



International
Labour
Organization

Module

4

ILO Toolkit for Quality Apprenticeships

Volume 2: Guide for Practitioners

► Organizing apprenticeship training



ILO Toolkit for Quality Apprenticeships

Volume 2: Guide for Practitioners

► Organizing apprenticeship training



Edited by: Ashwani Aggarwal

Skills and Employability Branch, Employment Policy Department

Copyright © International Labour Organization 2020

First published 2020

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publishing (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

ILO Toolkit for Quality Apprenticeships. Volume 2: Guide for Practitioners
For developing, implementing, monitoring and evaluating apprenticeship programmes.
Module 4: Organizing apprenticeship training

ISBN: 978-92-2-032183-6 (print)
978-92-2-032184-3 (web PDF)

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns.

Design and layout by the International Training Centre of the ILO, Turin - Italy

Printed in *Italy*

ILO Toolkit for Quality Apprenticeships

Module 1 Introduction - The quality apprenticeship training life cycle

Module 2 Developing quality apprenticeship programmes

Module 3 Preparing quality training places

▶ **Module 4 Organizing apprenticeship training**

Module 5 Post-training transitions and evaluation

Module 6 Innovations and strategies in apprenticeships

Table of contents

Acronyms and abbreviations v

Module 4 Organizing apprenticeship training 1

4.1	Attracting candidates to join apprenticeship training	1
4.2	Recruiting apprentices	8
4.3	Developing a training plan	13
4.4	Effective training delivery methods	18
4.5	Monitoring, assessment and certification	25
4.6	Social inclusion	34
4.7	Checklist	39

List of tools

Tool 4.1.1	Digital video platform “Film your job”, France	4
Tool 4.1.2	Digital vocational orientation at school, Germany	4
Tool 4.1.3	Vocational guidance and counselling services, Switzerland	5
Tool 4.1.4	Careers portal, South Africa	5
Tool 4.1.5	Promotional materials for apprenticeship, Canada	5
Tool 4.1.6	Best practice guide to youth career programmes, Australia	6
Tool 4.1.7	Promotional materials for apprenticeship, Germany	6
Tool 4.1.8	Online match-making platform connecting schools with workplace volunteers, United Kingdom	7
Tool 4.1.9	Using technology to connect employers and students, United Kingdom	7
Tool 4.1.10	Online vocational guidance, Austria	8
Tool 4.2.1	Online portal for apprenticeship, India	11
Tool 4.2.2	The European job mobility portal	11
Tool 4.2.3	Guide to apprentice recruitment for employers, United Kingdom	12

Tool 4.2.4	An online apprentice test designed to match training employers and apprentices, Austria	12
Tool 4.2.5	Procedure for recruiting apprentices, Switzerland	13
Tool 4.2.6	A mechanism for transferring an apprentice, South Africa	13
Tool 4.3.1	Sample rotation plan, Asian countries	16
Tool 4.3.2	Scheduling apprentices' training time between different venues, Germany	16
Tool 4.3.3	An enterprise training plan, Germany	16
Tool 4.3.4	A TVET provider training plan template, Australia	17
Tool 4.4.1	12 training methods for use by in-company trainers, Germany	21
Tool 4.4.2	Manual for the instruction of vocational trainers in industrial and technical trades, Afghanistan	21
Tool 4.4.3	Lesson planning and action-oriented teaching – a manual for secondary technical schools, Afghanistan	23
Tool 4.4.4	Teaching and training methods in apprenticeship: A review of research, United Kingdom	23
Tool 4.4.5	Approaches to effectively engage apprentices and students to lower the drop-out rate, NetWBL	24
Tool 4.4.6	A digital platform providing online apprenticeships and career coaching services for apprentices, France	24
Tool 4.5.1	A guide for monitoring and assessing apprentices' performance, United States	29
Tool 4.5.2	Online mock tests and online assessment, India	29
Tool 4.5.3	An apprenticeship logbook, Bhutan	29
Tool 4.5.4	An apprenticeship logbook, Denmark	30
Tool 4.5.5	Sample logbook, Asian countries	30
Tool 4.5.6	Mobile logbook, British Columbia	30
Tool 4.5.7	Model documents for reporting on apprentice performance, Switzerland	31
Tool 4.5.8	Rules and conditions for formative and summative assessment, South Africa	31
Tool 4.5.9	Assessment and certification system, Denmark	31
Tool 4.5.10	How final assessment is organized, Switzerland	32
Tool 4.5.11	How examiners for the apprenticeship final assessment are chosen and trained, Switzerland	33
Tool 4.5.12	How final assessment is organized, Germany	33
Tool 4.6.1	Integrative apprenticeships for learners with special needs, Austria	37
Tool 4.6.2	Guidance on how to make apprenticeships and workplace learning inclusive for those with disabilities, ILO	37
Tool 4.6.3	A special, shorter apprenticeship programme for vulnerable youth, Switzerland	38
Tool 4.6.4	Tools for the identification of apprentices who are at risk of dropping out and guidance for trainers, VET teachers and parents on dealing with this situation	38

List of figures

Figure 4.1	Steps for recruiting apprentices for an enterprise	9
Figure 4.2	Scheduling on- and off-the-job training	14
Figure 4.3	The project-based method: learning the complete work process	19
Figure 4.4	The four-step method of training and learning	20
Figure 4.5	Inclusion challenges in TVET and apprenticeship	35

Acronyms and abbreviations

BIBB	German Federal Institute for Vocational Education and Training
CBC	competency-based curriculum
Cedefop	European Centre for the Development of Vocational Training
CVET	continuing vocational education and training
DC dVET	Donor Committee for Dual Vocational Education and Training
EaFA	European Alliance for Apprenticeships
ESS	employer/establishment skills survey
ETF	European Training Foundation
EU	European Union
GAN	Global Apprenticeship Network
GIZ	German Corporation for International Cooperation (<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>)
GTOs	Group Training Organisations
ICT	information and communication technology
ILO	International Labour Organization
in-CT	in-company trainer
IOE	International Organisation of Employers
IVET	initial vocational education and training
KPI	key performance indicator
LMI	labour market information
MoU	memorandum of understanding
NCS	National Competency Standards
NIMI	National Instructional Media Institute
OECD	Organisation for Economic Co-operation and Development
off-JT	off-the-job training
OJT	on-the-job training
OS	occupational standard
RTOs	Registered Training Organizations
SDC	Swiss Agency for Development and Cooperation
SFIVET	Swiss Federal Institute for Vocational Education and Training
SMEs	small and medium-sized enterprises
TVET	technical and vocational education and training
VET	vocational education and training



► Organizing apprenticeship training

The apprenticeship model provides young people with opportunities to develop the skills required to thrive in the 21st century.

Morten Wierod (ABB President), June 2019

This module examines the processes necessary to organize and deliver apprenticeship training. The six main processes are as follows:



► 4.1 Attracting candidates to join apprenticeship training

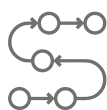


The issue: How to make apprenticeships an attractive career option

The benefits of apprenticeships are not always obvious to potential apprentices. In many countries, apprenticeships are perceived to be linked to blue-collar jobs, offering low wages and mainly related to male-dominated sectors. A commonly held view is that work-based learning (WBL) schemes, such as apprenticeships, impose a glass ceiling on career progression. What is more, the association of any WBL programme with apprenticeships and the prevalence of informal apprenticeships with exploitative conditions in many developing countries has contributed to the persistence of these negative perceptions. Other education pathways, especially the academic path, are often seen as superior in terms of employability, income and status. Apprenticeship, in many countries, is perceived to be for poorly performing students and school drop-outs. Considering the important role played by apprenticeship schemes in enhancing a better match between the skills demanded in

the labour market and those acquired through training, and in facilitating the transition of young people from school to work and preparing adults to meet the changing needs of the world of work, a strategy to overcome the pervasive negative public perception associated with apprenticeship is urgently needed. To reverse this entrenched perception, adequate promotion and advocacy of quality apprenticeships is therefore necessary.

Career guidance and counselling services can also assist in promoting apprenticeships as an attractive career option. Such services provide people with information about the world of work and help them to make informed decisions about which education and training opportunity they might take, based on their skills and aptitude and the particular requirements of various occupations. An important purpose of career guidance is also to provide young people from all backgrounds with relevant information about the labour market and specific careers. Given that young people's choices are shaped by their social and personal circumstances, enabling them to make well-informed choices could help to break intergenerational cycles of disadvantage, while simultaneously providing employers with a broader range of potential future employees (Musset and Kurekova, 2018). Furthermore, to address issues of gender segregation in apprenticeships, it is important that all occupations, including skilled manual labour, are presented in a positive light in schools, while actively challenging gender stereotypes in all occupations.



The steps needed to promote quality apprenticeship

Depending on the country context, a technical working group, public employment services or the entity promoting apprenticeships may fulfil the following functions:

- ▶ Bring together stakeholders to agree on a communication strategy adapted to specific country circumstances, including a social media strategy and a range of awareness-raising and marketing activities to promote quality apprenticeships. If a country is just starting a pilot programme or implementing apprenticeships at a limited level, the communication strategy might not be very detailed.
- ▶ Based on the communication strategy, create information materials explaining quality apprenticeships, using a mix of media tools tailored to the needs of the different target groups (students, teachers, parents, enterprises, and education and career counsellors). Different modes of communication could include seminars and media events, press conferences, radio and TV interviews, articles placed in newspapers, social media and internet chat rooms, among others.
- ▶ Make targeted career guidance and comprehensive advice available to young people to inform their further learning and career decisions and when they may be considering pursuing an apprenticeship. Such guidance may form part of a wider sphere of guidance activities, preparing all young people, in all types of schools, for the world of work.

