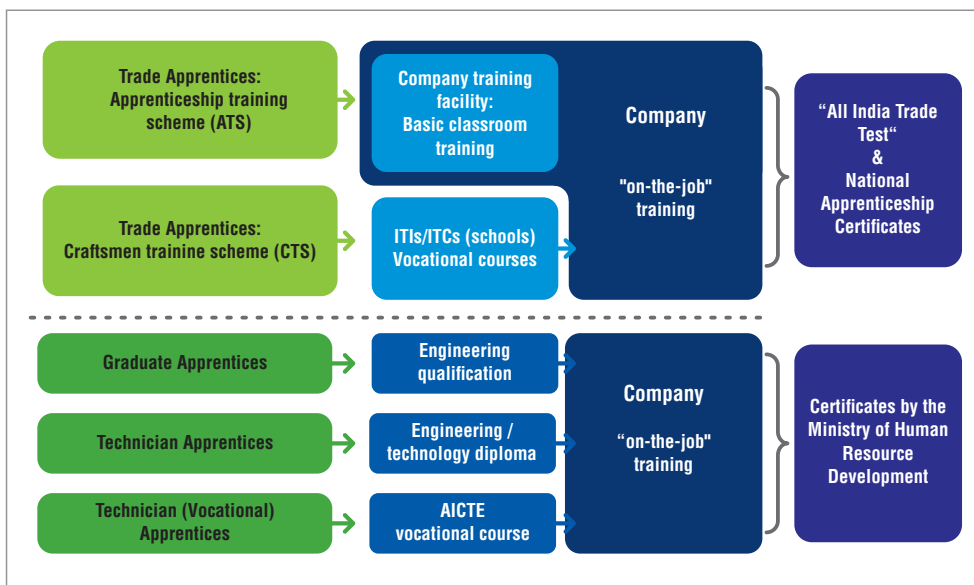
Critical policy developments

A political agreement on the latest VET reform mentions three major challenges:

- Fewer young people apply for a VET education;
- High drop-out rate;
- A high age heterogeneity among apprentices and a substantial share of adult apprentices.

The system therefore needs to be made more attractive for young learners, provide a clearer and simpler structure with clear admission requirements and offering better opportunities for post-compulsory and continued education. At the same time, more adequate apprenticeship opportunities for the over-25 need to be created. Consequently, better career guidance is needed.

C. Case Study: India



Background

India has an oversupply of higher education graduates, many of them ending up in occupations where their skills are under-utilised. The lack of skilled workers and technicians is holding back economic progress. Employers are generally dissatisfied with the country's training arrangements and have only limited possibilities for participation and influencing possible reforms. Many large firms resort to doing their own training, but these qualifications cannot be translated into officially recognised certificates.

The Indian National Apprenticeship Scheme started in 1959 on a voluntary basis, was brought under the ambit of the Apprentices Act in 1961 and implemented effectively in 1962. Although the system is small compared to the total population and the available school-based training options, it is still quite complex and over-regulated. It includes several categories of apprentices:

1. Trade Apprentices
2. Graduate Apprentices
3. Technician Apprentices
4. Vocational Technician Apprentices

Besides, there is also a long tradition of informal training and workplace learning and an "informal apprenticeship system" exists alongside the formal system.

Trades and training occupations

The Indian formal QA system has a limited, and in some ways outdated, list of designated apprenticeship trades with several sub-groups. For Trade Apprentices, the number of

apprenticeships in each occupation and region is set by the Government. For Graduate Apprentices, Technician Apprentices and Technician (Vocational) Apprentices there is no limitation for intake.

Apprenticeship is carried out in trades as varied as forestry, chemical production, manufacturing of machinery and parts, construction and wholesale trade. However, there are only a few trades in the service or business sectors, even though there is a much higher employment potential in services than in manufacturing, construction, utilities and mining combined.

Duration

Depending on the trade, apprenticeships in the Apprenticeship Training Scheme (ATS) have training periods of between 6 months and 4 years. Graduate Apprentices, Technician Apprentices and Technician (Vocational) Apprentices are trained for one year.

Apprentices

Each apprentice category has different entry criteria, different stipend and a different duration. Apprenticeship participation rates are very low and many of the available places remain unfilled. In 2008, only 215,000 apprentices in 23,900 companies were reported against 320,000 available seats. Reasons for the low participation are:

- Low stipends: they are mainly an allowance, but cannot cover living expenses. Regular wages are much higher which makes looking for a job more attractive than an apprenticeship;
- No workplace guarantee after completion, low job retention and progression into permanent employment;
- No routes into higher qualifications;
- Low social image;
- Over-complexity leads to little public knowledge about how the system works;
- Apprenticeship certificates and qualifications are not valued in the labour market due to the low quality of skills training acquired during the apprenticeship.

Young women are under-represented, mainly due to the strong focus on manufacturing occupations which are traditionally favoured by males. It is suggested that apprenticeship should be extended to occupations that attract young women.

The Apprenticeship Act includes provision for disadvantaged groups. However, this adds to the complex and cumbersome administrative requirements for employers. Apprenticeship rules stipulate requirements for physical fitness, limiting the opportunities for some candidates. However, there are official provisions for apprentices with disabilities as well as ratios applied to caste and tribal backgrounds. There is however a lack of coverage in rural areas.

Contract

Every apprentice and employer needs to enter into an apprentice training contract, which is registered with the Apprenticeship Advisors.

Wage or allowance

Apprentices are paid a stipend, which is specified in government regulations and revised every two years based on the consumer price index. The arrangements vary with the different apprenticeship schemes, but payments are generally very low. For example, trade apprentices are paid by the employer and the stipends increase over the period of the training programme.

For graduate, technician and vocational technician apprentices the cost of the stipend is shared equally between the employer and the government. These apprentices need to reimburse 50% of their stipends to the employer after completing their training.

Training organisation and delivery

Apprentice training is generally carried out in enterprises. ATS Trade Apprentices have no prior theoretical vocational training and must be given classroom-based basic training and related instruction training in the company. All other apprentices (CTS, Graduate, Technician and vocational Technician Apprentices) undergo school-based vocational or technical training before starting their apprenticeship.

“On-the-job” training

It is obligatory for the employers both in public and in the private sector, to make adequate arrangements and provide in-company instructors for “on-the-job training”. Companies can be inspected by the Apprenticeship Advisers and several companies may join together for the purpose of providing practical training to an apprentice.

Trade Apprentices are allocated to private training companies and public establishments according to a quota system, based on in-company training facilities and a worker-to-apprentice ratio. The government may even require companies to train additional numbers of apprentices. Due to the quota, company-based training is often not related to companies’ real need for workers, nor to the genuine work in the company. Teaching qualifications are desirable, but not necessary. Workplace training curricula are reported to be insufficient and not-up-to-date. There is also concern that employers train apprentices only in the skills needed at their particular company. As a result, training quality is low and may not sufficiently cover all necessary competencies, translating into a considerable failure-rate at the apprenticeship test (around 30%).

The company-based training for Graduate, Technician and Technician (Vocational) Apprentices is prepared in joint consultation between the Apprenticeship Adviser and the training company concerned.

There are high levels of organisational, regulatory and reporting requirements for employers. Non-compliance, incomplete documentation, as well as using apprentices for inadequate work or not paying them correctly can lead to penalties, including fees and even imprisonment.

“Off-the-job”- training

Trade Apprentices in the ATS category must be provided with “basic training” and “related instruction training”, which must be organised by employers in a training facility in the company’s premises. Companies with more than 500 workers need to set up a separate

area for this; government loans are available to provide some financial support. This in-house classroom training cannot be outsourced, except for exceptional circumstances and in this case only to government ITIs. It implies substantial costs for employers and makes recruiting apprentices relatively unattractive. Curricula are reported to be of poor quality and oriented towards imparting isolated skills and too focused on the manufacturing sector, with little relevance for the service sector.

For other apprentice categories there are no requirements for further external training. It is assumed that they received the necessary preparation by means of their prior school-based instruction.

- CTS: have completed vocational training at a public Industry Training Institution (ITI) or a private Industry Training Centre (ITC) with their respective ITI / ITC certificates. Shortcomings, such as a lack of infrastructure, modern equipment and raw materials are reported from ITIs and ITCs.
- Graduate Apprentices: will have an engineering degree by a statutory university or institution,
- Technician Apprentices: will have achieved a Diploma in engineering or technology granted by a state council or board of technical education.
- Vocational Technician Apprentices: will have completed a 2-year AICTE (All India Council of Technical and Vocational Education) recognised vocational course.

Testing, qualification and certification

By the end of their training, Trade Apprentices pass the “All India Trade Test”, administered by the National Council for Vocational Training and receive a National Apprenticeship Certificate (NAC). Completion rates for apprenticeships are quite low (70%). Graduate, Technician and Vocational Technician Apprentices are awarded certificates by the Ministry of Human Resource Development.

Institutional arrangements and administration

The Apprentices Act governs the employment conditions, training and wages of all categories of apprentices. It has been amended several times over the years to address issues raised by employers, and the changes did lead to the desired improvements. However, the system has an overly complex administration, and lacks transparency and convergence between various agencies. It is difficult for stakeholders to understand the system and their roles in it and information is not easily accessible.

