

GUIDANCE NOTE 8

Implementing work-based learning

Topic overview

An international trend towards the **relevance of work-based learning (WBL)** in vocational education and training (VET) systems can be observed⁽¹⁾. A European Commission communication, 'Rethinking education: Investing in skills for better socio-economic outcomes' (EC, 2012), emphasises the importance of WBL, focusing on the need to foster cooperation between VET and the private sector. However, a universally accepted definition or common understanding of WBL does not exist. Notions of WBL vary between and within countries, and there are overlaps between a number of concepts (see Figure GN8.1).

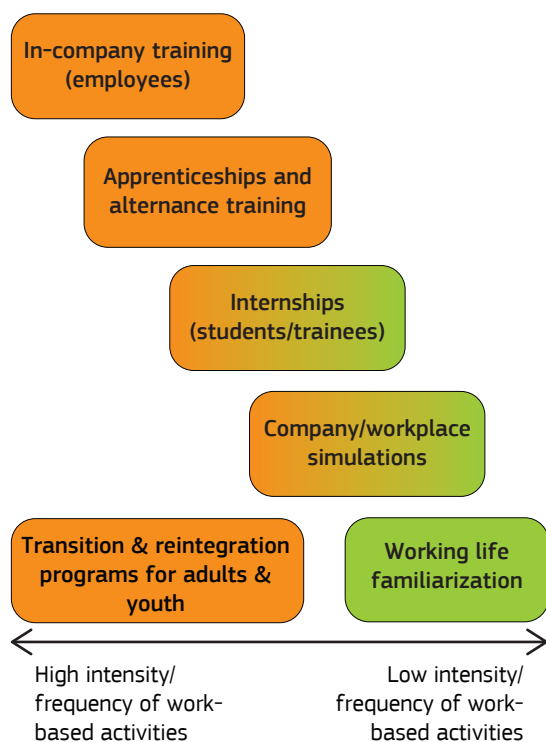
The WBL Sub-Working Group of the Inter-Agency Working Group on Technical and Vocational Education and Training (IAG-TVET) conducts work in three areas⁽²⁾: (i) creating a **common understanding of WBL**; (ii) creating a **policy framework**, by conducting a mapping which will clarify the different agencies' policy messages on WBL; and (iii) creating an **advocacy tool** to support the development of quality WBL. The European Commission's Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL) is

⁽¹⁾ A number of sources can be consulted for additional information on WBL policy and good practice in implementing WBL programmes, e.g. Cedefop (2015), EC (2013a, 2013b), and ETF (2014).

⁽²⁾ The IAG-TVET was established in 2009 with the aim of coordinating activities of the agencies active in the field of TVET — i.e. the Asian Development Bank, the European Commission, the European Training Foundation, the International Labour Organization, the Organisation for Economic Co-operation and Development, the United Nations Educational, Scientific and Cultural Organization, and the World Bank.

SUMMARY OF KEY ASPECTS

- An international trend towards the relevance of WBL schemes in VET systems can be witnessed. The integration of WBL, in addition to apprenticeship, in the broader education and training system is a first condition of success.
- WBL refers to learning that occurs through undertaking real work, through the production of goods and services, whether this work is paid or unpaid. Informal apprenticeship systems are widespread in many developing countries.
- WBL also refers to combinations of classroom-based learning and learning in the workplace. Companies are engaged as providers of practical training periods, together with VET vocational secondary schools or vocational training centres.
- WBL helps learners build key competences (e.g. communication, teamwork, customer relations and problem-solving skills) in which they constantly learn new skills and new ways of doing things. They tend to be more productive and more profitable as well as more innovative.
- WBL connects learners more directly to the world of work. It can improve learners' job prospects by giving them more relevant work skills and by connecting them to employers who may offer them employment after they graduate. This can be an important way of expanding opportunities and increasing social inclusion among target groups that are disadvantaged in the labour market.

FIGURE GN8.1 Different types of WBL

Source: ETF, 2013b.

also working on this subject; a study is forthcoming on VET teachers and trainers in WBL/apprenticeships⁽³⁾.

In a broad definition, WBL refers to **combinations of classroom-based learning and learning in the workplace**, as is the case in the typical central European dual apprenticeship schemes. WBL refers practical learning whereby a young apprentice acquires the skills for a trade or craft in a micro, small or medium-sized enterprise (MSME) working side by side with an experienced master craftsperson. This work can be paid or unpaid, but it must be real work that leads to the production of goods and services. The integration of WBL — and not only apprenticeship — in the broader education and training system is a first condition of success (see Box GN8.1).