- ▶ This guidance should start at an early stage in the school education system and be provided by qualified/trained teachers or specialist organizations (e.g. employment services, TVET providers, employers' and workers' organizations).
- ▶ Encourage cooperation between enterprises and local schools and training providers to engage stakeholders in career guidance and apprenticeship promotion, with events such as careers fairs, open days and trial apprenticeships (see box 4.1). Digital technology can provide new and more attractive ways of facilitating interactions between schools and enterprises, as shown in Tool 4.1.8.

Box 4.1 Work experience programmes



The Adecco Group offers an Experience Work Day programme to introduce young people to the world of work. On designated days, Adecco opens its 700 offices and branches in 46 countries to young people, allowing them to shadow Adecco Group employees in the departments and roles of their choice, learn more about their preferred jobs by stepping into their mentors' shoes, and improve their skills through workshops and coaching. In 2017, more than 9,000 young people benefited from the Experience Work Day programme.

Source: Information collected and provided by GAN Global;

<https://www.adecgroup.com/wp-content/themes/ado-group/downloads/sustainability-review-2017.pdf>





Tips

- ★ A user-friendly online platform containing comprehensive information about apprenticeships, including potential benefits for apprentices, enterprises and TVET providers, has been proven to improve enrolment and retention rates. It should also include rosters of apprenticeship positions, both open and filled. While such a platform may be developed initially by a government agency, subsequently social partners can take over this responsibility.
- ★ Actively involve the target groups when preparing the communication strategy and take their communication habits into account. To engage the younger generation, foster cooperation with and outreach to youth groups.
- ★ The engagement of people with first-hand knowledge of workplaces can provide young people with useful and reliable information about the world of work.



Tools for promoting quality apprenticeships



Tool 4.1.1

Digital video platform “Film your job”, France

The platform “Film your job” aims to promote apprenticeships by introducing young people to apprenticeship and trades through short videos shared on a dedicated platform as well as on social media.

The project is implemented in partnership with schools, regional council, companies and non-governmental organizations, and involves a video contest organized every year in which apprentices film themselves at their workplace. The tool aims to emphasize the value of apprentices, apprenticeships and trades (on all levels) and make these trades better known among young people. It also aims to tackle prejudices about apprenticeship training.

Source: <http://filmetonjob.com/> (in French)



Tool 4.1.2

Digital vocational orientation at school, Germany

“Your first day” shoots 360-degree films about various professions and makes them available throughout Germany to all interested schools, free of charge and with all the necessary technology. This resource allows young people get to know career paths and companies that they would not otherwise have access to. It offer companies the opportunity to digitally open the doors of their production, office or business premises and introduce themselves to future professionals.

Source: <https://www.deinerstertag.de/ueber-uns/> (in German)

<https://www.deinerstertag.de/en/> (some films in English, and also in Arabic)



Tool 4.1.3

Vocational guidance and counselling services, Switzerland

In Switzerland, career orientation is an integral part of compulsory schooling with special lessons dedicated to it. Through “pre-vocational traineeships”, students spend a few days with an employer to gain an insight into a profession that interests them. Schools cooperate closely with specialized career guidance and counselling services at the local level, staffed by professional counsellors. Their services are free for compulsory school-aged pupils and for young people who have left compulsory school. National online platforms provide additional information on various IVET and CVET professions and career paths.

The search for open apprenticeship positions usually takes place in the open market but it is facilitated by various online platforms and services where employers can advertise their openings. In the event of difficulties, vocational guidance and counselling services help young people to find an apprenticeship position.

Source: National portal for vocational and career guidance (in French):

www.orientation.ch/dyn/show/1418?lang=fr

List of local/regional guidance and counselling services: www.orientation.ch/dyn/show/8242

Centralized portal for open apprenticeship positions: www.orientation.ch/dyn/show/2930?lang=fr



Tool 4.1.4

Careers portal, South Africa

The Careers Portal website focuses on providing information to young people seeking post-school opportunities. It publishes the latest information on apprenticeships, learnerships, internships, college courses, bursaries and other related content.

Source: www.careersportal.co.za

Tool 4.1.5

Promotional materials for apprenticeship, Canada

The *Apprenticeship handbook* provides a wide range of useful material for would-be apprentices in Newfoundland and Labrador, Canada. It details the potential benefits of apprenticeship, the length and content of programmes and the practical steps which an individual needs to take to become an apprentice. It describes the different trades in which apprenticeship is possible and the arrangements for certification, and sets out the options for financial assistance.

Source: www.aesl.gov.nl.ca/app/pdf/apprenticeship_handbook.pdf

Tool 4.1.6 **Best practice guide to youth career programmes, Australia**

The *Best practice guide: Youth career programs* has been compiled by the apprenticeship employment network, with input from GTOs, youth, schools and employers, who have been involved in over 170 pre-apprenticeship programmes during the period 2016–18.

The aim of the guide is to assist young people in making better informed career choices; provide work-ready candidates and recruitment support for SMEs and improve non-completion rates in apprenticeships and traineeships.

GTOs have been encouraged to design unique pilot programmes to deliver a blend of career guidance, work experience, job-search and industry information to young people seeking a career in industries making use of vocational skills. The many successful programmes designed and delivered to date have been evaluated to determine common themes and best practices to assist with the development of the guide.

Source: <https://aen.org.au/wp-content/uploads/Best-Practice-Guide-Youth-Career-Programmes-Feb-19.pdf>



Tool 4.1.7 **Promotional materials for apprenticeship, Germany**

In Germany, the craft sector has been running a campaign in which a mix of different media is used to attract young people to become qualified craftspersons. The video clip for the 2018 campaign can be found here:

<https://handwerk.de/erfuellung>

The website also provides information for young people about apprenticeships and helps them to identify their specific career preferences:

<https://handwerk.de/berufechecker>

Source: www.zdh.de/en/





Tool 4.1.8

Online match-making platform connecting schools with workplace volunteers, United Kingdom

“Inspiring the Future” is a national online match-making platform that connects schools and colleges with volunteers from a range of sectors and professions that match their particular requirements. This tool gives students the opportunity to hear at first-hand the experiences of working people who can inspire and motivate young people regarding their future education and training choices and make them aware of different routes into a career.

The platform is free and easy to use. Teachers register their school or college and select and invite people who best meet the needs of their students, while volunteers register and select a number of areas of expertise that might be of interest to students.

The platform has over 40,000 volunteers registered throughout the United Kingdom, representing a broad range of roles, from apprentices to CEOs, and from all different age groups. Volunteers can support schools and colleges through a variety of activities, including talks on apprenticeship and careers, careers fairs, CV workshops, mock interviews, mentoring and workplace visits.

Source: www.inspiringthefuture.org



Tool 4.1.9

Using technology to connect employers and students, United Kingdom

Through the “Bridge to Work” initiative, Loughborough College helps young people aged 14 to 18 years old to gain an insight into employers’ expectations before they apply for jobs or apprenticeships. In part, this is achieved through collaborative conferencing and social software.

The Bridge to Work team sets up a series of webinars using conferencing software to bring together students and employers in local and national firms. Through the webinars, students gain first-hand knowledge of what employability entails, as well as developing confidence and skills in talking to employers. Furthermore, apprentices currently on placement provide their personal insights, bringing the culture of the workplace to life for students who are still at college.

Source: Chatterton, P. and Rebbeck, G. (2015) *Technology for employability: Study into the role of technology in developing student employability* (Bristol, Jisc):
http://repository.jisc.ac.uk/6249/3/Technology_for_employability_-_full_report.PDF



Tool 4.1.10

Online vocational guidance, Austria

In Austria, the online portal for career planning “BIC.at” provides descriptions for more than 2 000 occupations and details the requisite qualifications. The occupations can be explored in various ways through the career information menu, including alphabetical search, occupational group search and an education and training pathway search for those occupations that require similar qualifications. The website also offers tips about what should be considered when choosing a qualification or an occupation, and contains several practical worksheets.

Source: www.bic.at/index.php?lg=en

► 4.2 Recruiting apprentices



The issue: Why is it important to recruit the right apprentices?

The selection of the right candidates as apprentices is an important factor in determining the success of apprenticeship. The major proportion of apprenticeship training takes place at the workplace, where the apprentices are actively involved with workers carrying out work processes. An employer will, therefore, be keen to recruit candidates who are motivated to work in the chosen occupation and complete the apprenticeship, and who have the right attributes to work in teams and follow established rules (see box 4.2). While the selection of apprentices should mainly be the enterprises' responsibility, they may collaborate with TVET providers in the recruitment process, since part of the training will take place in the TVET provider's premises.

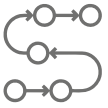
Given that dropping out of the apprenticeship training has a significant cost for both the apprentice and the enterprise, it is important that an apprentice fully understands the requirements of an occupation, such as the necessary competencies, working conditions and career prospects, as well as the requirement to complete the apprenticeship training. The apprentice should then make an informed decision, in view of his or her aptitude and level of interest, about whether to apply for an apprenticeship in a particular occupation and enterprise.

Box 4.2 Apprentice selection, Brazil



In Brazil, employers have total freedom to select apprentices, subject to compliance with the constitutional principle of equality.