| | |
|--|---|
| Central Government | <ul style="list-style-type: none"> → Determine the quotas for Trade Apprentices in companies. → May require employers to train additional apprentices. → Determine the appropriateness of the training facilities for apprentice training inside the companies. |
| Prime Minister's National Council on Skills Development | <ul style="list-style-type: none"> → Coordinate action on Skills Development. |
| All India Council for Technical Education (AICTE) | <ul style="list-style-type: none"> → Is the regulatory body for Technical Education and the Indian Apprenticeship Programme for all categories of apprentices. → Promote quality in technical education. → Plan and coordinate the development of the technical education system and maintain norms and standards. |

| | |
|--|--|
| National Council on Vocational Training (NCVT) | <ul style="list-style-type: none"> → Engage in formulating training curriculum and standards. → Participate in certification through “trade tests”. |
| National Skills Development Corporations (NSDC) | <ul style="list-style-type: none"> → Set up by the Ministry of Finance to provide special funding. → Coordinate private sector initiatives. |
| Central Apprenticeship Council | <ul style="list-style-type: none"> → Is a statutory body with representatives from central and state government, employers’ and workers’ organisations. → Advise the government on policies and prescribe norms and standards for the ATS. |
| Trade Committees | <ul style="list-style-type: none"> → Lay down the prescribed syllabi, the period of training, etc. |
| 21 Sector Skills Councils | <ul style="list-style-type: none"> → Relatively new bodies required to enable industry participation in apprenticeship policy and implementation. |
| Directorate General of Employment and Training (DGET) (Ministry of Labour) | <ul style="list-style-type: none"> → Is responsible for the Trade Apprentices. → Regulate the Government Industrial Training Institutes (ITIs) and the private Industrial Training Centres (ITCs). |
| Regional Directorates of Apprenticeship Training | <ul style="list-style-type: none"> → Six Directorates located throughout India are responsible for implementing the Apprenticeship Act for Trade Apprentices. |
| Apprenticeship Advisers | <ul style="list-style-type: none"> → Implement the Apprenticeship Act at State level. → Inspect apprenticeship places in companies. → Identify apprenticeship places for Trade Apprentices and may require employers to hire specific numbers of apprentices. → Prepare training for Graduate, Technician and Technician (Vocational) Apprentices in consultation with companies. → Register the training contracts. → Take final decisions in case of disputes. → Move apprentices to other employers if a company closes. |
| ITIs and ITCs (Industrial Training Institutes (public) / Industrial Training Centres (private)) | <ul style="list-style-type: none"> → Provide school-based vocational training. → Graduates can join the Craftsmen Training Scheme (CTS) which is the “short track” of the Trade Apprenticeship. |
| Department of Secondary and Higher Education (Ministry of Human Resource Development) | <ul style="list-style-type: none"> → Is responsible for Graduate Apprentices, Technician Apprentices and Technician (Vocational) Apprentices. → Oversee four Boards of Apprenticeship Training in charge of Graduate, Technician and Technician (Vocat.) Apprentices. |

Governance and participation of Social Partners

A study by ILO Delhi and the World Bank found levels of social partner participation in governance, policy design and implementation to be low. In spite of stakeholders’ willingness to engage, few routes of intervention are available. As part of the National Policy on Skills Development, 21 Sector Skills Councils are currently being established, but progress is reported to be slow. Although social partners are represented in institutions such as the Central Apprenticeship Council, it is reported that they are not adequately integrated in developing or revising the curricula. As a result, training contents do not reflect the skills needs of the industry, causing low levels of acceptance among employers.

- Individual employers face considerable obstacles. Companies with representation in more than four states have to undergo a highly bureaucratic process to obtain training approval. Detailed reporting procedures, strict regulations and penalties make compliance onerous and costly.

Funding

Funding is shared between the government, employers and by some apprentice categories.

The Government

- finances the training in ITIs (for CTS apprentices)
- co-funds 50% of the stipends for Graduate, Technician and Technician (Vocational) Apprentices
- provides loans for companies with 500+ workers to create areas for “off-the-job” training

Employers

- finance the stipends for Trade Apprentices
- “advance” 50% of the stipends for Graduate, Technician and Technician (Vocational) Apprentices (the apprentices have to reimburse this money after completing training)
- fund the facilities, materials and other arrangement for theoretical training in their companies

Graduate Apprentices, Technician Apprentices and Technician (Vocational) Apprentices reimburse 50% of their stipends to the training company upon completion of the apprenticeship.

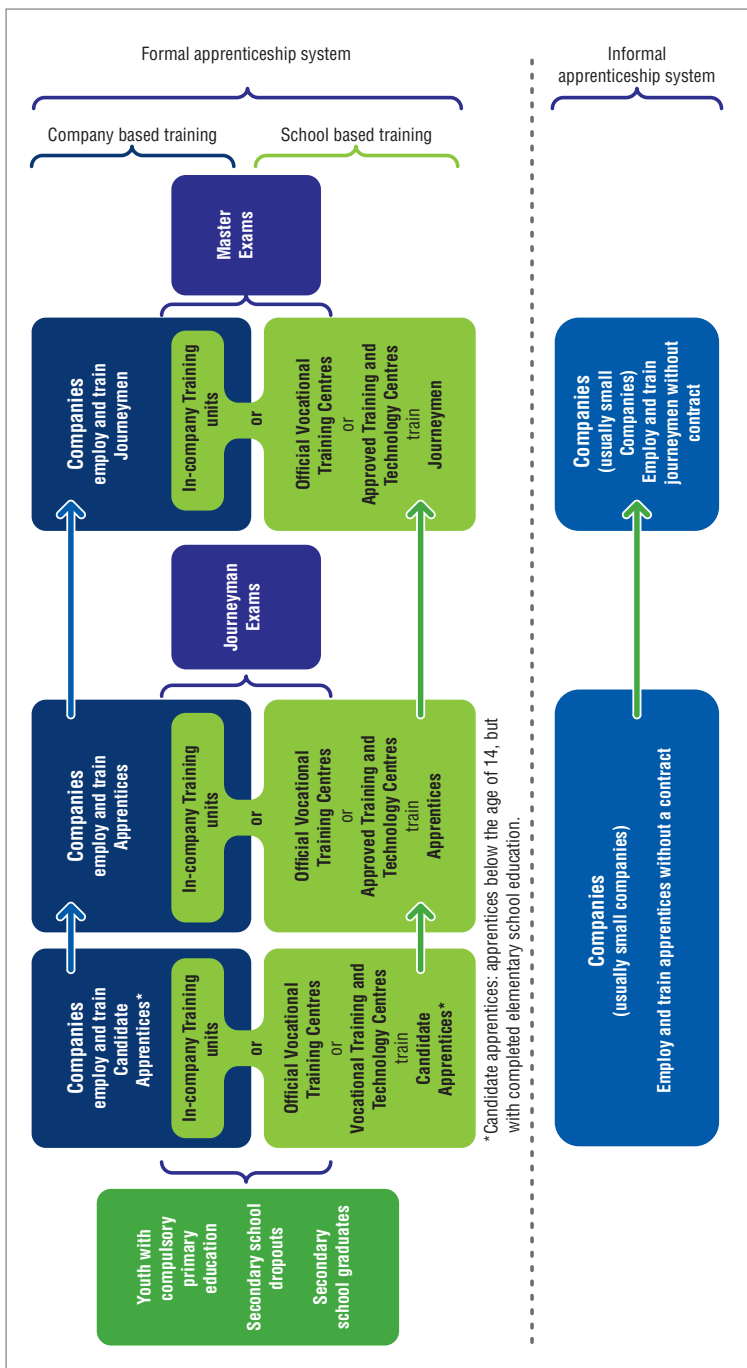
Critical policy developments

Despite the low participation by apprentices and employers, the government reportedly regards QA as part of a broad policy to improve skills levels. In a recent study, the ILO and the World Bank have identified and discussed with various stakeholders four main areas of improvement:³⁶

| Group | Themes | Possible options |
|---------|--------------------------|---|
| Group 1 | Simplify access | Replace compulsory participation requirements with voluntary registration. |
| | | Reduce the regulatory burden on employers. |
| | | Introduce “third” entities to observe and better react to labour market changes and to support employers and disadvantaged apprentices. |
| Group 2 | Improve training quality | Introduce off-the-job-training through the whole apprenticeship period. |
| | | Upgrade quality and recognition of apprentice certification. |
| | | Improve workplace curriculum. |
| | | Improve skills and expertise of those delivering training. |
| Group 3 | Harmonise the system | Greater involvement of stakeholders in the system. |
| | | Simplify and harmonise regulations and the system. |
| | | Increase “market currency” of apprentice qualifications. |
| Group 4 | Increase participation | Cover more trades and occupations in the economy. |
| | | Give financial incentives to participants, companies and training providers. |
| | | Introduce non-financial strategies to increase participation. |

36 - Ver documento completo en: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_234728.pdf

D. Case Study Turkey



Background

Apprenticeship in Turkey goes back to the 13th Century, when a fraternity organisation called Akhi was founded; it was responsible for vocational training and social education. Apprentices would start on a probationary arrangement, later become full apprentices, progress to become journeymen and finally, masters. The modern quality apprenticeship system still holds remnants of the Akhi system.

Trades and training occupations

There are more than 140 formal apprenticeship programmes that are recognised by the Ministry of National Education. Apprentices can mainly be found in occupations relating to hairdressing, electrics, automotive mechanics and framework, clothing machinery, furniture production, computerised machine production processes, welding, flattening and cooking.

In addition, about 355 apprenticeship occupations – most of them with short-term training periods of a few weeks – are not covered by the official apprenticeship training system, nor recognised by the official apprenticeship legislation, but implemented through the Turkish Confederation of Tradesmen and Craftsmen (TESK). These occupations are not recognised by the MoNE because of their limited scope within manufacturing or services (e.g. the production of specific goods and foods). TESK also organises the testing and certifying of prior learning and informally acquired skills.

Duration

Depending on the occupation, the duration of apprenticeship varies between two and three years, but is reduced by half for apprentices who have completed secondary or higher levels of formal schooling.

The length of training to become a Master (for journeymen and journeywomen with completed apprenticeship training) is two years. The Master certificate entitles the holder to open a formal business. The Government is seeking to shorten the training duration for some occupations, to enable people to start up businesses faster.

Apprentices

Apprentices in the formal apprenticeship system are usually between 14 and 18 years old. The majority are students who did not continue on to secondary education after completing basic education, or secondary school drop-outs. Apprentices aged 19 or above need to hold a secondary school diploma.

■ Apprenticeship is formally seen as a part of education and the Labour Act defines apprentices as “students”. “Candidate apprentices” are only accepted if they have completed the compulsory eight years of elementary education (which starts at the age of six) and are in possession of the respective diploma.

Although the Labour Act prohibits employment under the age of 15, there is an extra category for apprentices aged 14 or below, called “candidate apprentice.” This constitutes a “grey zone,” as international conventions (which were adopted and ratified by Turkey) set the minimum

working age at 15 years³⁷. According to the Turkish Labour Act, children aged 14 and 15 can be employed in light work that does not harm their physical, intellectual and moral development, nor interfere with their education.

In addition, the Turkish Labour Act and related laws prohibit employing young people under the age of 16 in arduous or dangerous work. Young people under 18 are generally not allowed to engage in hazardous work. For all apprentices under the age of 18, parents have to co-sign the training contract.

Besides the formal system, there is an informal apprenticeship system according to which a considerable number of young people is trained informally as apprentices and journeymen. Some of it is traditional training of relatives in family businesses. These apprentices and journeymen work without a contract, do not attend school-based training and are not covered by social protection requirements.

Most apprenticeship occupations are male-dominated and only a few, namely women's hairdressing, skin care and beauty, women's clothing design, readymade clothing or machinery for design are female dominated.