In many developing countries around the world, large sections of the economy experience **difficulties in**

BOX GN8.1 General models of WBL in initial VET in Europe

- **Alternance training schemes or apprenticeships** are typically known in Austria and Germany as the 'dual system'. These are fundamentally based on the integration of companies as training providers together with VET schools or other education/training institutes. In these programmes, learners spend a significant time training in companies.
- **School-based VET** includes on-the-job training periods in companies. On-the-job training periods typically cover internships, work placements or traineeships that are incorporated as a compulsory or optional element of VET programmes leading to formal qualification.
- WBL can be integrated in a school-based VET programme through on-site labs, workshops, kitchens, restaurants, junior or practice firms, simulations or real business/industry project assignments. The aim is to create **real-life work environments**, establish contacts and/or cooperation with real companies or clients, and develop entrepreneurship competences.

Many European countries combine these three general models of WBL. Terminology and definitions vary, and even a single term such as apprenticeship may have different connotations and underlying concepts.

Source: EC, 2013b.

recruiting workers with the appropriate knowledge, skills and occupational competences. The World Bank publication 'Skills, Not Just Diplomas: The Path for Education Reforms in ECA' concisely describes the dilemma many VET systems in developing countries face today (Murthi and Sondergaard, 2010). The publication highlights the fact that a large number of students complete upper secondary and tertiary education, but too many of them graduate without the right skills needed by industry. In order to pass skills from one generation to the next, low-revenue societies have developed informal apprenticeship systems that are purely workplace based.

⁽³⁾ This study is under the aegis of DG EMPL Unit E3, VET, Apprenticeships and Adult Learning.

In such cases, apprenticeship agreements are mostly oral, yet they are embedded in societal customs, norms and traditions (ILO, 2012). **Informal apprenticeship systems are widespread** in many developing countries. They are considered by far the most important source of skills training in Africa and South Asia. Informal apprenticeship is believed to be responsible for the majority of all skills development in Ghana, and accounts for almost 90 % of all training for trades in Benin, Cameroon and Senegal (see Box GN8.2).

BOX GN8.2 Informal and traditional apprenticeships in developing countries

Traditional apprenticeship is understood as the system by which skills are transmitted from a father or mother to one of their children, or between close family or clan members. Traditional apprenticeship systems have, in many regions of the world, evolved into informal apprenticeship systems which are open to apprentices from outside the family or kin group.

Source: ILO, 2011.

WBL is the acquisition of knowledge, skills and occupational competence through **carrying out — and reflecting on — tasks in a real occupational context**, either at the workplace or in a VET provider facility. It is a very effective modality for developing expertise and the kind of knowledge, skills and competence that are highly relevant to a particular occupation and a specific workplace. Because of the close relationship between learning and real-life work, as well as the nature of learning by observing and doing, the development of skills and knowledge goes hand in hand with the acquisition of procedural knowledge in any employment position, whether academic or non-academic.

WBL is an excellent way to acquire a broad range of knowledge, soft skills and occupational competences and behaviours through VET courses for secondary and post-secondary learners to achieve **employment-related competences in the workplace**. Many of these are difficult to develop outside of a real workplace — e.g. attitudes towards work, including taking responsibility, meeting deadlines and knowing how to

act in a given situation. Key competences (e.g. communication, teamwork, customer relations skills, project planning and problem-solving skills) are becoming increasingly important in today's labour market.