Source: https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-port_of_spain/documents/genericdocument/wcms_545812.pdf



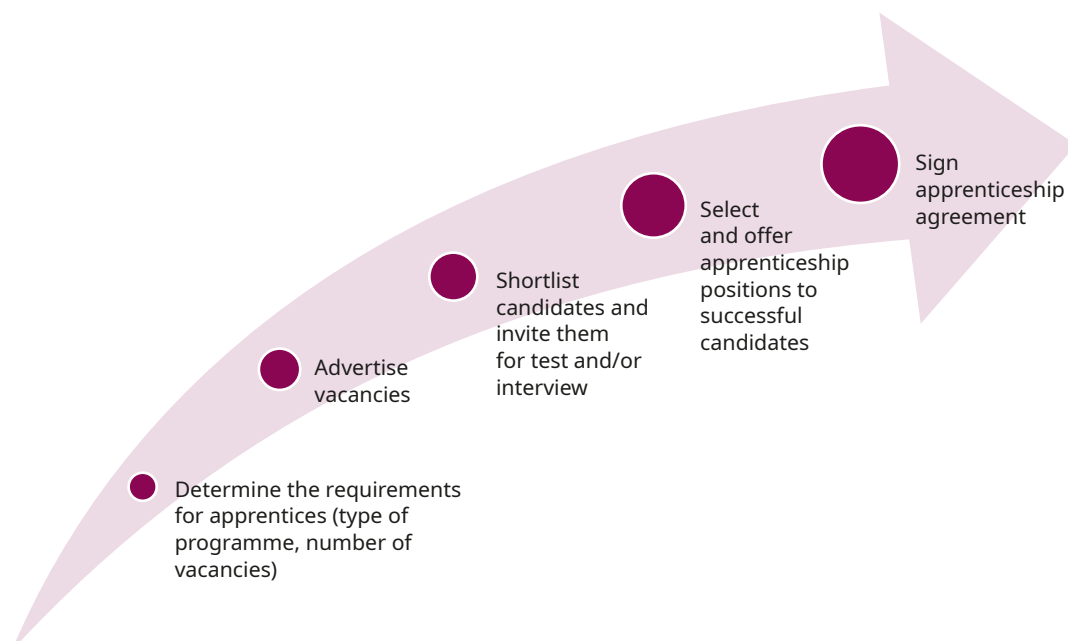
The steps needed to recruit apprentices

The procedure for recruiting apprentices may vary depending on the country context. The regulatory framework of a country prescribes the roles and responsibilities of stakeholders in the recruitment process.

Enterprises may take the following generic steps for recruiting apprentices, as appropriate:

- ▶ Decide on the number of apprenticeships to be offered in various occupations, based on the company's human resource needs and capacity to train apprentices in line with the applicable standards.
- ▶ Determine the remuneration and the training and working conditions for apprenticeships, based on the applicable standards.
- ▶ Openly advertise apprenticeship vacancies by different means, including through the enterprise's website, social media, official websites of chambers, employers' and workers' organizations, as well as through schools and employment offices, to attract young people and reach the target recruitment pool.
- ▶ Prepare guidelines, including criteria for assessing the skills, knowledge and attitudes of candidates as well as their motivation for participating in apprenticeships.
- ▶ Conduct initial screening and shortlisting exercises, and invite candidates for tests and/or interviews.
- ▶ Following an interview, select and offer appointments to the successful candidate(s) and provide feedback to the unsuccessful candidates.
- ▶ Sign the apprenticeship agreement with the selected apprentice and register it with the competent body (refer to section 3.2).

▶ **Figure 4.1 Steps for recruiting apprentices for an enterprise**



Source: Authors' own figure.



Tips

- ★ Candidates for apprenticeships should be fully aware of the requirements of the chosen occupation so that they can make an informed decision when choosing a specific apprenticeship programme.
- ★ Enterprises may invite students for a guided visit or offer a short work trial to potential candidates. In this way, students can become familiar with the programme and determine whether it meets their expectations, while employers have the chance to assess the suitability of potential candidates for apprenticeships.
- ★ Enterprises may use different selection methods, such as aptitude tests, group discussions, role playing and work trials, to assess candidates' suitability for apprenticeships.
- ★ SMEs may seek support from intermediaries, TVET providers or public and private employment services in the selection process, as they may not have the necessary expertise for recruiting apprentices.
- ★ TVET providers may cooperate with and support employers, while recognizing that employers should be entitled to select their own candidates.
- ★ Enterprises may consider offering more favourable working conditions than those prescribed in order to attract better candidates.





Tools for recruiting apprentices



Tool 4.2.1

Online portal for apprenticeship, India

India has a comprehensive online portal that facilitates the registration of apprentices, enterprises, intermediaries, basic training providers and third-party aggregators. Enterprises can select apprentices and register apprenticeship agreements through the portal. The apprenticeship candidates and enterprises can access information about available apprenticeship opportunities and applications by parameters such as state, district, sector and trade, organization, qualification, etc. The portal also provides information about the Apprentices Act 1961. Furthermore, enterprises can submit their claim for subsidies under national apprenticeship promotion scheme online. Apprentices can also check the results of their final assessment. Currently there are two portals for different categories of programmes that are intended to be merged into one (<https://apprenticeshipindia.org>) in the future.

Source: <https://apprenticeship.gov.in/pages/Apprenticeship/home.aspx>
<https://apprenticeshipindia.org>
<http://apprenticeship.gov.in/pages/apprenticeship/apprenticeregistration.aspx> (registration form).



Tool 4.2.2

The European job mobility portal

Drop'pin@EURES is an online platform where companies and organizations can promote and showcase their youth opportunities and is designed to help young Europeans take their first steps into the labour market. Opportunities available on the platform include apprenticeships, traineeships, training programmes, e-learning courses, language training, mobility support, coaching and mentoring, etc.

Drop'pin@EURES also facilitates matching of youth opportunities with the right young person's profile by granting access to a large number of skilled jobseekers across Europe. On the platform, employers are able to find the perfect match by browsing the CVs of potential candidate online. The tool also allows organizations to directly and easily post youth opportunities on the portal, which can be seen by young EURES members from all over Europe.

Source: <https://ec.europa.eu/eures/public/en/opportunities>



© ILO

Tool 4.2.3 Guide to apprentice recruitment for employers, United Kingdom

This tool has been designed to guide enterprises, particularly SMEs, through the apprenticeship recruitment process. It outlines ten steps involved in the recruitment of apprentices, from developing the job specification and advertising the vacancy, to preparing and carrying out the interview and selecting the successful candidate. It also includes an apprenticeship vacancy template and interview question bank. The publication encourages good practice in all aspects of the recruitment of apprentices and promotes equality and diversity.

Source: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/609449/Employer_Guide_February_2017.pdf



Tool 4.2.4 An online apprentice test designed to match training employers and apprentices, Austria

This modular online test system supports the selection of apprentices and future skilled workers. The apprentice selection process aims at an optimal match between training employers and apprentices. Some features of the test are detailed below:

- An individual aptitude test that includes 15 modules, allowing an assessment that is independent of school grades.
- Open questions provide insights into the applicant's motivation for applying to the specific apprenticeship occupation and employer.
- The test is user-friendly and easy to use. Evaluation takes place automatically. The results and applicant data are clearly presented.
- The integration of employer-specific tasks and ability to adapt the test design to an individual employer makes the test easily customizable.

Source: <https://auswahlhilfe.at/> (in German)

Tool 4.2.5 Procedure for recruiting apprentices, Switzerland

The selection records document is intended as a guide for employers, trainers and human resources personnel involved in the recruitment of apprentices, to help determine a person's suitability for apprenticeship.

The document includes sections on general information on the candidate, the recruitment interview and suggestions for questions to ask regarding personal motivations and the steps following the interview.

The questionnaire gives structure to the interview, showing how the interview should unfold. It facilitates objective comparison while at the same time providing sound reasons for accepting or refusing an application.

Source: http://vpel.ch/dyn/bin/21423-23924-1-selektionsmappe_de_2016i.pdf

Guide to using the selection records document:

http://vpel.ch/dyn/bin/21423-23925-1-infoblattsm_eg_2016_web.pdf

Tool 4.2.6 A mechanism for transferring an apprentice, South Africa

For various reasons, it may become necessary for an apprentice to move to another employer during an apprenticeship. The transfer of an apprentice from one employer to another often has the potential to involve costs for all concerned. This tool provides an example of how such a transfer may be conducted.

Source: <http://merseta.org.za/sd/LearningProgrammes/Apprenticeships/Pages/Transfers.aspx>

► 4.3 Developing a training plan

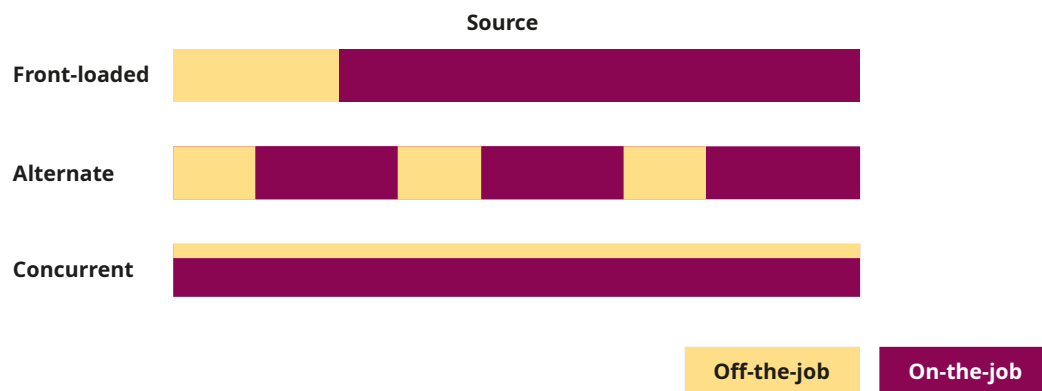


The issue: Why a good training plan is important for quality apprenticeship

The training plan developed by an enterprise sets out how the enterprise implements the apprenticeship curriculum in the workplace, and how the general requirements of the curriculum would be combined with the specific requirements of the enterprise. To ensure that apprentices fulfil all the requirements defined in the occupational standards, the enterprise training plan should provide a complete description of the training to be delivered and the competencies to be developed. More specifically, the training plan should set out when and where different training sequences will be carried out, and identify the individuals responsible for delivering different parts of the training. It should also specify how and when the assessment will take place.