Apprentices usually stay with their training company until the end of their training and it is estimated that at least 90% of the apprentices complete their training. After completing their training, apprentices are awarded the status of "journeymen" or journeymen. Most of them continue training for two more years with the same company to take the master examination and earn a master craftsperson title. Those who hold a master certificate may attend pedagogical training to achieve a master-trainer certificate, which entitles them to train apprentices in the workplace. Once a master, many leave their workplaces to set up their own businesses.

While social contributions for apprentices up to 19 years are paid by the government, such provisions don't exist for journeymen and journeymen. There is no obligation for employers to contract journeymen or women, nor apprentices of 19 years or older and they might not be willing to pay for their social insurance and contributions. This means that apprentices 19 years and above, and journeymen and journeymen might need to continue their training either unregistered and without social protection coverage.

Contract

Apprentices receive a formal employment contract and social protection (social security premiums, health and accident insurance) is financed by the government. Without a contract, an employer is legally not entitled to train an apprentice. Contracts must be registered with the relevant professional chambers and from there are passed on to the responsible Vocational Training Centre. A probation period of at least one month and maximum three months is consented before the

■ The social status of apprenticeship occupations is low. Apprentices generally come from lower socio-economic classes; frequently they are school dropouts or have low aspirations to pursue formal education. In addition, the working conditions of apprentices in workplaces have the reputation of being tough.

37 - "Legal Protection of Working Children in Turkey", Esin Conağ, Onur Dinç; The World of Child Labor: A Historical and Regional Survey, by Hugh D Hindman, 2014

written contract becomes binding. However, this only applies to apprentices under the age of 19. Graduates of Vocational and Technical High Schools and apprentices older than 19 years do not receive a contract.

Wage or allowance

Training companies pay wages to apprentices which cannot be below 30% of the minimum wage.

Training organisation and delivery

The Turkish apprenticeship system has a dual structure: apprentices spend four days a week in the companies and one in school-based training.

Company-based training

Companies must meet certain criteria to be entitled to employ and train apprentices. First, a master-trainer, who acts as a “mentor” is responsible for training and monitoring the development of the apprentice. Master-trainers need to complete a 40-hour programme, including subjects such as job security, educational psychology, occupational analysis, programme development and assessment. Second, workplaces need to have well-equipped, hygienic and secure training and working conditions.

School-based training

Training in schools comprises mainly theoretical, vocational and general subjects. Training providers can be:

- Vocational Training Centres run by the Ministry of National Education.
- Vocational Training and Technology Centres run by TESK in co-operation with the Foundation for the Promotion of Vocational Training and Small Industry (MEKSA)
- Training units within enterprises with ten or more apprentices, approved and monitored by the Ministry of National Education

Testing, qualification and certification

An examination commission supervises the written and practical exams at Vocational Training Centres. After successfully sitting for the “experienced apprenticeship exam”, apprentices receive a certificate which qualifies them as a journeyman or journeywoman. For the short-term apprenticeships carried out by TESK (occupations not recognised by the Ministry), the exams are organised and certificates awarded by TESK.

Governance and participation of Social Partners

The Directorate for Lifelong Learning within the Ministry of Labour (MoNE) is the official body responsible for apprenticeship. By law, social partners participate in the planning, development and evaluation of apprenticeship through the Vocational Education Council, which is the main actor in shaping and taking policy decisions. It is composed of the Ministry of National Education and other relevant Ministries, the Turkish Confederation of Tradesmen and

Craftsmen and other professional chambers, as well as the Trade Unions (through the Workers' Confederation with the highest number of members). The Council takes decisions on the planning, development and evaluation of school-based and company-based apprenticeship training. MoNE usually executes the Council's decisions and recommendations.

The Council is represented at local level through the Provincial Vocational Education Councils, which have similar responsibilities. The chairperson of the national Council is the undersecretary of MoNE and the chairpersons of the provincial councils are the provincial directors of national education.

Employers' participation in vocational training is strong in Turkey, in particular through the Turkish Confederation of Tradesmen and Craftsmen (TESK), which is an umbrella organisation representing more than 90% of all enterprises, including small and medium enterprises.

Principal actors are:

| | |
|--|--|
| Ministry of National Education, MoNE, particularly the Directorate for Lifelong Learning | <ul style="list-style-type: none"> → Is officially responsible for apprenticeship. → Take policy decisions following the recommendations of the Vocational Education Council. → Recognise official apprenticeship occupations. → Develop curricula and define competencies jointly with the Vocational Qualification Authority. |
| Training Centres: Government Vocational Training Centres (MEM) Vocational Training and Technology Centres (METEM) "Training Units" in enterprises | <ul style="list-style-type: none"> → Implement the school-based part of the apprentice training. → Carry out journeyman/woman training. → Carry out master-trainer training. → Implement examinations for all the aforementioned, supervised by a commission. |
| Vocational Qualification Authority | <ul style="list-style-type: none"> → Design the national qualifications framework. → Develop curricula, jointly with the Directorate for Lifelong Learning/Ministry of National Education. |
| Vocational Education Council | <ul style="list-style-type: none"> → Is composed of ministries, TESK, chambers, trade unions. → Is organised at national, as well as at provincial level. → Take decisions and state opinions to MoNE on all strategic matters concerning apprenticeship. → Act, at national and local level, as the decision-making body for planning, development and evaluation of apprenticeship. |
| Turkish Confederation of Tradesmen and Craftsmen, TESK | <ul style="list-style-type: none"> → Approve and assure the quality of company-based training. → Monitor training companies through local chambers. → Give out business permits to qualified master craftspersons. → Run the "Vocational Training and Technology Centres". → Co-finance training, certification and quality control. → Provide apprenticeship training and certification for occupations not recognised by the official legislation. |
| Enterprises Monitoring and Consulting Groups, IDDG (Units within local TESK Chambers) | <ul style="list-style-type: none"> → Monitor and ensure good working conditions for apprentices. |
| Turkish Union of Chambers and Stock Exchanges, TOBB | <ul style="list-style-type: none"> → Hand out business permits to their members in some occupations, without prior apprenticeship training. |
| Foundation for the Promotion of Vocational Training and Small Industry, MEKSA | <ul style="list-style-type: none"> → Support TESK in running the Vocational Training and Technology Centres. |

Funding

Apprenticeship training is co-financed between different contributors. The government funds the Government Vocational Training Centres and pays the social protection of apprentices. In addition, the state contributes indirectly through a series of financial incentives to the enterprises in terms of tax exemptions. Employers are exempted from revenue stamps, income tax, severance payment and similar financial requirements and they can claim apprentice wages as part of their tax refunds. In addition, apprentices are not included into employers' payroll. Employers' organisations, particularly TESK, make financial contributions to the implementation of training and the award of certificates, monitoring and improving training quality. Private companies contribute by paying apprentices' salaries.

Critical policy developments

Turkey has embarked on an EU-supported reform process aiming to improve quality, strengthen modular training and implement a national qualifications system. It is reported that the development of educational standards through the use of modular system has been a helpful development³⁸.

An important challenge is the formalisation of informal apprenticeships, particularly in fields that are difficult to inspect. Also, the inclusion of apprentices over 19 years and journeymen and journeywomen into social arrangements is a shortcoming that needs to be addressed.

38 - See full report available at: <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=2885&furtherNews=yes>

E. Workplace learning for intellectually disabled persons in Egypt

The Egyptian NGO EBTESSEMA, with support of ILO Cairo, offers workplace learning for intellectually disabled people, to train them for employment at tourist hotels by the Red Sea. The programme consists of 50% theory and 50% practice and starts with a three-month “incubator-training” in a simulated work environment. Trainees are given career guidance and trained in practical and social skills. This is followed by a one-month period of theoretical and technical training in alternation between company and school.

This is followed by three months of practical training at a hotel. EBTESSEMA staff accompany the trainees during the first weeks of workplace learning. Later, a trained member of the hotel staff acts as a work buddy to support them and help them integrate.

EBTESSEMA places high value on creating a positive attitude within the companies. It provides orientation session for managers, HR and other staff to ensure that employees communicate effectively and clearly with the trainees. EBTESSEMA staff remain available to offer follow-up support in case it is needed.

Trainees do not receive a formal certificate, but are generally hired by the hotels where they were trained. Through the initiative, employers realise that they can fulfil the 5% employment quota with motivated workers who contribute to the hotels' productivity.

One of the most important aspects is the strengthening of social skills. In Egypt, people with intellectual disabilities are often kept at home and have little social interaction other than with their families. The preparatory training helps to build up self-esteem and is important for becoming independent workers.

“I’ve been able to achieve my dream of working in a good place where I am appreciated and earning a good salary. I now have many goals to look forward to.” (Hassan, hotel worker trained by EBTESSEMA)

F. Opening up quality apprenticeship to persons with disabilities: the case of Ethiopia

In 2012, Ethiopia started including young people with all types of disabilities into their national apprenticeship system. Training occupations are available on the basis of the individual abilities of each apprentice. Restrictions apply only when a job requires a specific ability, e.g. when eyesight is indispensable for learning the occupation. The apprenticeships have a duration of between one and four years, applying an alternation of 70% company-based and 30% school-based training.

Each Regional Training Agency and training college has a designated focal point for disability inclusion and needs to reserve a specific share of their budget for accommodation purposes. Colleges usually identify the training companies, check accessibility and seek a good match between the company and the apprentice. Specialised support staff can be hired to assist companies and TVET schools in accommodating disabled apprentices. They advise on adaptations of workshops, facilities and curricula or accompany apprentices during the initial training phase at the company. Free scholarships are available for especially disadvantaged youth, e.g. from rural areas.

Upon successful completion, disabled and non-disabled graduates receive the same certificate. The scheme is still too recent to provide data on long-term employment outcomes, but first evidence shows that a number of apprentices are hired by their training-companies.³⁹ In addition, the government encourages disabled and non-disabled graduates to set up joint cooperatives, offering microfinance and business development services. Despite these efforts, it is reported that additional knowledge and strategies are needed to overcome negative attitudes and to improve accessibility.

39 - See full report available at: http://www.ilo.org/skills/pubs/WCMS_168819/lang-en/index.htm

G. Workplace-learning for people with physical disabilities, West Java, Indonesia

The Vocational Rehabilitation Centre for People with Physical Disabilities (BBRVBD) in Cibinong, West Java, offers training programmes which include workplace-learning in selected companies. Training is available in electronics, the metal industry, the garment sector, graphic design, informatics and the automotive sector.