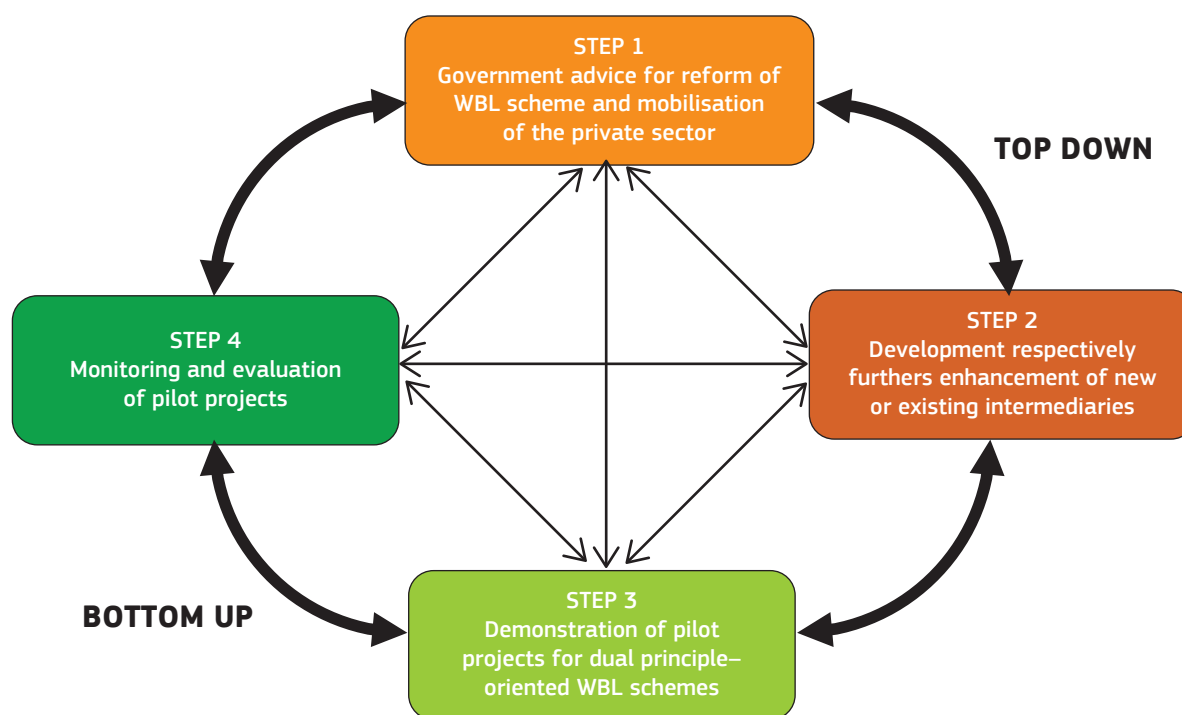
The effects of WBL on **self-confidence, self-efficacy and learner motivation** have been well documented. From the companies' point of view, workplaces in which apprentices constantly learn new skills and new ways of doing things tend to be more productive and more profitable. They tend to be more innovative, and better at using employee knowledge to improve product quality and customer service.

Preparing young people for the world of work through **real work experience improves their employability**. It can be a double asset in the transition from school to work and in competition for employment. On the one hand, learners obtain certain skills and competences more effectively through WBL; on the other hand, they already have a presence in the labour market since employers tend to recruit the best candidates from their own work-based VET programmes. In Australia, Belgium, France, Germany and the Netherlands, a high percentage of VET graduates find employment immediately after they complete their apprenticeship.

Procedure

Given the complexity of the formal and informal economies in developing countries and based on a different socio-economic and cultural value orientation, a direct transfer of European WBL schemes to developing countries seems impossible. However, a dual combination of practice-oriented learning at workplaces in companies with knowledge-based learning at classrooms in public or private VET providers can be proposed. To support the relevant partner organisations at the macro, meso and micro levels to build capacity for the development of WBL schemes, the use of a systemic multi-level approach is suggested based on a circular bottom-up approach combined with a top-down approach (see Figure GN8.2).

Partner organisations at the micro level are supported to **develop, test and evaluate** innovative dual principle-oriented WBL approaches. Different

FIGURE GN8.2 Methodological approach

conditions of the various labour market segments in the selected economic sectors must be respected. A reduction of pilot projects to only one labour market segment and one self-governing structure is considered inappropriate.

STEP 1: Conceptualise development frameworks of WBL schemes

The development of WBL schemes is conceptually, administratively and politically complex. A **strategic, contextual and structural re-organisation** of current forms of WBL schemes is needed as well as mobilisation of the private sector (e.g. through hearings, road shows, financial incentives, tax reductions, etc.) to offer training places in companies for apprentices. Addressees of the consultancy services are primarily the ministries with political leadership for WBL. Central areas of support requested from stakeholders include the design of policy and reform strategies with relevant regulations and the systematic relationships and dialogue structure between government, the private sector and civil society. Further areas of support are given to the development or adaptation of conceptual

frameworks for the development of national occupational standards, professional profiles and funding formula for WBL schemes.

STEP 2: Mobilise the private sector or social partner-driven intermediaries

Active participation of the private sector is essential for the implementation of WBL schemes. The modernisation of WBL schemes requires a more open and active social partnership between public authorities and the associated stakeholders, particularly employer organisations and unions. Many countries have begun to establish social partner-driven intermediaries such as sector skills councils. In India, the National Skills Development Corporation (NSDC) has been leading the establishment of sector skills councils as an instrument for meeting the demands for a trained workforce in different industry sectors since 2009. It has done this by bringing together all the stakeholders: industry, labour and VET providers.