Corresponding to the enterprise training plan, TVET providers should also prepare a plan for off-the-job training that complements on-the-job training at the enterprise. The combination of on- and off-the-job training guarantees that apprentices are work-ready on completion of the programme.

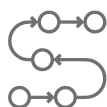
► **Figure 4.2 Scheduling on- and off-the-job training**



Source: Authors' own.

Scheduling of on-the-job and off-the-job training

There are several ways in which on-the-job and off-the-job training can be scheduled (figure 4.2). For example, in Luxembourg, the dual VET programmes (apprenticeships) usually include one to four days per week of training at school with the apprentice trained in an enterprise on the other weekdays. The proportion of off-the-job training is usually greater in the first year and decreases in the following years. Some VET programmes in Luxembourg are also organized with blocks of several weeks of full-time training at a technical secondary school (usually between three and nine weeks) that alternate with blocks of several weeks of full-time training in an enterprise (European Alliance for Apprenticeship, 2016).



The steps needed to develop a training plan

- To ensure coherence between on- and off-the-job training, in-CTs should develop the enterprise training plan for on-the-job training in cooperation with teachers from TVET providers, who develop the teaching plan for off-the-job training.
- Both the enterprise training plan and the TVET provider teaching plan should fully cover the occupational standards and curriculum of the specific apprenticeship programme.
- The in-CT should draw up a rotation plan for apprentices in various departments of an enterprise, and coordinate apprentices' training with the relevant departments, supervisors and mentors.
- The plan should specify:
 - » the arrangement and sequencing of on-the-job and off-the-job training – if part of the training takes place in other enterprises or intermediaries, the plan should state the specific duration and parts of the curriculum to be covered outside of the enterprise
 - » details on the use of various training methods, tools and materials – it should also identify any additional support available to apprentices to help them to successfully complete the training
 - » competencies acquired by apprentices at various stages of the training plan, and how the assessments will be carried out.



Tips

- ★ During the planning process, the capacity of an enterprise to develop a training plan should be assessed. TVET providers or intermediaries should support enterprises in the preparation of the training plan, especially those that are providing an apprenticeship for the first time.
- ★ As in-CTs, supervisors and mentors gain experience, the training design can be adjusted and become more detailed. An improved training plan enhances both training efficiency and the productivity of apprentices, which is likely to lead to a faster return on investment for the enterprise.
- ★ The training content may cover a broader scope that goes beyond the requirements of the specific occupational profile.
- ★ In-CTs should ensure that the individuals involved in delivering training to apprentices have the necessary competencies.
- ★ Coordination between teachers and in-CTs can be achieved through the use of a logbook, in which the apprentices record their experience in both learning contexts. The logbook should be available to both the TVET teacher and in CT-trainer.
- ★ Good planning is essential to promote effective cooperation between the two training locations in apprenticeships. Before the start of each training year, training enterprises and TVET providers must determine when the trainee will be at which location.
- ★ TVET providers should maintain contact with the apprentices, particularly during block placements with employers. This could be achieved, for example, via a mobile learning application, whereby at least half a day of online training could be scheduled weekly.





Tools for developing a training plan

Tool 4.3.1

Sample rotation plan, Asian countries¹

This tool provides a template for a rotation plan for apprenticeships (refer to annex 11 of the tool). The rotation plan specifies the time period that an apprentice will spend in each of the relevant units of the enterprise, thereby ensuring that the apprentice gains experience in all trade-relevant tasks in the company.

The tool also provides an example from The Philippines on how to support companies in the development of rotation plans (see box 14 in the source publication).

Source: GIZ (2017) *Down to earth: A practitioner's guideline to work with business and industry in TVET*: https://sea-vet.net/images/seb/e-library/doc_file/311/giz2017down-to-earthguideline-version-2.pdf

Tool 4.3.2

Scheduling apprentices' training time between different venues, Germany

The resource consists of a block plan that indicates how training is scheduled between different learning venues (i.e. when the apprentices are in the TVET school and when they are at the workplace). This example from the construction industry in Hamburg includes the inter-company training centre in this sector, in addition to the learning locations of the employer and TVET provider.

Source: www.azb-hamburg.de/ausbildung/blockplaene/ (in German)

Tool 4.3.3

An enterprise training plan, Germany

This tool provides an example of a training plan for an apprenticeship for a "roller shutter and sun protection mechatronics technician".

This in-company training plan guides the trainer and apprentice through the apprenticeship by outlining the parts of the apprenticeship, the competencies and knowledge that the apprentice needs to acquire, and company-specific elements that define the training and work content necessary to meet the needs and requirements of the company. Time indicators point out how much time should be spent on specific parts of the apprenticeship, including, for instance, work preparation and quality assurance measures, learning about the components and tasks involved in the occupation, and occupational safety and health aspects. A column reserved for completion notes allows the apprentice's progress to be monitored.

Source: www.bibb.de/tools/berufesuche/index.php/practice_examples/checklisten_und_muster/ag_RS_Kap2_Muster-betr-AP.pdf (in German)

¹ The source publication was developed by the Community of Practice "Private Sector Cooperation in TVET" within the GIZ Sector Network Assets for Asia. The Community of Practice comprises GIZ staff (international experts, national personnel, integrated experts and development advisers) from the following Asian countries: India, Indonesia, Lao People's Democratic Republic, Mongolia, Myanmar, Pakistan, Sri Lanka, The Philippines, Thailand and Viet Nam.



Tool 4.3.4

A TVET provider training plan template, Australia

The tool provides a template for preparing a training plan for apprentices in Australia. The training plan is developed and maintained by the registered training organization (RTO) in conjunction with the apprentice/trainee and enterprise, and is a live document that is intended to reflect the current status of the apprentice's training.

This training plan fulfils the following purposes:

- describes the responsibilities of the apprentice, enterprise and RTO
- describes what training is to be undertaken and outlines who will provide the training
- specifies how, when and where training will be delivered
- details how the assessments will be carried out and when the apprentice/trainee is deemed competent
- identifies any additional support required for the apprentice to successfully undertake and complete the training.

Source: https://desbt.qld.gov.au/_data/assets/word_doc/0029/7949/srto-training-plan-example.doc

▶ 4.4 Effective training delivery methods



The issue: Why effective training methods are essential for quality apprenticeships

Effective, impactful apprenticeship training often requires a personalized approach, in which each apprentice is seen as an individual with unique training needs. There is no single standardized training method that guarantees the success of apprenticeship programmes. Therefore, both teachers in TVET providers and in-CTs in enterprises should be trained in using a variety of training and teaching methods (see section 3.5). They should choose the training methods that are most appropriate to the specific context and adapt them to the individual needs of the apprentice. The following paragraph lists several effective training methods.

Effective learning methods

The City & Guilds Alliance for Vocational Education recommends the following nine learning methods that work for vocational education (Tool 4.4.4, pp. 12–13).

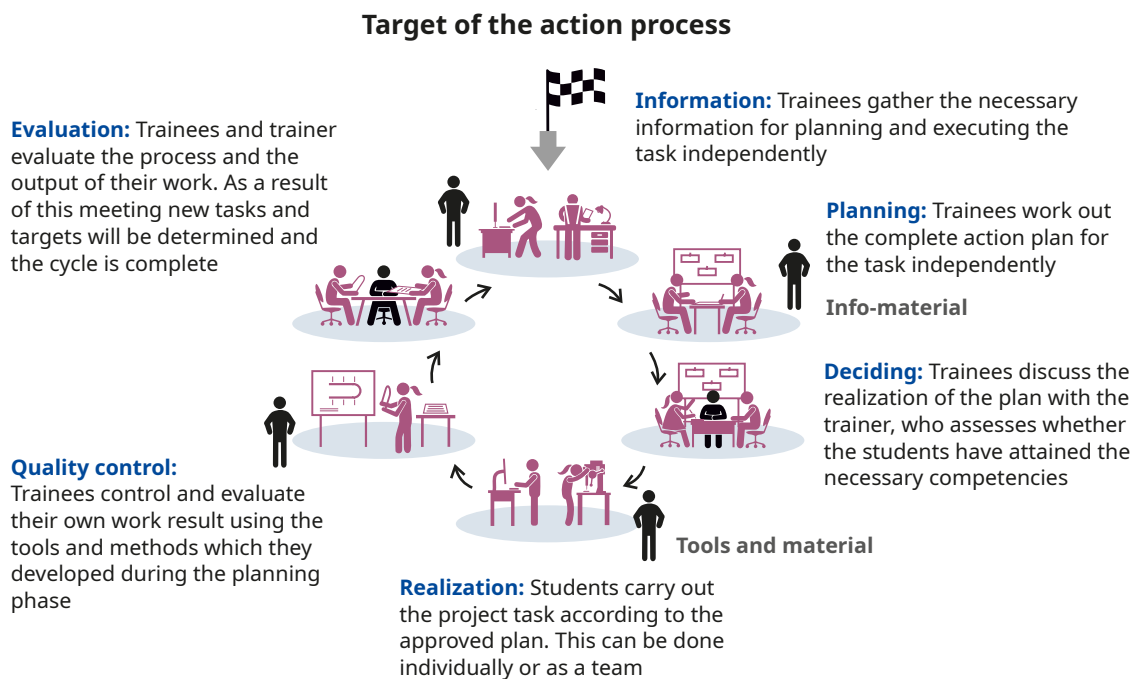
- ▶ *Learning from experts* – by watching and imitating and by listening, transcribing and remembering.
- ▶ *Practising* – through trial and error, experimentation or discovery and deliberate practice.
- ▶ *Hands-on* – by making, by drafting and by sketching.
- ▶ *Applying feedback to learning* – using assessment to inform learning approaches, through conversation, by reflecting and by teaching and helping others.
- ▶ *One-to-one* – by being coached and mentored.
- ▶ *Real-world learning* – by real-world problem solving, through personal or collaborative enquiry and by thinking critically and producing knowledge.
- ▶ *Against the clock* – by competing, through simulation and role play and through games.
- ▶ *Online* – through virtual environments and seamlessly blending virtual with face-to-face learning environments.
- ▶ *Any time* – on the fly. This last category is a simple reminder that much of what apprentices learn is not planned, stressing instead the need for them to be ready to learn. “On the fly” learning is unplanned and informal, the result of an unexpected occurrence from which a lesson can be learned.