Before the start of the one-year programmes, trainees have to pass a physical exam. The training begins with a school-based preparatory phase on technical skills, inter-personal skills, work ethics and self-confidence. After an induction to the workplace, trainees receive several months of practical training to become proficient in a specific job-role within the company.

Workplace learning makes up 30% of the programmes and some companies remunerate trainees with a minimum allowance. BBRVBD provides transport and supports the companies in adapting curricula and workstations. By the end of the training, graduates receive a certificate and have good employment prospects within their training companies. Others opt for starting their own businesses.

Around 85 - 100 trainees live at the Centre's dorm facilities and an additional 50-100 trainees come from nearby areas. The premises offer good accessibility and follow universal design principles. However, curricula could benefit from regular updating and collaboration with the companies, to better reflect the needs of the labour market.

BBRVBD is the one of two training centres of this kind in Indonesia. It caters exclusively to trainees with physical disabilities from all over the country and can hardly satisfy the high demand. Although it could serve as a role model for mainstreaming disability in regular TVET colleges, a major constraint are conflicting responsibilities: while the Centre is managed by the Ministry of Social Affairs, regular TVET centres fall under the responsibility of the Ministry of Manpower. This makes institutional collaboration difficult.

H. Brazil's "National Plan for Professional Apprenticeships"

In August 2016, during SENAI's International Conference on Skills Development in Curitiba and in meetings of ILO CINTERFOR officials with SENAI and SENAR in Brasília, an interest in reforming and strengthening the Brazilian apprenticeship system was expressed clearly. ILO CINTERFOR therefore offered its support in organising social dialogue on apprenticeships in Brazil in general and support in rewriting the new National Plan for Professional Apprenticeships in Brazil in particular.

In early 2017, the Federal Government of Brazil, represented by the Secretary of Public Employment Policies and the Director of the Department of Work and Employment Policies for Youth, requested technical assistance from the ILO Office in Brazil in order to set out the main guidelines for the new National Plan for Professional Apprenticeships.

Stakeholder participation and Social Dialogue

As in many countries in Latin America, stakeholder participation in quality apprenticeship in Brazil is very weak and needs to be strengthened substantially in order to develop a quality apprenticeship system in Brazil. With this objective in mind, in May 2017 the ILO Office in Brazil organised a workshop for the so-called National Professional Apprenticeships Forum, a group of experts with diverse experience in government, employers' and workers' organisations and civil society. The workshop had a double objective:

- a) Improve social dialogue within the Forum, a tripartite group of experts on the subject marked by a lack of consensus and friction between its members, and
- b) jointly discuss recommendations for the National Plan for Professional Apprenticeships.

The National Professional Apprenticeship Forum agreed on 10 key subjects to focus on in the next year and that they should increase topical discussions with government and social partners. The 10 areas are: assessing training practices (tripartite consultations) at national and state levels; carrying out sectoral labour market analysis to determine key occupations; building sectoral tripartite committee(s) or other coordination mechanisms; carrying out skills/ training needs analysis in order to select relevant skills; training vocational teachers and in-company trainers; shaping effective curricula; designing cost-sharing financing schemes; negotiating a basic/flexible legal framework; tracking skills, testing and certification; and measuring impact.

The key challenges ahead in Brazil

Despite a good start in the renewed tripartite, plus discussions on shaping quality apprenticeships for Brazil, a few challenges remain, such as:

- a) finding incentives for employers to participate on a large scale, and move away from the planned quota system that currently forces employers to participate;
- b) identifying innovative ways to delay the entry age of youth into quality apprenticeship programmes; for example through the design of large-scale pre-apprenticeship programmes;
- c) designing labour demand-driven quality apprenticeship programmes together with employers and workers and strong civil society participation, in order to create work options for youth in Brazil in both urban and rural areas and facilitating the transition from school to work.

Current Outlook

Brazil's growing interest in promoting quality apprenticeships sets the path towards generating other activities with the technical assistance of ILO CINTERFOR.

One of the requests made by Brazil's Ministry of Labour was for further technical assistance from the ILO to promote a national pact for quality apprenticeships that involves not only large corporations, but SMEs as well, in order to raise awareness of apprenticeship as an investment, and as a way to boost productivity and competitiveness, and not as part of the cost structure of companies.

In addition, the ILO Office in Brasilia is planning to bring out a Portuguese version of ILO CINTERFOR's toolkit on quality apprenticeships and to conduct a study, in partnership with Instituto Ethos in Sao Paulo, on the current status of apprenticeship in Brazil and potential pathways to go forward into the future.

I. The case of the “Jamaican Registered Apprenticeship”

The Jamaican Apprenticeship Board, a body of experts in vocational education, is currently looking at revising the 1955 Jamaica Apprenticeship Act. In close collaboration with the ILO, the Jamaican Apprenticeship Board recently took study tours, and held many internal as well as tripartite stakeholder meetings in Jamaica.

The focus of the Jamaican Apprenticeship Board has been on strengthening the current apprenticeship programme and structure in the following areas:

- a) using labour market needs as a driver in designing quality apprenticeship programmes;
- b) building apprenticeship programmes with synergistic relationship with trade unions, and private sector through the Chamber of Commerce;
- c) establishing recognition and status of apprenticeship programmes similar to a university degree;
- d) providing work based programmes embedded with underpinning theoretical college studies;
- e) creating apprenticeship programmes that are separated from the national public provider in vocational education in Jamaica (HEART Trust/NTA), to be guided by the Jamaican Apprenticeship Board with the autonomy to work with ministries such as the Ministry of Investment and Commerce, Ministry of Labour, Ministry of Science, Technology, Energy and Mining as well as private sector bodies such as Private Sector Organisation of Jamaica (PSOJ), Jamaica Employers' Federation (JEF), and Master Builders Association, among others, to run the programme; and memorandums of Understanding (MoU) signed with the 'partners' with clear guidelines and action items for operations.

Stakeholder participation

Social dialogue on apprenticeships in Jamaica is currently still marked by weak participation of the social partners, which is critical to developing a quality apprenticeship system. In its technical work with Jamaica the ILO has repeatedly pointed out to the Board that every effort needs to be made to overcome the challenges impeding the participation of social partners, especially the trade unions.

Social dialogue meeting

In a recent tripartite stakeholder consolidation meeting, commitments were made to focus more on social dialogue mechanisms for the sectoral design of quality apprenticeships, identifying roles and responsibilities among employers, government ministries, trade unions and training providers; providing a legal framework for apprenticeships, and inventing creative funding mechanisms for apprenticeship programmes.

Current outlook⁴⁰

Since the start of the programme in 2014, training has progressed fairly satisfactorily. Eight hundred and forty-one apprentices have enrolled in various programmes in many occupations across several sectors. From a gender perspective, the composition shows reasonable balance: 450 (53.5%) females and 391 (46.5%) males. The educational background of apprentices varies considerably, with the majority coming from vocational schools, and the average entry age is 23-25 years of age.

40 - For further information on quality apprenticeship in Jamaica, please see: http://www.jamaicaobserver.com/news/Apprenticeship-a-solution-to-youth-unemployment_89659

J. INFOTEP and dual training in the Dominican Republic

INFOTEP of the Dominican Republic began its Dual Training Programme in 1988. It is a programme that is executed with companies, associations or business associations, institutions or organisations interested in training young people with a comprehensive approach. The training is developed either by combining attendance at an INFOTEP Technological Centre or the system's network of Operational Centres with practical learning in a company; or there is also the possibility that the whole process of theoretical, technological and practical training can take place in companies known as "training companies".

Dual Training has been consolidated and expanded to all regions and sectors of the country, although it is mainly concentrated in the Central and North Regions. Since its inception, more than 8,000 technicians have graduated from this programme in 42 occupations. During the last ten years the average annual number of graduates is slightly above 300 apprentices. About 330 companies are active in the programme, and since its creation, more than 1000 have offered posts to INFOTEP apprentices.

Legal framework: The fundamental aspects of the legal framework applicable to the learning contract and the conditions of the apprentice in the company are given by three articles of the Labour Code (articles 255 to 257) of the Dominican Republic and by the Regulation on the Apprenticeship Contract approved by INFOTEP and published by the Ministry of Labour.

Article 257 of the Labour Code establishes that the apprenticeship of young workers may be carried out by means of a contract, the principles, methods and stipulations of which shall be regulated by INFOTEP and submitted to the subsequent approval of the Secretary of State for Labour. It is stipulated by law that in no case shall the compensation be less than the legally established minimum wage. The Regulation on the Apprenticeship Contract approved by INFOTEP regulates the contract, establishes the obligations of the parties (employers and apprentices) as well as their rights, guarantees the social security coverage of the apprentices, ensures apprentices' accreditation at the end of their training, determines the grounds for termination of the contract, etc.

Social dialogue: INFOTEP is a national vocational training institution that has a tripartite Board of Directors, so social dialogue is an important feature of its governance system. To this is added, specifically for the case of dual training, the existence of Sectoral Consultative Committees, where representatives of workers and employers provide inputs for the planning and management of dual training.

Programme Challenges and Opportunities for Improvement: Despite being a programme with positive feedback from the social partners, the government and the apprentices themselves, it faces significant challenges in terms of outreach and coverage. In order to increase the number of graduates and to improve the quality of training, some necessary actions identified during a recent workshop organised by ILO/Cinterfor with INFOTEP technicians include:

- a) have a better and closer link with the business sector, mainly to get more places for apprentices;
- b) achieve better participation of the production sector in order to develop and update tra-

- ining plans according to its requirements;
- c) carry out follow-up and satisfaction studies of participating companies on the performance of trainees;
- d) technically update teachers and facilitators and strengthen curriculum innovation;
- e) update laboratories and overcome bottlenecks in the management and distribution of the use of laboratories between apprenticeship courses and other training modalities;
- f) training and continuous updating of monitors and creation of incentives, benefits and recognition systems for them;
- g) training and updating of Evaluation Commissions;
- h) strengthening Technical Commissions;
- i) look for mechanisms to generate correspondence and gateways between the dual training programme and the education system;
- j) obtain government-specific funding for Dual Training;
- k) review the regulatory framework in order to recognise investment made in apprentices and to seek financial incentives for their participation in the Programme, assessing the particular situation of SMEs;
- l) achieve greater involvement of workers' organisations in the operation of the Programme.
- m) generate gender balance in dual training.