The intermediaries are expected to participate in the establishment of standards-generating bodies

for the development of national occupational standards and framework curricula for WBL schemes. In a range of settings, these sector skills councils have become **major vehicles for employer involvement** in setting occupational skills standards, often within national qualifications frameworks (NQFs). Another intervention is the establishment of quality assurance bodies for the assessment and certification of WBL schemes at the regional or local level. Furthermore, both financial and non-financial incentives are crucial for starting WBL, and more needs to be known about how to get companies on board.

For example, in Algeria, the national, regional and provincial chambers of commerce and industry, agriculture, and arts and crafts have a role in **promoting work-based apprenticeships** (see Box GN8.3). Local apprenticeship commissions are responsible for gathering offers of apprenticeship places from employers and applications for apprenticeships from potential apprentices. Teachers from vocational schools play a role in ensuring that employers and apprenticeship masters deliver appropriate training. However, ongoing assessment of apprentices' skills and learning outcomes is generally regarded as an area in which further development work is needed.

STEP 3: Develop tools and processes of WBL implementation

Public authorities, stakeholders and VET providers have developed a range of tools and processes that can be used to **support the quality of WBL**; these include the following:

- overarching guidelines to integrate WBL into VET programmes;
- external quality assurance measures/tools;
- process and tools to support planning and implementation of WBL in practice;
- assessment and recording achievement approaches;
- measures to match learners and placements;

BOX GN8.3 Starting and expanding of work-based apprenticeships in Algeria

There is a long tradition of apprenticeship in Algeria. Following the country's independence, formal training through apprenticeships was established for the first time in 1975, when legislation was passed giving apprenticeship a legal basis. VET by way of apprenticeship was further institutionalised by law in 1981 — through legislation that defined the scope, mission and role of each party involved, their rights and obligations, the entry conditions for apprentices and the conduct of the training. Following this, apprenticeship saw a remarkable expansion and rise in popularity during the 1980s. The number of apprentices in Algeria increased from 40 000 in 1981 to 250 000 in 2011, accounting for approximately 40 % of all vocational trainees in the country.

Nevertheless, experience has revealed a number of inadequacies and difficulties, including poor human, material and financial resources for the monitoring of apprentices; weaknesses in teaching and training programmes and teaching methods; inadequate regular contact between VET providers and employers; and the lack of a mechanism to motivate and stimulate those directly involved in apprenticeships. This experience has resulted in a number of legislative and regulatory changes in 1990 and 2000 to address the problems identified. Financing issues relating to employer participation incentives were addressed in 1997 legislation that established a national apprenticeship tax.

Source: ETF, 2014.

- measures to ensure student health and safety in the workplace.

STEP 4: Demonstrate innovative pilot projects of WBL leading to up-scaling

The **implementation of innovative pilot projects** shows how WBL schemes are going to function before nation-wide up-scaling takes place. The initial project phase is followed by an action plan for up-scaling of successful projects, programmes or policies and

expanding, adapting and sustaining them in different ways over time for greater development impact. The pilot projects develop, test and evaluate organisational structures for assessment and certification in selected economic sectors. The private sector has a central role in planning and implementation of practical company-based training phases.

WBL includes costs to enterprises, namely through the **loss of productive working time** by those conducting the instruction within the WBL schemes. If there is no recognition of these costs, employers may be unwilling to take part in up-scaling WBL schemes. At the same time, if enterprises do not know about WBL schemes, they are unlikely to participate. This highlights the importance of awareness raising, marketing and communication — in which employer organisations, trade unions and governments should all be involved. Marketing of WBL schemes to MSMEs, which are the least likely to know about WBL schemes, is particularly important.

STEP 5: Monitor and evaluate the impact of up-scaling

The creation of WBL schemes suited to the needs of the labour market is the basis for the development, test and evaluation of pilot projects, followed by up-scaling measures as well as subsequent impact monitoring for the purpose of **describing experiences and lessons learned** for the horizontal and vertical distribution of best practices. A final step is to support the establishment of a monitoring and evaluation system as a whole for the overall WBL scheme to allow more evidence-based decisions on the political-strategic level.

References and further reading

Adams A.V., 2010. 'The Mubarak Kohl Initiative-Dual System in Egypt: An Assessment of Its Impact on the School to Work Transition'. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Cairo.

Cedefop (European Centre for the Development of Vocational Training), 2015. 'Work-based learning in continuing vocational education and training: Policies and practices in Europe'. Research Paper No. 49. Publications Office of the European Union, Luxembourg.