Methodologies like the project-based training method, illustrated in figure 4.3, enable more flexible learning, which is especially helpful for allowing apprentices to master complex tasks independently (see also the video link).



Video: *Action-oriented vocational training steps*,
<https://www.bibb.de/govet/en/98265.php>

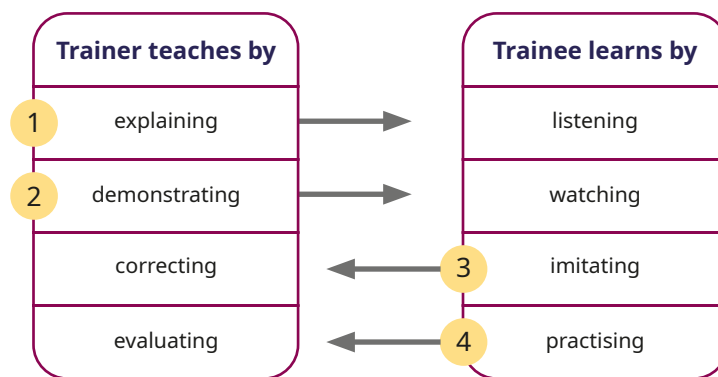
► Figure 4.3 The project-based method: learning the complete work process



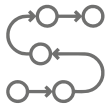
Source: Based on BIBB, n.d.

Another training method used in apprenticeship is the four-step method of training and learning. With the four-step method, a training programme can be developed for a workplace to provide a conducive learning environment for the trainee. As illustrated in figure 4.4, the trainer first explains and demonstrates the training content, as trainees and apprentices learn passively by listening and watching. Apprentices' learning is then strengthened through imitating their trainers. The method requires trainers to provide direct guidance and continuous feedback to apprentices.

► **Figure 4.4 The four-step method of training and learning**



Source: Authors' own figure, based on information provided by Dr Frank Wenghöfer, Dresden Technical University.



The steps necessary to ensure the relevance and suitability of training and teaching methods

- As discussed in section 2.4 on instructional and learning media, the entity responsible for managing apprenticeship programmes should facilitate the development of instructional media and training methodologies for various apprenticeship programmes.
- The entity should ensure the availability of training programmes for developing the capacity of TVET teachers and in-CTs in using diverse training and teaching methods and instructional media (refer to section 3.4).
- TVET teachers and in-CTs should identify and select a range of training methods for potential use in their apprenticeship programmes. They should adapt the training methods according to apprentices' individual needs and in the context of the particular occupation.
- During the implementation of the enterprise training plan, teachers and in-CTs should evaluate the effectiveness and suitability of the selected training methods and modify them accordingly. They should also provide feedback to the developers of instructional media to ensure the relevance of training and teaching materials.



Tips

- ★ Use the feedback from apprentices to evaluate and improve training and teaching methods.
- ★ The use of modern technology can facilitate the development and implementation of innovative methodologies.



Tools for providing various, effective training and teaching methods

Tool 4.4.1 12 training methods for use by in-company trainers, Germany

This tool presents and explains different teaching methods that can be used by in-CTs so that apprentices can learn in an autonomous, motivated and goal-oriented way. Development of comprehensive competencies (as mentioned in section 3.3) is at the heart of these modules, and these methods aim to teach apprentices problem-solving, communication, teamwork and learning-to-learn skills. The tool supports in-CTs with information on how to create a good learning and working environment to ensure that the apprenticeship is a success for both apprentice and company.

The tool has 12 different learning modules that help in-CTs to master a range of training methods to support them in guiding apprentices.

Source: https://www.foraus.de/de/foraus_111699.php (in German)

Tool 4.4.2 Manual for the instruction of vocational trainers in industrial and technical trades, Afghanistan

The *Reader for Instruction of Vocational Trainers of Industrial and Technical Trades* offers action-oriented information on the planning, implementation and assessment of practical lessons in various industrial-technical vocations.

This tool delivers the latest scientific knowledge for the organization of teaching and learning methods for practical apprenticeship training and the control of the learning process in practice as well as in the complex interaction of didactics and teaching and learning methods. The tasks and questions repeated at the end of each of the five chapters reinforce the lessons learned.

Source: www.giz.de/en/mediacenter/publications.html (enter the title into the search bar)



© ILO



Using and analysing work processes

From the work process to the professional field of action

Creating learning and work tasks

It's in the mix: training and teaching methods

Defining and evaluating skills

Video: *Using and analysing work processes; From the work process to the professional field of action; Creating learning and work tasks; It's in the mix: Training and teaching methods; Defining and evaluating skills,*

https://www.youtube.com/watch?v=jBkPYLGaDsE&list=PLKk3TOS83jk_V34dKa4JtiAY9r14J9zZP&index=2

https://www.youtube.com/watch?v=IJ9_UpNZVYg&list=PLKk3TOS83jk_V34dKa4JtiAY9r14J9zZP&index=3

https://www.youtube.com/watch?v=Y-8jpaWtiyo&list=PLKk3TOS83jk_V34dKa4JtiAY9r14J9zZP&index=4

https://www.youtube.com/watch?v=OfT_ERAQIQ&list=PLKk3TOS83jk_V34dKa4JtiAY9r14J9zZP&index=5

https://www.youtube.com/watch?v=u8OWcCm274k&list=PLKk3TOS83jk_V34dKa4JtiAY9r14J9zZP&index=6.

Tool 4.4.3 Lesson planning and action-oriented teaching – a manual for secondary technical schools, Afghanistan

This publication is a lesson-planning guide for teachers, especially those working in secondary technical schools. It provides information on the planning, implementation and evaluation of theoretic vocational lessons, while at the same time describing the necessary scientific background knowledge in the areas of learning psychology, teaching and learning/didactics, the tasks of teachers, and the evaluation of the quality of teaching and learning. It also includes media resources and methodoogies for teaching.

Source: www.giz.de/en/mediacenter/publications.html (enter the title into the search bar).

Tool 4.4.4 Teaching and training methods in apprenticeship: A review of research, United Kingdom

This publication, *Remaking apprenticeships: Powerful learning for work and life*, is a review of the research into the pedagogy of apprenticeships, exploring the art, science and craft of teaching and learning methods for apprentices.

This tool is linked to six proposed learning outcomes for apprenticeships:

- Routine expertise in an occupation.
- Resourcefulness – the capacity to think and act in situations not previously encountered.
- Craftsmanship – pride in a job well done and an ethic of excellence.
- Functional literacies – numeracy, literacy, digital and graphical skills.
- Business-like attitudes – customer- and client-focused, entrepreneurial and aware of the concept of value for money, whether in the for-profit, public or third sectors.
- Wider skills for growth – the dispositions and wider skills for a lifetime of learning and change.

The identified learning methods appropriate to apprenticeships involve: learning from experts, deliberate practising, hands-on learning, feedback which promotes learning, real-world problem-solving, one-to-one coaching and mentoring, competing against the clock and seamless blending of online and face-to-face learning.

Source: www.cityandguilds.com/-/media/documents/what-we-offer/apprenticeships/remaking-apprenticeships_final-pdf.ashx.

Tool 4.4.5 Approaches to effectively engage apprentices and students to lower the drop-out rate, NetWBL

Building on successful practices, tools and approaches for the prevention of student drop-out, partners from six European countries came together in the “tune in!” project with a view to disseminating information on all such successes. The “tune in!” toolbox contains practical examples of exercises that can be used by teachers and trainers and has a notably practical focus (learning by doing). Notably, a set of associated guidelines has been produced for those new to the subject of educational drop-out. Materials (toolbox and guidelines) can be accessed in English and all six partner languages and form a useful and practical addition to occupational and transferable learning materials.

Source: www.wbl-toolkit.eu/index.php?id=51



Tool 4.4.6 A digital platform providing online apprenticeships and career coaching services for apprentices, France

Openclassrooms is a platform that provides the off-the-job training component through online learning. Video courses and real-life projects are always accessible, allowing apprentices to work wherever and whenever happens to fit into their schedules. The Openclassrooms apprenticeship programmes include weekly, one-to-one mentorship sessions with a dedicated professional in each field, supporting apprentices through their programmes.