ILO/Cinterfor and the Decent Work Team and Country Office for Central America, Haiti, Panama and the Dominican Republic of the ILO in Costa Rica are working closely with INFOTEP to help strengthen their Dual Training Programme and significantly increase their coverage both sectorally and regionally.

K. Uruguay: promotion of youth employment by the public sector and an innovative learning experience in dual training in the private sector

The Government of Uruguay adopted a new youth employment law in September 2013. The aim of the law was to promote decent work for young people, linking employment, education and vocational training from the perspective of fundamental rights, with decent work principles and tripartism as its guiding principles.

The law contains rules that can be categorised in three main groups: promotion of employment, promotion of study and compatibility of education and work, and promotion of youth entrepreneurship. In terms of employment promotion in the private sector, different contractual work opportunities for youth were envisaged, such as work opportunities for youth with learning disabilities, work opportunities for people with educational backgrounds in vocational education as well as after university studies, and finally, paid internships in companies. The new youth employment law did not explicitly include quality apprenticeships.

However, in June 2018, government stakeholders from the world of work and of education, and business and labour organisations signed an “Inter-agency agreement for the implementation of training proposals that include companies and organisations as training venues”. The aim of this agreement is to further improve the quality and relevance of technical education and vocational training through the incorporation of theoretical and practical forms of teaching and learning, which alternate training in training venues that are different but complementary: an educational institution or training centre and a company or organisation.

(Text of the agreement: https://www.mtss.gub.uy/c/document_library/get_file?uuid=eb06283b-702b-4146-87ef-282f67b89920&groupId=11515)

These institutions have agreed to work on three lines of action:

- a) Implementing pilot experiences in 2018-2019 under the conditions arising from this agreement;
- b) Designing an apprenticeship teaching model using as an input the pilot experiences and support provided by international cooperation, through agreements with Germany and France and others that may arise;
- c) Preparing proposals for changes to current regulations with a view to improving the inclusion of companies and organisations as training venues for this apprenticeship teaching model.

Funding is expected to be shared between public funds, educational institutions and companies. The Labour Retraining Fund administered by the National Employment and Vocational Training Institute (INEFOP) will subsidise part of the remuneration for training practices, tutors' working hours and training for tutors.

In addition, there is an interesting non-profit initiative in Uruguay's private sector driven by a group of young entrepreneurs, which has begun to offer two-year dual apprenticeships to more than 60 apprentices in nearly 30 companies.

ÁNIMA is a new educational centre that opened its doors in February 2016 with an innovative educational approach for the second cycle of secondary education (Bachillerato Técnico). They offer two orientations of a technological baccalaureate: Administration and Information Technology.

ÁNIMA has as its starting point its firm belief in the potential of young people and in the importance of vocational education and training and quality work as a non-transferable field for learning. They seek to contribute to education in the country through programmes in vocational and technical training aimed at young people living in situations of social vulnerability, and for this they have an innovative educational strategy that takes up several components of the Dual Training System, for example:

- carrying out skills needs analyses in sectors with growth and job potential;
- responding to the existing skills gap in the private sector through training needs analyses;
- taking into account the needs and interests of young people in new technologies;
- participating companies pay salaries to the students in the two-year programmes;
- constructing a link between learning in schools and working in companies (80% of the apprenticeship programme takes place at the ANIMA school, 20% takes place in companies);
- building a link between learning in schools and working in companies;
- responding to the existing skills gap in companies.

The exit profile of young people was built through demand studies of companies in the ICT sector that show the skills that young people would have to develop in order to achieve good job placements. These include “soft skills”, such as responsibility, teamwork, punctuality, commitment, communication, language skills and frustration management. On the other hand, the more “technical” competencies are mobile and web development, technical support and other IT-related subjects. The exit profile of the administration area is an administrative assistant who can enter the labour market in any company. More on ANIMA’s website, at:

<http://anima.edu.uy/>

Glossary

| No. | Term | Definition |
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| 1 | Advocacy | Dissemination of information intended to influence individual behaviour or opinion, corporate conduct or public policy and law. |
| 2 | Apprentice | Any person undergoing initial training for a recognised apprenticeable occupation during an established period assured by a contract. The term is generally applied to young people although present-day practice tends to take no account of strict age limits. |
| 3 | Apprenticeship | Apprenticeship refers to any system by which an employer undertakes by contract to employ a young person and to train him (or her) or have him (or her) trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service. (It encompasses) systematic long-term training for a recognised occupation taking place substantially within an undertaking or under an independent craftsman should be governed by a written contract of apprenticeship and be subject to established standards. Informal apprenticeship Quality apprenticeship |
| 4 | Apprentice contract | Verbal or written agreement binding a would-be apprentice and his prospective employer. In the context of this toolkit, we usually refer to formal, written apprentice contracts. Verbal contracts are used for informal apprenticeships. |
| 5 | Assessment | Examinations (sometimes also called "testing") |
| 6 | Career Guidance | Guidance and counselling: A range of activities designed to help individuals take educational, vocational or personal decisions and carry them out before and after they enter the labour market. (CEDEFOP) |
| 7 | Chambers | In the context of this toolkit, "chambers" refer to professional associations for companies in specific sectors, industries or occupations, representing their interests, e.g.: Chambers of commerce, chambers of industry, craft chambers, chambers of artisans, etc. |
| 8 | Company-based training | In the context of this toolkit, "company-based training" refers to the part of the apprenticeship process that takes place within the company; on-the-job training |
| 9 | Competence / Competency | The ability, encompassing knowledge, skills and attitudes of an individual to perform adequately in a job. |
| 10 | Competence/Competency-based training (CBT) | A system by which the student is trained on the basis of demonstrated ability rather than on that of elapsed time. |
| 11 | Curriculum | The content of an organised programme of study in an educational or training institution indicating the subjects taught, the time allotted to each, and their sequence. |
| 12 | Employers' Organisations | Organisation of employers (regional, industry-based, national), established for representing and promoting the interests of its members. |
| 13 | Employability | Relates to portable competencies and qualifications that enhance an individual's capacity to make use of the education and training opportunities available in order to secure and retain decent work. |
| 14 | Equal opportunity | Equal opportunity is a stipulation that all people should be treated similarly, unhampered by artificial barriers or prejudices or preferences, except when particular distinctions can be explicitly justified. |
| 15 | Formal Economy | antonym: informal economy |
| 16 | Formal Training | A hierarchically structured, chronologically graded education and training system, running from primary school through the university and including, in addition to general academic studies, a variety of specialised programmes and institutions for full-time technical and professional training including formal training at the workplace (context). It is usually conducted within a structured programme with precise learning objectives (process) and leads to certification recognised by public authorities. |

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| 17 | Gender | The social differences, as opposed to the biological ones, between women and men that have been learned, are changeable over time and have wide variations both within and between cultures. |
| 18 | Gender Equality | Means that boys and girls would experience the same advantages and disadvantages in educational access, treatment and outcomes. In so far as it goes beyond questions of numerical balance, equality is more difficult to define and measure than parity. The achievement of full gender equality in education would imply: equality of opportunities; equality in the learning process; equality of outcomes; and equality of external results. (UNESCO-UNEVOC TVETipedia) |
| 19 | Grants | A sum of money given by a government or other organisation for a particular purpose. Apprentices can receive grants in form of tuition, travel, tools, or other expenses. |
| 20 | Guidance and counselling | A range of activities designed to help individuals take educational, vocational or personal decisions and carry them out before and after they enter the labour market. (CEDEFOP) |
| 21 | Informal apprenticeship | Informal apprenticeship refers to the system by which a young apprentice acquires the skills for a trade or craft in a micro or small enterprise learning and working side by side with an experienced practitioner. Apprentice and master craftsman conclude a training agreement that is embedded in local norms and traditions of a society. |
| 22 | Informal Economy | The informal economy forms part of the market economy in that it produces (legal) goods and services for sale or other form of remuneration. It covers informal employment both in informal enterprises (small unregistered or unincorporated enterprises), and outside informal enterprises. Informal entrepreneurs and workers share one important characteristic: they are not recognised or protected under existing legal and regulatory frameworks. The informal economy excludes the criminal economy and the reproductive or care economy. |
| 23 | Instructor | In the context of this toolkit, the “instructor” is the person who is directly interacting with the apprentice, imparting the practical training and inducing him or her into the work during the company-based part of the training. Depending on the company an apprentice can work with several instructors at different training stations within a company. In a small company, the instructor can, at the same time, be the supervisor. |
| 24 | Journeyman / Journeywoman | A person who has acquired the full qualifications needed to perform a recognised trade or other occupation. |
| 25 | Levies | An amount of money that must be paid and that is collected by a government or other authority. An example of a levy is income taxes collected tax and revenue authorities. The government may propose to apply the apprenticeship levy to large employers across all industries in a country. |
| 26 | Lifelong learning (LLL) | Encompasses all learning activities undertaken throughout life for the development of competencies and qualifications. |
| 27 | Loans | A loan is the act of giving money, property or other material goods to another party in exchange for future repayment of the principal amount along with interest or other finance charges. A loan may be for a specific, one-time amount or can be available as open-ended credit up to a specified ceiling amount. |
| 28 | Master-craftsperson/craftsman/craftswoman | Skilled worker who has become very highly competent in his trade or occupation, having gone beyond the ordinary level of skills and knowledge required of a craftsman. |
| 29 | National Qualifications Framework (NQF) | An instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes, i.e. clear statements of what the learner must know or be able to do whether learned in a classroom, on-the-job, or less formally. The Qualifications Framework indicates the comparability of different qualifications and how one can progress from one level to another, within and across occupations or industrial sectors (and even across vocational and academic fields if the NQF is designed to include both vocational and academic qualifications in a single framework). |
| 30 | Occupation | An occupation is defined as a set of jobs whose main tasks and duties are characterised by a high degree of similarity. A person may be associated with an occupation through the main job currently held, a second job or a job previously held. |