Apprentices can earn bachelor's and master's-level diplomas in web development, data, IT and project management, among other subjects. They can also develop crucial soft skills, such as working effectively in teams, public speaking and learning how to learn efficiently.

Source: <https://openclassrooms.com/en/>



► 4.5 Monitoring, assessment and certification

A comprehensive, credible mechanism for monitoring and assessing apprentices' performance is an indispensable component of all quality apprenticeship programmes. It is crucial for ensuring apprentices' progress and establishing that they are on the right track to attain the required competencies to complete the programme (see box 4.3).

Box 4.3 Monitoring apprenticeships, South Korea



In South Korea, monitoring of apprenticeships starts from the selection of the participating company and proceeds until the completion of the training. It covers overall work, such as preparation for training, apprentice recruitment, treatment of and working conditions for apprentices, teaching methods, management, assessment and certification, and the use of HRD-Net – Vocational and Information Network.

Source: Kang, Jeon and Lee, 2017.

Assessment is usually divided into two categories with different objectives: formative and summative assessment. Summative assessment (also known as assessment *of* learning) refers to final assessments (including tests and examinations) after the completion of the apprenticeship programme. It is used to determine whether apprentices have achieved the learning outcomes of the programme or competency standards that would make them eligible for the intended qualification. Formative assessment (also referred to as assessment *for* learning), by contrast, draws on information gathered at frequent intervals throughout the learning process, with the aim of identifying specific learning needs and adjusting training and teaching accordingly (Looney, 2011).



The issue: Why formative assessment is important for quality apprenticeships

Through formative assessment, the learning progress of apprentices can be monitored continuously throughout the apprenticeship programme. More specifically, it allows enterprises and TVET providers to:

- be fully informed about the learning and training of apprentices in various training venues, and whether they encounter any challenges during their training period
- improve the coherence of on- and off-the-job training offered by enterprises and TVET providers, respectively, in different training venues



© ILO

- ▶ enhance apprentices' awareness and understanding of the expectations of the programme and of their progress
- ▶ identify the strengths and weaknesses of individual apprentices, and provide the required support to improve their learning and performance
- ▶ identify apprentices who are falling behind or at risk of dropping out and introduce individual support measures as appropriate
- ▶ make an informed decision on whether to offer the graduating apprentice a job
- ▶ modify and adjust the programme to strengthen its benefits for all parties involved.

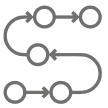
It is important to keep in mind that monitoring of apprentices should not be regarded as a control measure or as a means of eliminating weaker apprentices during the programme, but rather as a support instrument for ensuring the success of apprenticeship programmes for all.



The issue: Why the summative assessment and certification system is important for quality apprenticeships

Summative assessment evaluates whether an apprentice has achieved the learning outcomes or competency standards prescribed for a programme. As these learning outcomes are based on the occupational standards, the qualification received by apprentices on completion of their programme demonstrates that they have gained the required competencies to work in that occupation. It is important to ensure that the assessment process is of high quality, reliable and fair, and involves social partners, so that employers can confidently place their trust in it and value the qualification acquired by apprentices in their recruitment process, thereby improving the prospects of apprenticeship graduates in the labour market.

The qualification awarded to apprentices should be an integral part of the education and training system of the country and allow further education and training opportunities for apprenticeship graduates.



The steps needed to implement the monitoring, assessment and certification mechanism

The implementation of assessment requires the collaboration of various stakeholders, such as quality assurance bodies, employers' and workers' organizations, enterprises and TVET providers. The steps listed below illustrate the roles of the different actors in monitoring and assessing apprentices' learning progress.

- ▶ Employers' organizations can play a leading role in raising awareness about the importance and benefits of an effective monitoring and assessment system for apprenticeships. They can also provide support for enterprises to strengthen their monitoring and assessment capacity.
- ▶ Quality assurance bodies and the entities responsible for assessment should develop a mechanism for monitoring and assessment with the involvement of all stakeholders. Apart from clearly defined learning outcomes and assessment criteria, they should also specify the roles and responsibilities of relevant stakeholders.
- ▶ Enterprises can develop a performance appraisal sheet for evaluating apprentices' performance based on a set of criteria (refer to Tool 4.5.1). The evaluation criteria should cover both occupation-specific technical skills and generic, transferable skills that support occupational mobility and career development.
- ▶ In-CTs, supervisors or mentors should conduct regular monitoring interviews with apprentices to review their learning progress and achieved outcomes after each in-company training sequence and introduce supporting measures if necessary. Apprentices can also carry out self-evaluation of their performance, which is later discussed with their in-CTs or mentors to agree on a joint evaluation.
- ▶ In-CTs and teachers of TVET providers should keep track of what apprentices have learned and the activities that they have carried out on a daily basis during their on- and off-the-job training in an apprentice training logbook (see box 4.4). This information allows TVET teachers to offer teaching that supports apprentices' practical activities at the enterprise, while also enabling in-CTs to build on the theoretical knowledge that apprentices have acquired at TVET providers when assigning work tasks to complement apprentices' off-the-job learning content. A well-maintained logbook can also constitute a requirement for the final assessment.
- ▶ The quality assurance body or entity responsible for assessment should set up an examination committee to design and implement summative assessments covering both practical and theoretical aspects of on- and off-the-job training according to the occupational profile and the learning outcomes of the programmes. The committee should be composed of representatives from employers' and workers' organizations and TVET providers, and it might act on behalf of a credible and well-respected institution, such as an employers' organization, chamber or TVET agency.
- ▶ It is usually the responsibility of the quality assurance body to award the qualification to apprentices who successfully completed the assessment.

Box 4.4 Apprentices' logbooks

Many apprenticeship schemes involve logbooks, maintained by the apprentices, in which they note down the tasks they have performed and reference relevant documents, photographs of finished products, etc.

Logbooks are used in various ways:

- to direct apprentices' attention towards what they need to achieve
- to encourage them to reflect on their performance
- to record key stages of achievement for assessments of progress, or to count towards formal qualifications.

Source: ILO, 2018.

Box 4.5 Use of transparency in assessment

In South Korea, resources and documents related to external evaluation are open to the public on the apprenticeship website (www.bizhrd.net). Companies and apprentices can refer to the website to prepare for the evaluation.

Source: Kang, Jeon and Lee, 2017.

**Tips**

- ★ Giving a leading role to employers in the assessment process and involving industry experts as examiners can help to ensure the credibility of the certification.
- ★ A clear distribution of responsibilities, effective communication and close cooperation between the enterprise and the TVET institution, as well as a detailed feedback and evaluation mechanism for monitoring apprentices' progress are all essential features for the successful delivery of apprenticeships.



Tools for implementing a training assessment and monitoring system

Tool 4.5.1

A guide for monitoring and assessing apprentices' performance, United States

The *Employer's playbook* offers a "how to" guide for monitoring the apprenticeship programme's performance, to ensure that the programme works well and delivers the expected outcomes. It includes sections on the assessment of participants' success, training impact and support structures, as well as the evaluation of the programme and mid-programme adjustments. An example of an apprentice evaluation report can be found here:

www.themanufacturinginstitute.org/Hidden/~media/CBE15B009AA745F496C3BBAAD21286F6.ashx

Source: *Employer's playbook for building an apprenticeship program*, p. 83:

www.themanufacturinginstitute.org/~media/53456D700856463091B62D1A3DA262F4/Full_Apprenticeship_Playbook.pdf



Tool 4.5.2

Online mock tests and online assessment, India

In India, theory part of assessment of apprentices is conducted online, while the practical test is conducted by the employer at the shop floor premises. National Instructional Media Institute (NIMI) has developed a tool that allows apprentices and trainees to take mock tests on an online platform, to help assess and broaden their knowledge and skills and prepare for the theory examination. The test questions have three levels of difficulty to assess knowledge, functional understanding and problem-solving skills, and include pictures to test the practical understanding of the trainees.

The results are generated automatically at the end of the test and show correct answers with explanations, allowing apprentices/trainees not only to assess their knowledge, but also to study for the summative assessment. Finally, apprentices take part in an online summative assessment for all theoretical subjects.

A sample mock test can be found here:

<http://nimionlinetesting.in/moodle/moodle/course/view.php?id=11>

Source: <http://nimionlinetesting.in/moodle/moodle/>

Tool 4.5.3

An apprenticeship logbook, Bhutan

This apprentice logbook provides users with a record of the status of an apprentice's skills and knowledge; how, when and where these skills and knowledge have been gained; and who has been involved in providing and assessing the training.

This tool includes sections on the following aspects: instructions on maintaining the logbook, keeping a record of daily activities, attendance sheets and performance assessment forms.

Source: https://www.skillsforemployment.org/KSP/en/Details?dn=EDMSP1_254638

Tool 4.5.4 An apprenticeship logbook, Denmark

This tool provides an example of an apprentice logbook for a carpentry apprenticeship. The logbook, which should be completed jointly by the apprentice and the company, includes evaluation forms that contain a number of tasks relevant to the apprentice's development of specific job-related competencies, with five levels of assessment – from apprentice's lack of knowledge and skills in a given area to the ability to independently plan and execute the assignment.

In addition to the employer assessment, a special activity list is provided for the apprentice to indicate their familiarity with profession-related sub-topics listed under technical themes. This provides the apprentice and the enterprise with an overview of the apprentice's general level of skills.

Source: www.bygud.com/media/2030/carpenter_log_book.pdf

Tool 4.5.5 Sample logbook, Asian countries¹

This tool provides a template for a logbook that can be used by an enterprise and apprentices for the on-the-job training component of the apprenticeship (refer to annex 12 of the tool).

Source: GIZ (2017) *Down to earth: A practitioner's guideline to work with business and industry in TVET*: https://sea-vet.net/images/seb/e-library/doc_file/311/giz2017down-to-earthguideline-version-2.pdf



Tool 4.5.6 Mobile logbook, British Columbia

In British Columbia, apprentice and trainee crane operators use a mobile logbook called SkillRecord to record and demonstrate their work experience and competencies.

The mobile logbook allows users to log hours worked, tasks performed and equipment used, and makes it easy to add photographs to the logbook entries. It automatically summarizes logbook entries by employer, equipment and other criteria, providing a broader, more complete picture of apprentices' experience and skills. Finally, SkillRecord also allows apprentices to view their logbooks, thereby facilitating collaboration and peer-to-peer learning.

Source: <https://bccranesafety.ca/logbook/>
<https://skillrecord.com/british-columbias-apprentices-embrace-mobile-logbook/>

¹ The source publication was developed by the Community of Practice "Private Sector Cooperation in TVET" within the GIZ Sector Network Assets for Asia. The Community of Practice comprises GIZ staff (international experts, national personnel, integrated experts and development advisers) from the following Asian countries: India, Indonesia, Lao People's Democratic Republic, Mongolia, Myanmar, Pakistan, Sri Lanka, The Philippines, Thailand and Viet Nam.

Tool 4.5.7 Model documents for reporting on apprentice performance, Switzerland

This assessment form is used for the training report and indicates the level of progress achieved by the apprentice, at least once each semester.

The apprenticeship trainer and apprentice discuss the content of the training report, which includes the assessment of technical, methodological, social and personal competencies, as well as a section to be filled in by the apprentice, with a focus on technical and methodological competencies, working atmosphere and level of personal encouragement with the programme.

Source: The training report form: http://vpvet.ch/dyn/bin/21423-23926-1-bildungsbericht_eg_2016i.pdf

Guide to using the form: http://vpvet.ch/dyn/bin/21423-23927-1-infoblattbb_eg_2016.pdf

Tool 4.5.8 Rules and conditions for formative and summative assessment, South Africa

This tool from South Africa offers the necessary policy support and assistance for developing, organizing, structuring and implementing an assessment framework for the National Certificate (Vocational).

The tool provides rules and conditions related to conducting, managing and administering continuous assessment and external examinations. It describes the rights of all those involved in the assessment process, including officials involved in the administration of the assessment, apprentices, parents and institutions that make use of assessment results.

Source: www.dhet.gov.za/FET%20College%20Examination/Other%20TVET%20College%20Examination%20Documents%201/1Policy%20on%20the%20conduct%20of%20exams%2030287%20of%2012%20september%202007%20PDF.pdf

Tool 4.5.9 Assessment and certification system, Denmark

In Denmark, exams must reflect the goals and objectives of each programme. Consequently, exams vary from programme to programme, and include oral, written, oral based on projects (project based assessment) and a journeyman's test.

Tests and exams are typically organized by the VET College. The trade committee is responsible for the journeyman's test, although the actual test is agreed in cooperation between the trade committee and the VET College.

After successful completion of the requisite school period, participants receive a school certificate (skolebevis), and after completion of the whole programme, apprentices receive an education certificate, which includes the school certificate, the placement certificate, a letter of trade and, if appropriate, the journeyman's certificate. The education certificate confirms that the apprentice is a skilled worker and can be employed accordingly.

Source: www.apprenticeship-toolbox.eu/?id=89:examination-certification-in-denmark

Tool 4.5.10

How final assessment is organized, Switzerland

In Switzerland, “qualification procedure” is the generic term for all final assessments in vocational training, and it can take the form of a single examination, several partial examinations or other qualification procedures that are separately recognized by federal authorities (SERI). Each vocational programme is regulated by a federal ordinance, which includes the requirements for the qualification procedure to be deemed successful. In most programmes, the work-based training is assessed through pre-assigned examination projects and/or individual practical projects.

- Pre-assigned examination project – the defined examination tasks are set by the professional organization and are the same for all learners in the region. These examinations can be held either centrally (e.g. in a training centre) or in the respective host companies and are conducted at the same time for all candidates.
- Individual practical project – the learner completes an individual practical project at his or her workplace in accordance with a real work task established by the employer. The candidate’s supervisor drafts a document describing the task to be examined (with the learner’s assistance) and submits it to be assessed by the board of examiners. After the completion of the project, it is reviewed by the supervisor, who then suggests an assessment. During an expert discussion, the candidate presents his or her project to the board of examiners. The board and the supervisor reach an agreement on the final grade to be awarded for the work done.

Source: <http://qv.berufsbildung.ch/dyn/1579.aspx>
www.berufsbildung.ch/dyn/11007.aspx?lang=FR&action=detail&value=6&lex=1



Tool 4.5.11

How examiners for the apprenticeship final assessment are chosen and trained, Switzerland

In Switzerland, examiners are appointed by the cantonal authority (local government) on the recommendation of the professional associations. Their mandate is to prepare and conduct all or part of the examinations.

Examiners are qualified people recruited from among those responsible for delivering training in companies and vocational schools. They must hold at least the federal certificate of competence of the professional field in which they work as experts or have an equivalent qualification. The experts should be trained in their professional field and have adequate pedagogical, methodological and didactic know-how. They are trained in courses provided by the Federal Institute for Vocational Education and Training (SFIVET) in collaboration with the cantons and labour organizations.

The *Handbook for experts on qualification procedures for initial vocational training* is the reference work for carrying out qualification procedures. Published by the SFIVET, the manual was developed in collaboration with the Swiss Service Centre Vocational Training (SDBB) and vocational training partners. It contains approaches and solutions for the preparation, implementation and evaluation of qualification procedures at upper secondary level and is suitable for all specialists who become examiners.

Source: SFIVET's basic and continuous courses for examiners:
www.iffp.swiss/expertes-et-experts-aux-examens

Link to the handbook for examiners (available in French, German and Italian):
<http://pq.formationprof.ch/dyn/7236.aspx>

Tool 4.5.12

How final assessment is organized, Germany

In Germany, the final examination is regulated in the respective occupational ordinance and the competent bodies, which are usually the chambers, play an important role.

The final examination in this example of the qualification for an electronics technician for industrial engineering consists of two parts:

- Part 1 takes place before the end of the second year of training. The examination consists of a complex work-related task, situational oral examination elements and written tasks.
- Part 2 of the final examination comprises tasks related to the following aspects: company order; system design; function and system analysis; and business and social studies. Attention is also given to VET, employment and collective wage agreement law, the structure and organization of the company providing the training, health and safety at work, environmental protection, company and technical communication, planning and organization of work, evaluation of results, quality management and assessment of the safety of electrical plant and equipment.

Source: [www.bibb.de/dokumente/pdf/ElektronikerIn\(1\).pdf](http://www.bibb.de/dokumente/pdf/ElektronikerIn(1).pdf)

▶ 4.6 Social inclusion



The issue: Why social inclusion is an essential component of quality apprenticeships

Apprenticeship can be a powerful and reliable pathway for people from all kinds of backgrounds to obtain the competencies required to access decent jobs and pursue rewarding careers. For enterprises, inclusive apprenticeships enable access to a wider pool of talent and create a positive image of the enterprise (see box 4.6).

Box 4.6 Refugees in apprenticeships, Germany



In 2016, Nestlé Germany launched the “Nestlé helps” initiative to provide emergency aid and strengthen the integration of refugees. One of the goals of the programme is to provide access to work and help to integrate young refugees into the labour market through apprenticeships and internships. Initially, 20 young people will be offered apprenticeships and 25 have already completed internships. In addition to the actual training, Nestlé covers the costs of necessary language courses.

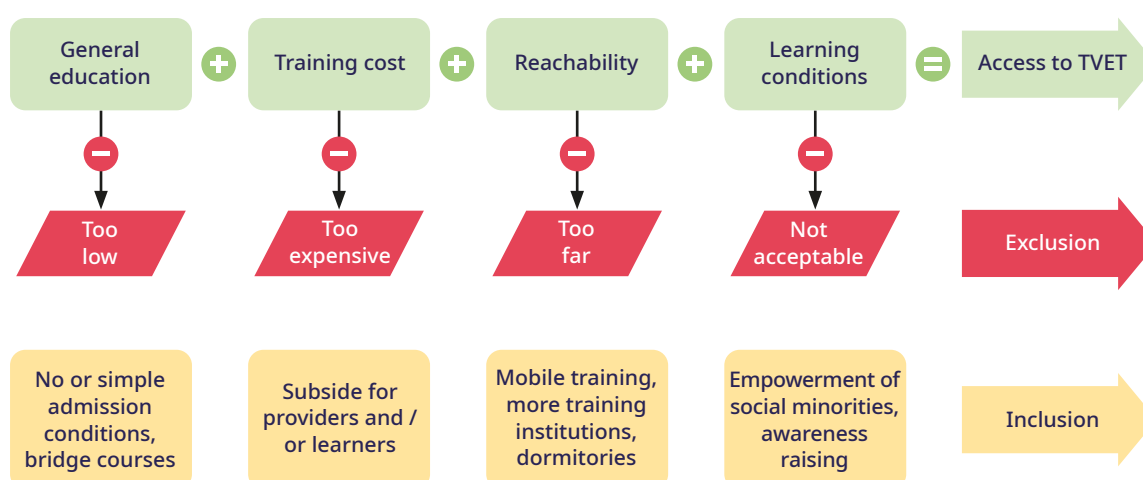
Source: Information collected and provided by GAN Global; <https://www.nestle.de/medien/news/nestle-hilft>

Inclusiveness in apprenticeships needs targeted approaches to offer equitable opportunities to all sections of society in the recruitment process, while supporting apprentices’ successful programme completion, regardless of their social and educational background. However, multiple challenges currently undermine the goal of inclusiveness; for example, minimum entry requirements for apprenticeships that may render many candidates ineligible; insufficient opportunities and/or inadequate provision for persons with disabilities and those living in rural and remote areas; gender biases. Figure 4.3 illustrates some of the inclusion challenges that arise in TVET and apprenticeship programmes.