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| 31 | Occupational profiles | An Occupational Skills Profile summarises essential characteristics required for a given job: the level of education and training required (and hence the complexity of the occupation); the field of education and training required; and other requirements in terms of knowledge, skills, competence, occupational interests, and work values. (CEDEFOP) |
| 32 | Off-the-job-training | In the context of this toolkit, the term «school-based training» is generally preferred. In some apprenticeship schemes all training (practical and theoretical) takes place at the company and in these cases “off-the-job training” is used. |
| 33 | On-the-job training | In the context of this toolkit, the term «company-based training» is generally preferred. In some apprenticeship schemes all training (work-based and classroom-based) takes place at the company and in these cases “on-the-job training” is used to describe the training received. |
| 34 | Portable skills | A skill or competency that can be transferred from one work context to another. |
| 35 | Provider | training school TVET school Training provider |
| 36 | Public-Private Partnerships | Collaborative arrangements among government, private enterprises and educational institutions for the provision of a public service or the promotion of research and development. |
| 37 | Quality apprenticeship | Quality apprenticeship is a unique form of vocational education, combining on-the-job learning and school-based training, for specifically defined competencies and work processes. It is regulated by law and based on written employment contract with a compensatory payment, and standard social protection scheme. A formal assessment and a recognised certification come at the end of a clearly identified duration. |
| 38 | Recognition of Prior Learning (RPL) | An assessment process that assesses the individual's non-formal and informal learning to determine the extent to which that individual has achieved the required learning or competency outcomes; May also be referred to as: Accreditation of prior learning; Validation of informal/non formal learning. (UNESCO-UNEVOC TVETipedia) |
| 39 | School-based learning | In the context of this toolkit, school based learning refers to the part of the apprenticeship training that takes place within a training / TVET school. This training is both, theoretical (academic classroom setting) and practical (hands-on-induction at a laboratory or workshop at the training school). |
| 40 | Skills Development | Covers basic education, initial training and lifelong learning. It is the task of basic education to ensure to each individual the full development of the human personality and citizenship; and to lay the foundation for employability. Initial training develops further his or her employability by providing general core work skills, and the underpinning knowledge, and industry-based and professional competencies which are portable and facilitate the transition into the world of work. Lifelong learning ensures that the individual's skills and competencies are maintained and improved as work, technology and skill requirements change; ensures the personal and career development of workers; results in increases in aggregate productivity and income; and improves social equity. |
| 41 | Social Dialogue | Social Dialogue includes all types of negotiation, consultation or exchange of information between or among representatives of governments, employers and workers on issues of common interest relating to economic and social policy. |
| 42 | Social Partners | «Workers' Organisations and «Employers' Organisations |
| 43 | Social Protection | General term covering all guarantees against reduction or loss of income in cases of illness, old age, unemployment or other hardship, and including family and ethnic solidarity, collective or individual savings, private insurance, social insurance, mutual benefit societies, social security, etc. |
| 44 | Standards | Also: Skills Standards, Occupational Standards Explicit statements about expected capabilities to be met as an expression of accomplishment. Standards of performance that people are expected to achieve in their work, and the knowledge and skills they need to perform effectively. (UNESCO-UNEVOC TVETipedia) |
| 45 | STEM-skills | Skills in Science, Technology, Engineering, Mathematics (Wikipedia) |

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| 46 | Teacher | In the context of this toolkit, we refer to the "teacher" as the person imparting the theoretical training at the TVET school. Their work is complemented by the è trainer, who teaches practical training at the school workshop or laboratory. |
| 47 | Testing | Exam or examination, often also called assessment. In some countries, apprentices who want to graduate as journeymen and journeymen have to produce a "test piece" as part of the overall exams, to prove their proficiency in the occupation. |
| 48 | Trainer | In the context of this toolkit, we refer to the "trainer" as the person imparting the practical training at the TVET school's workshop or laboratory. The trainer's work is complemented by the è teacher, who imparts theoretical and academic classroom training at the TVET school. |
| 49 | Training contract | apprentice-contract; in the context of this toolkit, training contract is used synonymous with apprentice-contract |
| 50 | Training Provider | training school |
| 51 | Training School/ TVET school | Any establishment providing Technical and Vocational Education and Training TVET, including colleges, institutes, centres and schools. |
| 52 | TVET / Technical vocational education and training | Activities aiming at providing the skills, knowledge and attitudes required for employment in a particular occupation, or group of related occupations, in any field of economic activity. Vocational training VET, Vocational education and training |
| 53 | Social protection | Social protection consists of policies and programs designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capacity to manage economic and social risks, such as unemployment, exclusion, sickness, disability and old age. |
| 54 | Social protection floor | Social protection floors are nationally defined sets of basic social security guarantees that should ensure, as a minimum that, over the life cycle, all in need have access to essential health care and to basic income security which together secure effective access to goods and services defined as necessary at the national level. |
| 55 | Social security | Social security is the protection that a society provides to individuals and households to ensure access to health care and to guarantee income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner. |
| 56 | Subsidies | Money that is paid usually by a government to keep the price of a product or service low or to help a business or organisation to continue to function. |
| 57 | Supervisor | In the context of this toolkit, the supervisor is the person in the company who is responsible for the adequate implementation of the training plan for the apprentice. Depending on the size of the enterprise, this person can be a master-craftsperson or the company-owner (e.g. in a small or medium sized enterprise) or a co-worker who has undergone specific training in supervising apprentices and their work progress (often in large companies). |
| 58 | Training fund | A 'training fund' is a stock or flow of financing outside normal government budgetary channels dedicated to developing productive work skills. The overall purpose of training funds is to raise the productivity, competitiveness and incomes of enterprises and individuals by providing them with needed skills. Most training funds are financed by levies on enterprises, but may also be based on public subsidies or donor financing. |
| 59 | Upgrading informal apprenticeship | Upgrading informal apprenticeship means the gradual improvement of informal apprenticeship systems by making it more dynamic and responsible to current and future socio-economic changes. A step-by-step approach combining different types of interventions may be required to improve the quality of training and of skills acquired, working conditions, skills recognition beyond the local community, financial arrangements, and young women's access to non-traditional occupations. |
| 60 | Vocational training | Activities aiming at providing the skills, knowledge and attitudes required for employment in a particular occupation, or group of related occupations, in any field of economic activity. TVET/ Technical vocational education and training VET / Vocational education and training |
| 61 | VET / Vocational education and training | Vocational training TVET/ Technical vocational education and training |

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| 62 | Workers' Organisations | Trade Union. Organisations of employees, usually associated beyond the confines of one enterprise, established for protecting or improving, through collective action, the economic and social status of its members. |
| 63 | Work(place) based learning / on-the-job training | Acquisition of knowledge and skills through carrying out – and reflecting on – tasks in a vocational context, either at the workplace (such as alternance training) or in a VET institution. (CEDEFOP) |

Sources:

If not indicated otherwise, all definitions in this glossary are taken from the ILO Thesaurus: <http://www.ilo.org/thesaurus/defaulten.asp>, or correspond to official definitions as specified in ILO Conventions, recommendations or official publications. Some terms were defined by the team who developed this toolkit for the purpose of clearer communication of concepts across this toolkit.

Other sources quoted here are:

- Unesco-Unevoc TVETipedia: <http://www.unevoc.unesco.org/go.php?q=TVETipedia+-Glossary+A-Z&filt=all&id=234>,
- Cedefop: <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4106>

Wikipedia: www.wikipedia.org

Bibliography

- Altonji, J. G.; Kahn, L. B.; Speer, J. D. 2014. Cashier or consultant? Entry labor market conditions, field of study, and career success, NBER Working Paper 20531 (Cambridge, MA, National Bureau of Economic Research).
- Aring, M. 2014. Innovations in quality apprenticeships for high-skilled manufacturing jobs in the United States at BMW, Siemens, Volkswagen (Geneva, ILO). Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_244374.pdf [accessed 24 August 2016]
- The Australian government. 2015. National Code of Good Practice for Australian Apprenticeships. Available at: https://www.australianapprenticeships.gov.au/sites/ausapps/files/publication-documents/national_code_of_good_practice_for_australian_apprenticeship_0.pdf
- Axmann, M.; A. Rhoades; Nordstru, L. 2015. Vocational teachers and trainers in a changing world: the imperative of high-quality teacher training systems. (Geneva, ILO). Available at: http://www.ilo.org/employment/Whatwedo/Publications/working-papers/WCMS_383787/lang--en/index.htm [accessed 26 August 2016].
- Axmann, M. 2004. Facilitating labour market entry for youth through enterprise-based schemes in vocational education and training and skills development. (Geneva, ILO). Available at: http://www.ilo.org/empent/Publications/WCMS_117683/lang--en/index.htm [accessed 26 August 2016].
- BBC. Skills for Birmingham. Available at: https://www.youtube.com/watch?v=IXcfa_A-8Mk&feature=youtu.be [accessed 29 August 2016]
- Brewer, L. 2004. InFocus Programme on Skills, Knowledge and Employability: Youth at risk - The role of skills development in facilitating the transition to work, Skills Working Paper No. 19 (Geneva, ILO). Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_103428.pdf [accessed 29 August 2016]
- Bundesamt für Sozialversicherungen (BSV). 2016. Ein praktischer führer für KMU. (Bern, Bundesamt für Sozialversicherungen). Available at: http://www.bsv.admin.ch/kmu/index.html?lang=de&download=NHZLpZeg7t,Inp6l0NTU042l2Z6ln1acy4Zn4Z2qZpnO2Yuq2Z6gpJCEdYB5gmym162epYbg2c_JjKbNoKSn6A--.
- Catholic Action for Street Children (CAS). 2002. The Ghanaian Street (Ghana). Available at: http://www.crin.org/docs/cas_ghana_street.pdf [accessed 24 August 2016]
- CEDEFOP. 2014. Focus on Apprenticeships, EU Skills Panorama 2014, Analytical Highlight, http://skillspanorama.cedefop.europa.eu/sites/default/files/EUSP_AH_Apprenticeships.pdf [accessed 24 August 2016]
- 2012a. France: VET in Europe; country report 2012. Available at: http://www.cedefop.europa.eu/files/2012_cr_fr.pdf [accessed 24 August 2016]