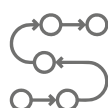
In addition to overcoming the challenges in terms of access, apprentices, especially the younger ones, may need targeted support to successfully complete the apprenticeship programme. It is worth noting that vulnerable young people are more likely to struggle to complete their apprenticeship than an average apprentice. While the drop-out of an apprentice commonly results in a weak labour market outcome for the individual, it is also costly for the employer who has invested in recruiting and training that apprentice (OECD, 2018a).

Furthermore, programmes designed for apprentices with disabilities are required to address some specific issues. An example from Brazil is given in Toolkit 1, box 39.

► Figure 4.5 Inclusion challenges in TVET and apprenticeship



Source: Based on Kehl et al., 2019.



The steps needed to ensure inclusion in apprenticeship programmes

- Each enterprise, in consultation with workers' organizations, may develop a strategy for inclusiveness that is in line with national policies as well as its own vision. The strategy may include the following aspects:
 - » setting targets for increasing the participation of disadvantaged or under-represented groups
 - » sensitizing and training staff, particularly those responsible for apprenticeship recruitment, supervision and mentoring, about the importance and benefits of promoting inclusiveness, paying special attention to women, persons with disabilities, migrants and other vulnerable groups
 - » offering additional support and mentorship to apprentices who are at risk of dropping out
 - » providing targeted guidance services, in cooperation with organizations that represent or support disadvantaged or under-represented groups, both before and during an apprenticeship
 - » strengthening outreach activities to prospective apprentices from disadvantaged or under-represented groups organized by career guidance counsellors, education providers, enterprises and employers' and workers' organizations.
- Enterprises should ensure effective induction of young persons in the workplace and take measures to prevent discrimination and harassment at work.
- The appropriate regulatory body should assess the inclusiveness of apprenticeships and take corrective measures, if needed.



© ILO



Tips

- ★ To ensure inclusiveness in apprenticeships, a combination of approaches is required at macro, meso and micro levels. While practitioners can take action at the micro or meso levels, policy-makers need to promote an enabling environment at the macro level, through developing effective policies and incentivizing enterprises to ensure inclusiveness. These issues are discussed further in chapter 10 of Toolkit 1.
- ★ To raise awareness of the importance and benefits of inclusiveness in apprenticeships, case studies on successful apprentices from disadvantaged backgrounds should be promoted.
- ★ The following measures can help to promote social inclusion in apprenticeships:
 - ▶ *Pre-apprenticeship programmes*, designed to accommodate a wide range of learners from diverse educational and social backgrounds, provide them with the full range of competencies needed to move on to a regular apprenticeship. Some examples are given in Table 6.1 in module 6.
 - ▶ *Support measures during an apprenticeship*, designed to ensure that apprentices who struggle at various stages of an apprenticeship receive targeted assistance, allowing them to complete their programme successfully.



Tools for social inclusion in apprenticeships

Tool 4.6.1

Integrative apprenticeships for learners with special needs, Austria

In Austria, integrative apprenticeships (IBA) are designed for learners with special needs, those with disabilities and those without a basic school-leaving certificate. Characteristics of integrative apprenticeships include the following:

- Longer completion period or partial qualification option: Participants can take longer to complete the programme (by one or two years) or obtain a partial qualification in one to three years.
- Training assistance: The IBA programme supports apprentices throughout their training, both during placement with the training company and at school. Training assistance has both a coordinating and a support function. Most training assistants have a special education background and come from organizations for disadvantaged youth. When IBA takes place at a training company, training assistants are in charge of administrative tasks, define the content of the training agreement between the apprentice and the training company, prepare/sensitize the company employees in advance of the arrival of the apprentice and find a person to offer initial support, and register the apprentice at the vocational school. Subsequently, training assistants act as mediators, provide tutorial support and design the final exam for the partial qualification pathway. When IBA takes place at a supra-company training centre, training assistance is provided by the centre's social worker.

Source: www.oecd.org/education/skills-beyond-school/Work-based_Learning_For_Youth_At_Risk-Getting_Employers_On_Board.pdf

Tool 4.6.2

Guidance on how to make apprenticeships and workplace learning inclusive for those with disabilities, ILO

This ILO tool gives an overview of the concept and role of disability-inclusive apprenticeships and workplace learning and focuses on practical approaches to implementing these schemes. It also details policy recommendations for governments, skills development institutions, employers and other stakeholders – including workers' organizations and those for persons with disabilities – for creating a more enabling environment. The publication includes examples from around the world which demonstrate how disability-inclusive apprenticeships and workplace learning can be put into practice.

Source: www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_633257.pdf

**Tool
4.6.3****A special, shorter apprenticeship programme for vulnerable youth, Switzerland**

In Switzerland, special two-year apprenticeship programmes can be offered to young people aged at least 15 years old who have completed lower secondary education, who are at risk of dropping out of education and training and/or who are struggling to obtain a “regular” three- or four-year apprenticeship.

The programme is provided in around 60 occupations. Programmes are organized like regular apprenticeships and include on-the-job training and time spent in a vocational school. Typically, one day per week is spent in school, with the optimal class size considered to be 12 students. Apprentices in this special programme are offered individual support, including one-to-one tutoring, remedial courses and support from in-CTs. On completion of the special programme, progression to three- or four-year apprenticeships is possible (based on national or canton level regulations).

Cost-benefit analysis of the two-year apprenticeships shows that, on average, participating enterprises manage to break even financially by the end of the programme, so these schemes can appeal to employers, as well as meeting the requirements of social inclusion.

Source: www.oecd.org/education/skills-beyond-school/Work-based_Learning_For_Youth_At_Risk-Getting_Employers_On_Board.pdf

**Tool
4.6.4****Tools for the identification of apprentices who are at risk of dropping out and guidance for trainers, VET teachers and parents on dealing with this situation**

The project QuABB (Capacity building for apprentices, companies and vocational schools involved in apprenticeship training) provides a set of tools for the identification of apprentices who are at risk of dropping out and offers guidance to trainers, VET teachers and parents on handling this situation. The early warning toolkit contains a collection of 30 tools for apprentices, in-CTs and VET teachers. The mood barometer is an indicator used to capture a snapshot of the emotional status of the class and enable teachers to enter into conversation with those apprentices experiencing negative moods.

Source: <https://www.cedefop.europa.eu/en/toolkits/vet-toolkit-tackling-early-leaving/resources/qualifizierte-ausbildungsbegleitung-betrieb> (in German)

4.7 Checklist

By completing the following checklist, readers of this Toolkit can revisit the key elements involved in the organization of apprenticeship training and also carry out a rapid assessment of the functioning of related systems. It will assist readers to identify the elements that could be improved and to assess whether additional measures are needed.



Organizing quality apprenticeship programmes	Yes	No	Needs improvement	Remarks
Are all stakeholders involved, through social dialogue, in developing a communication strategy to promote apprenticeships?				
Are youth groups involved in the development of promotional activities for apprenticeships?				
Is the communication strategy effective in engaging different target groups by taking their specific needs into account?				
Can prospective apprentices obtain adequate information about the benefits of participating in apprenticeships?				
Are employers responsible for hiring apprentices?				
Is there a company training plan that specifies the details of on-the-job training and identifies the responsible supervisors or mentors at the company?				
Is the company training plan part of the apprenticeship agreement?				
Is there a rotation plan across different departments within the company for enriching and diversifying apprentices' learning experiences?				
Is there a mechanism for resolving conflicts and settling disputes in the event that problems arise?				
Is the learning content sufficiently well-coordinated between the TVET providers and employers to achieve effective learning progress?				
Have TVET providers and employers reached an agreement on the distribution of on- and off-the-job training periods?				
Is there a systematic assessment mechanism that encourages and supports apprentices' learning progress?				

Organizing quality apprenticeship programmes	Yes	No	Needs improvement	Remarks
Is there a method whereby TVET providers and employers can exchange information about the learning progress of apprentices?				
Do apprentices use a logbook to document their learning progress? If so, do logbooks facilitate the exchange of information on apprentices' learning progress between TVET providers and employers?				
Is there a clear agreement on how the costs of apprentices' assessment should be shared between different stakeholders?				
Are workers' and employers' organizations involved in the design of apprentices' assessment?				
Do employers play a leading role in the assessment of apprentices' learning?				
Do the assessment criteria align with the relevant occupational profile and curriculum?				

The questions to which readers have answered “No” or “Needs improvement” point to gaps where measures to improve or strengthen the organization of apprenticeship training in their contexts should be considered. It is important to keep in mind that the involvement of social partners, including workers' and employers' organizations, in the design, development and implementation of apprenticeships, is a key factor for the success and sustainability of apprenticeship programmes.

The apprenticeship model provides young people with opportunities to develop the skills required to thrive in the 21st century.

Morten Wierod (ABB President), June 2019

ISBN: 978-92-2-032183-6



9 789220 321836