- 2012b. 2012. Germany: VET in Europe: country report 2012. Available at: http://www.cedefop.europa.eu/files/2012_cr_de.pdf [accessed 24 August 2016]
- Canadian Apprentice Forum. 2016. Apprenticeship Systems (Ottawa). Available at: <http://caf-fca.org/apprenticeship-in-canada/apprenticeship-systems/>
- Centre de formation universitaire en apprentissage (CFA-Eve). 2006. Guide de l'Apprentissage, CFA Evry Val d'Essonne. Available at: <http://www.cfa-eve.fr/static/47c7941dc6b9f1f0e6b26d570edc2a69.pdf> [accessed 24 August 2016]
- Clark, D. How Transferable is German Apprenticeship Training? (Bonn: IZA). Available at: <http://www.iza.org/en/papers/Clark141100.pdf> [accessed 24 August 2016]
- Commonwealth of Australia. 2011. A shared responsibility: Apprenticeships for the 21st Century, Final Report of the Expert Panel. Available at: http://www.australianapprenticeships.gov.au/sites/prod.australianapprenticeships.gov.au/files/publication-documents/Apprenticeshipsforthe21stCenturyExpertPanel_0.pdf [accessed 24 August 2016]
- Critical skills for tomorrow. 2008. Our future. It's in our hands: A Director's guide. Institute of Directors. Available at: <http://www.iod.com/guidance/publications/directors-guides/critical-skills-for-tomorrow> http://www.iod.com/~media/Documents/PDFs/IAS/Director%20Guides%20Series/DG_Critical_skills_for_tomorrow.pdf [accessed 24 August 2016]
- Deitmer, L.; Hauschildt, U.; Rauner, F.; Zelloth, H. 2013. The Architecture of Innovative Apprenticeship (Dordrecht, Heidelberg, New York and London, Springer)
- Deutsche Rentenversicherung (DRV). 2016. Berufsstarter und ihre Sozialversicherung (Berlin: Deutsche Rentenversicherung). Available at: http://www.deutsche-rentenversicherung.de/Allgemein/de/Inhalt/5_Services/03_broschueren_und_mehr/01_broschueren/01_national/berufsstarter_und_ihre_sozialversicherung.pdf?__blob=publicationFile&v=23 [accessed 29 August 2016]
- Euler, D. 2013. Germany's dual vocational training system: a model for other countries? A study commissioned by the Bertelsmann Stiftung, (Gutersloh, Germany). Available at: http://www.eunec.eu/sites/www.eunec.eu/files/attachment/files/2013_study_german_vet_system.pdf [accessed 24 August 2016]
- European Centre for the Development of Vocational Training (Cedefop). 2014. Developing Apprenticeships, Briefing Note. Available at: http://www.cedefop.europa.eu/files/9088_en.pdf [accessed 24 August 2016]
- European Commission/EACEA/Eurydice. 2016. Entrepreneurship Education at School in Europe. Eurydice Report. Luxembourg: Publications Office of the European Union. Available at: <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/images/4/45/195EN.pdf>
- European Commission. 2013. The effectiveness and costs-benefits of apprenticeships: Results of the quantitative analysis. Available at: <http://ec.europa.eu/social/BlobServlet?docId=11352&langId=en> [accessed 24 August 2016]

- 2013. Apprenticeship and traineeship schemes in EU27: Key success factors (Brussels).
- 2012. Apprenticeship supply in the Member States of the European Union. Available at: <http://ec.europa.eu/social/BlobServlet?docId=7717&langId=en>
- European Training Foundation (ETF). 2013. Work-based learning: a hand-book for policy makers and social partners in ETF partner countries, (Turin, European Training Foundation Communication Department). Available at: http://ec.europa.eu/education/library/publications/etf-wbl-handbook_en.pdf [accessed 24 August 2016]
- Federal Ministry of Education and Research. 2003. Germany's vocational education at a glance. Available online at: http://www.vvob.be/southafrica/sites/default/files/germanys_vocational_education_at_a_glance.pdf
- Fersterer, F.; Pischke, J.; Winter-Ebmer, R. 2004. Returns to Apprenticeship Training in Austria: Evidence from Failed Firms. (Bonn: IZA). Available at: <http://www.iza.org/essle/essle2005/Winter-Ebmer.pdf> [accessed 24 August 2016]
- Gambin, L.; Hasluck, C.; Hogarth, T. 2010. Recouping the costs of apprenticeship training: employer case study evidence from England. *Empirical Research in Vocational Education and Training*, Vol. 2(2), pp. 127–146. Available at: http://ervet.ch/pdf/PDF_V2_Issue2/Gambin_Hasluck_Hogarth.pdf [accessed 24 August 2016]
- Gardiner, D. 2009. Good practice from West Africa: Building the case for business collaboration on youth employment. (Dakar-Sénégal, The Youth Employment Network for West Africa). Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_473334.pdf [accessed 24 August 2016]
- Government of Australia. 2015. National Code of Good Practice for Australian Apprenticeships (Canberra). Available at: https://www.australianapprenticeships.gov.au/sites/ausapps/files/publication-documents/national_code_of_good_practice_for_australian_apprenticeship_0.pdf
- G20 Task Force on Employment. 2012. Key elements of quality apprenticeships ILO. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_218209.pdf [accessed 24 August 2016]
- The International Network on Innovative Apprenticeship Commission (INAP). 2012. An Architecture for Modern Apprenticeships: Standards for Structure, Organisation and Governance, Memorandum. The Commission after the 4th International Conference of INAP, Beijing, China, May, 2011). Available at: http://bildungsklick.de/datei-archiv/51719/memorandum_inap-commission-architecture-apprenticeship_may-2012.pdf [accessed 24 August 2016]
- ILO. forthcoming. Extending social security to workers in the informal economy and facilitating transition to the formal economy: A practical guide [working title].
- 2016. World Employment Social Outlook, Trends (Geneva). Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_443480.pdf [accessed 24 August 2016]

- 2015. Global Employment Trends Youth. (Geneva). Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_412015.pdf [accessed 24 August 2016]
- 2014a. Quality apprenticeships “gold standard” to get youth into decent jobs, 16 Sep. Available at: http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_307451/lang--en/index.htm
- 2014b. Upgrading Apprenticeships: route to Decent Work in Jordan Available at: https://www.youtube.com/watch?v=Y6_aCVdUPEw [accessed 24 August 2016]
- 2014c. World Social Protection Report 2014/15: Building Economic Recovery, Inclusive Development and Social Justice (Geneva). Available at: <http://www.social-protection.org/gimi/gess/ShowTheme.action?th.themeld=3985>
- 2014d. Innovative Apprenticeship and Internship Models in the IT Sector in the United States. Branka Minic. (Geneva). Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_310262.pdf [accessed 24 August 2016]
- 2014e. 5 reasons you should consider an apprenticeship. Work in progress [web log]. Available at: <http://iloblog.org/2014/09/16/5-reasons-to-consider-an-apprenticeship/#more-1031>
- 2013. Feasibility study for a global business network on apprenticeship (Geneva), Available at: http://www.ilo.org/skills/pubs/WCMS_222180/lang--en/index.htm
- 2013. The Informal Economy and Decent Work: supporting transitions to formality: a resource guide. (Geneva).
- 2012a. Social Security for All: Building social protection floors and comprehensive social security systems. The strategy of the International Labour Organisation. (Geneva). Available at: <http://www.socialsecurityextension.org/gimi/gess/ResFileDownload.do?ressourceId=34188>
- 2012b. The Youth Employment Crisis: Time for Action. (Geneva)
- 2012c. Upgrading informal apprenticeship: a resource guide for Africa (Geneva). Available at: http://www.ilo.org/wcmsp5/groups/public/---africa/---ro-addis_ababa/documents/publication/wcms_171393.pdf [accessed 24 August 2016]
- 2012d. Informal apprenticeship in the Micro and Small Enterprises (MSEs) - Alternative approach in Egypt (Geneva). Available at: http://ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_213126.pdf [accessed 24 August 2016]
- 2012e. Overview of Apprenticeship Systems and Issues: ILO contribution to the G20 Task Force on Employment (Geneva). Available at: http://www.ilo.org/global/about-the-ilo/how-the-ilo-works/multilateral-system/g20/WCMS_190188/lang--en/index.htm

- 2012f. The youth employment crisis: A call for action, Resolution and conclusions, International Labour Conference, 101st Session, Geneva (Geneva). Available at: http://www.ilo.org/ilc/ILCSessions/101stSession/texts-adopted/WCMS_185950/lang--en/index.htm
- 2012i. Upgrading informal apprenticeship: A resource guide for Africa (Geneva). Available at: http://www.ilo.org/skills/pubs/WCMS_171393/lang--en/index.htm
- 2011a. Upgrading informal apprenticeship systems: Skills for employment policy brief (Geneva). Available at: http://apyouthnet.ilo.org/resources/skills-for-employment-policy-brief-upgrading-informal-apprenticeship-systems/at_download/file1 [accessed 24 August 2016]
- 2011b. Upgrading Informal Apprenticeship Systems. Skills for Employment Policy Brief (Geneva), Available at: http://www.ilo.org/skills/pubs/WCMS_167162/lang--en/index.htm
- 2011c. Building business and entrepreneurship awareness. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_168356.pdf
- 2010. A skilled workforce for strong, sustainable and balanced growth: A G20 training strategy (Geneva). Available at: http://www.ilo.org/skills/pubs/WCMS_151966/lang--en/index.htm
- 2008. Conclusions on skills for improved productivity, employment growth and development, International Labour Conference, 97th Session, Geneva (Geneva). Available at: http://www.ilo.org/skills/pubs/WCMS_103457/lang--en/index.htm
- 2004. Human Resources Development Recommendation, 2004 (No. 195) (Geneva). Available at: http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:R195
- ILO; ILO Country Office for Bangladesh. 2013. Learning and earning: overcoming low education through skill development. (Dhaka: ILO). Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-dhaka/documents/publication/wcms_234533.pdf [accessed 24 August 2016]
- ILO; World Bank. 2013a. Possible futures for the Indian apprenticeship system: options paper for India/International Labour Office (New Delhi). Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_234727.pdf [accessed 29 August 2016]
- 2013b. Towards a model apprenticeship framework: A comparative analysis of national apprenticeship systems. (New Delhi). Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_234728.pdf [accessed 24 August 2016]
- International Trade Union Confederation, Quality Apprenticeships. 2015. What are trade unions doing? 2nd G20 conference on 'promoting quality apprenticeships. (Antalya, Turkey, Available at: http://www.ituc-csi.org/IMG/pdf/I20_note_for_the_ewg_apprenticeship_2015_conference.pdf [accessed 26 August 2016]

- International Training Centre of ILO. 2010. Study on the reintegration of children formerly associated with armed forces and groups through informal apprenticeship Available at: http://ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_158772.pdf [accessed 24 August 2016]
- Jäger, M. 2016. Dual Vocational Education and Training as an Option in Development Cooperation. (Zürich, DC Dvet). Available at: http://www.dcdualvet.com/wp-content/uploads/2016/06/DC-dVET-Dual-VET-as-an-Option-in-Development-Cooperation_Survey-Matthias-Jaeger.pdf [accessed 24 August 2016]
- Jeppesen, E.; Siboni, A. Forthcoming. The Danish apprenticeship system: Lessons for possible adaptations in other countries. (Geneva, ILO).
- L'apprenti. Le financement de l'apprentissage. Available at: <http://www.lapprenti.com/html/cfa/financement.asp> [accessed 24 August 2016]
- Lerman R. "Do firms benefit from apprenticeship investment?" IZA World of Labour 2014:55
- Lerman, R. 2014. Do firms benefit from apprenticeship investments? (Washington DC, Bonn, American University, Urban Institute and IZA). Available at: <http://wol.iza.org/articles/do-firms-benefit-from-apprenticeship-investments.pdf> [accessed 24 August 2016]
- 2013. Skill development in middle level occupations: The role of apprenticeship training, IZA Policy Paper No. 61, (Bonn, IZA). Available at: <http://ftp.iza.org/pp61.pdf> [accessed 26 August 2016]
- Lerman, R.; Eyster, L.; Chambers, K. 2009. The Benefits and Challenges of Registered Apprenticeship: The Sponsors' Perspective. (Washington, DC: Urban Institute). Available at: <http://www.urban.org/research/publication/benefits-and-challenges-registered-apprenticeship-sponsors-perspective> [accessed 29 August 2016]
- Mathematica Policy Research. 2012. An effectiveness assessment and cost-benefit analysis of registered apprenticeship in 10 states. Available at: https://wdr.doleta.gov/research/FullText_Documents/ETAOP_2012_10.pdf
- Mohrenweiser, J.; Zwickb, T. (2009). Why do firms train apprentices? The net cost puzzle reconsidered. *Labour Economics*, Vol. 16, No. 6, pp. 631–637 Available at: <http://www.sciencedirect.com/science/article/pii/S0927537109000931> [accessed 24 August 2016]
- Monk, C.; Justin Sandefur, J.; Teal, F. (2008). Does Doing an Apprenticeship Pay Off? Evidence from Ghana, Centre for the Study of African Economies, University of Oxford. Available at: <http://www.csae.ox.ac.uk/workingpapers/pdfs/2008-08text.pdf> [accessed 29 August 2016]
- Muehleemann, S; Wolter, S. 2013. Return on investment of apprenticeship systems for enterprises: Evidence from cost-benefit analyses, EENEE Analytical Report No. 16, (Brussel: European Commission)
- Mühlemann, S.; Schweri, J.; Winkelmann, R.; Wolter, S. C. (2005). A Structural Model of Demand for Apprentices. (Bonn: IZA). Available at: http://www.iza.org/conference_files/SUMS2005/1475.pdf [accessed 24 August 2016]

- Wolter, S. 2013. Return on investment of apprenticeship systems for enterprises: Evidence from cost-benefit analyses. EENEE Analytical Report No. 16
- Pfeifer, H.; Walden, G.; Wenzelmann, F.; Wolter, S. C. 2010. The financing of apprenticeship training in the light of labor market regulations. *Labour Economics*, Vol. 17, pp. 799–809, Available at <http://www.sciencedirect.com/science/article/pii/S0927537110000382> [accessed 24 August 2016]
- National Audit Office. 2012. Adult apprenticeships: Estimating economic benefits from apprenticeships –Technical paper
- New York Times. 2013. “Where Factory Apprenticeship Is Latest Model From Germany,” Schwartz, N. D. 30 Nov. Available at: <http://www.nytimes.com/2013/12/01/business/where-factory-apprenticeship-is-latest-model-from-germany.html> [accessed 24 August 2016]
- OECD. 2012. Quality apprenticeships for the G20 task force on employment, OECD note on 26 Sep. Available at: <http://www.oecd.org/els/emp/OECD%20Apprenticeship%20Note%2026%20Sept.pdf> [accessed 24 August 2016]
- 2009. Evaluation of Programmes Concerning Education for Entrepreneurship. Available at: <https://www.oecd.org/cfe/smes/42890085.pdf>
- Österreichische Sozialversicherung (SV). 2016. Lehrlinge [Apprentices] (Vienna). Available at: <https://www.sozialversicherung.at/portal27/esvportal/content/contentWindow?contentid=10007.683973&action=2&viewmode=content> [Accessed: 15 July 2016].
- Office for Standards in Education, Children’s Services and Skills (Ofsted), 2014
- Developing high-level skills in upholstery and soft furnishings – Wendy Shorter Interiors: A good practice case study the Commission on Adult Vocational Teaching and Learning (CAVTL). Available at: <https://www.gov.uk/government/publications/developing-high-level-skills-in-upholstery-and-soft-furnishings>
- Picchio, M.; Staffolani, S. (2013). Does Apprenticeship Improve Job Opportunities? A Regression Discontinuity Approach. (Bonn: IZA). Available at: http://www.iza.org/en/webcontent/publications/papers/viewAbstract?dp_id=7719 [accessed 29 August 2016]
- Rauner, F.; Heinemann, L.; Piening, D.; Bishoff, R. 2010. “Costs, benefits, and quality of apprenticeships: A regional case study” In: Rauner, F., Smith, E. (eds) *Rediscovering Apprenticeship: Research Findings from the International Network on Innovative Apprenticeship* (London: Springer Science + Business Media) pp 171-181. Available at: http://link.springer.com/chapter/10.1007%2F978-90-481-3116-7_15 [accessed 24 August 2016]
- Risler, M.; Zhiquan Z. 2013. Apprenticeship and Small and Medium-sized Enterprises, the China Case, Report of a desk study and a field research mission conducted in May-June 2013: The framework of the ILO “Global Product” Project (Chiangmai Thailand, Regional Association for Vocational Teacher Education in Asia). Available at: <http://>

- www.tvet-online.asia/series/RaD_vol-8_Risler_Zhiquan.pdf [accessed 24 August 2016]
- Rolls, S. 2012. Denmark: VET in Europe: country report 2012, Cedefop http://www.cedefop.europa.eu/files/2012_cr_dk.pdf [accessed 24 August 2016] Rothboeck, S. 2014. ILO Asia-Pacific Working Paper Series (ILO Decent Work Technical Support Team for South Asia and Country Office for India). Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_332263.pdf [accessed 24 August 2016]
- Schönfeld, G.; Wenzelmann, F.; Dionisius, R.; Pfeifer, H.; Walden, G. 2010. Kosten und Nutzen der dualen Ausbildung aus Sicht der Betriebe (Bundesinstitut für Berufsbildung).
- Sharpe, A.; Gibson, J. 2005. The Apprenticeship System in Canada: Trends and Issues (Ottawa, Centre for the Study of Living Standards). Available at: <http://www.csls.ca/reports/csls2005-04.PDF> [accessed 24 August 2016]
- Smith, E. ; Kemmis, R. B. 2013. Towards a model apprenticeship framework: A comparative analysis of national apprenticeship systems (ILO and World Bank, New Delhi). Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_234728.pdf
- Social Security Administration (SSA)/ International Social Security Association (ISSA) 2011. Social Security Programs Throughout the World (Washington D.C.: Social Security Administration)
- 2010. Social Security Programs Throughout the World (Washington D.C.: Social Security Administration).
- 2009. Social Security Programs Throughout the World (Washington D.C.: Social Security Administration).
- Socialversicherung (SV). 2016. Lehrlinge. Available at: <https://www.sozialversicherung.at/portal27/esvportal/content/contentWindow?contentid=10007.683973&action=2&viewmode=content> [Accessed: 15 July 2016].
- Steedman, H. 2012. Overview of apprenticeship systems and issues ILO contribution to the G20 Task Force on Employment, Geneva, ILO. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/genericdocument/wcms_190188.pdf [accessed 24 August 2016]
- . 2015. Promoting safe work and quality apprenticeships in small and medium sized enterprises: Challenges for developed and developing economies. ILO. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_411192.pdf [accessed 24 August 2016]
- Strupler, M and Wolter, S. 2012. Dual-track VET: a success story – also for host companies. Available at: <https://www.sozialversicherung.at/portal27/esvportal/content/contentWindow?contentid=10007.683973&action=2&viewmode=content> [Accessed: 15 July 2016].

- Tansel, A.; Ogawa, K. 2004. The Effects of Apprenticeship Training Scheme on Employment Probability in Turkey (Bonn: IZA). Available at: http://www.iza.org/conference_files/worldb2008/tansel_a1704.pdf
- UNESCO-UNEVOC International Centre. n. d. JAMBA - Young Single Mothers in Vocational Training, (Bonn). Available at: http://www.unevoc.unesco.org/fileadmin/user_upload/pubs/JAMBA_YoungSingleMothersInVocationalTraining-Germany.pdf [accessed 24 August 2016]
- UNEVOC.2014. Promising Practices in TVET. Available at: <http://www.unevoc.unesco.org/go.php?q=Promising+Practices+List&id=5>
- UNESCO.2014. Recognition of skills acquired in the non-formal sector in Senegal (Dakar). Available at: <https://www.youtube.com/watch?v=6RBSh5HtJgk> [accessed 24 August 2016]
- Unionlearn, European Trade Union Confederation (ETUC). 2013. Towards a European quality framework for apprenticeships and work-based learning: Best practices and trade union contributions (London and Brussels). Available at: https://www.etuc.org/sites/www.etuc.org/files/publication/files/ces-brochure_unionlearn-uk-rouge.pdf [accessed 24 August 2016]
- Ursula B.; Herget, H.; Walden, G. (2004). Costs and benefits of in-company vocational training. (Bielefeld, Federal Institute for Vocational Training). Available at: http://www.bibb.de/dokumente/pdf/a1_bwp_special-edition_beicht.pdf [accessed 24 August 2016]
- Valerio, A.; Brent Parton, B.; Robb. A. 2014. Entrepreneurship Education and Training Programs around the World. Dimensions for Success. (Washington DC: World Bank). Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/18031/9781464802027.pdf?sequence=1>
- World Economic Forum (WEF). 2009. Educating the Next Wave of Entrepreneurs Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. Available at: http://www3.weforum.org/docs/WEF_GEI_EducatingNextEntrepreneurs_ExecutiveSummary_2009.pdf
- Women in Resource Development Corporation (WRDC). 2011. Moving Forward: A Practical Guide – Preparing Women for Employment in the Natural Resource Sector. Available at: http://www.wrdoc.nf.ca/pdfs/Moving%20Forward%20Guide_SWC.pdf [accessed 24 August 2016]
- Ünlühisareikh, Ö.; Vos, A. 2013. The Role of Social Partners and the Status of Apprenticeship in Turkey, in: The Architecture of Innovative Apprenticeship

Este documento se terminó de imprimir en el
Departamento de Publicaciones de OIT/Cinterfor en
Montevideo, setiembre 2019
Hecho el depósito legal número 376.383