EC (European Commission), 2012. 'Rethinking education: Investing in skills for better socio-economic outcomes'. Communication, COM(2012) 669 final. EC, Strasbourg.

EC (European Commission), 2013a. *Apprenticeship and traineeship schemes in EU27: Key success factors. A guidebook for policy planners and practitioners*. EC, Brussels.

EC (European Commission), 2013b. 'Work-based learning in Europe: Practices and policy pointers'. EC, Brussels.

ETF (European Training Foundation), 2014. 'Work-based learning: A handbook for policy makers and social partners in ETF countries'. Working paper. ETF, Turin.

Euler D., 2013. *Das duale System in Deutschland — Vorbild für einen Transfer ins Ausland?* Bertelsmann Foundation, Gütersloh, Germany.

ILO (International Labour Office), 2011. 'Upgrading Informal Apprenticeship Systems'. Skills for Employment Policy Brief 167162. ILO, Geneva.

ILO (International Labour Office), 2012. 'Overview of Apprenticeship Systems and Issues: ILO Contribution to the G20 Task Force on Employment'. ILO, Geneva.

Murthi M. and Sondergaard L., 2010. 'Skills, Not Just Diplomas: The Path for Education Reforms in ECA'. Europe & Central Asia Knowledge Brief Volume 20. World Bank, Washington, D.C.

Case study: Work-based apprenticeship scheme in Egypt

CONTEXT	Like other developing and industrialised countries, Egypt in the 1990s faced the challenge of improving the transition from school to work for its youth. The youth unemployment rate was five to seven times that of adult rates — signalling that youth aged 16–24 faced considerable difficulty in moving from school to work. While producing economic growth and jobs with good macro-economic policies was one of the solutions to this problem, for youth the problem often went deeper to structural issues involving whether the skills they obtained in schools matched the needs of the labour market and how they searched for work and the expectations they held for employment and wages. The Mubarak-Kohl Initiative Dual System (MKI-DS) began in 1994. Although Germany supplied essential funding and know-how, the MKI-DS had the support of the Egyptian Government, which was willing to work closely with industry leaders and share decision-making power. Apprentices attend formal schooling at technical secondary schools under the Ministry of Education twice a week, plus work and learn in the workplace four days a week. This is now a fully and sustainably integrated work-based training scheme within the Egyptian VET system under public-private-partnerships (PPPs). The MKI-DS training system is governed by Law No. 62/2007 and legally integrated at the Ministry of Education, Decree Nr. 361 of 10.11.2008, with a regular budget. Government and the private sector are cooperating in regional and sectoral coverage, occupational profiles and curricula.
CHALLENGES AND OPPORTUNITIES	In better times, Egypt guaranteed public employment to young graduates of technical and higher education, but by the close of the 1980s, the policy ended and youth unemployment began to rise. Young women were especially affected by the loss of public sector jobs, as they were clustered in these jobs. The MKI-DS work-based training scheme was introduced to provide an alternative to general secondary and traditional technical secondary schools. These technical secondary schools were under-funded, suffering from outdated curricula and equipment, and focused on theory taught by teachers with inadequate industrial experience. The MKI-DS, with its engagement of the private sector and promise of improved quality and relevance of WBL provided an opportunity to test a different approach to preparing youth for employment. The MKI-DS employed the principles of the German dual-oriented work-based apprenticeship system, but adapted this system to the institutional context of Egypt. Duality involved sharing the responsibility for training between technical secondary schools and employers. These principles were built into the MKI-DS, along with the introduction of new institutions in the private sector. Since 2010, the number of MKI-DS enrolments, related technical secondary schools and companies has risen steadily.
ACTIONS TAKEN	A PPP conceptual framework offered the MKI-DS a wide range of opportunities and accommodates the realities of various sectors, regions and industries. The pivotal aspect of it is that the private sector and the Ministry of Education both engage in the design of the learning and assume joint responsibility for the learning outcomes.

LESSONS LEARNED

- VET policies that support a combination of work and learning for youth hold the potential to improve pathways to adulthood, **deliver economic and labour market benefits**, improve pedagogy, and reduce costs and increase capacity within the VET system.
- A 2001 study by the International Labour Office called MKI-DS an innovative apprenticeship programme and acknowledged its potential to provide preferably **modern segments of the economy with skills**, but noted its limitations in reaching the informal economy.
- As one successful form of WBL, apprenticeships ease the **transition from education and training to work**; evidence from the MKI-DS suggests that countries with an innovative apprenticeship system will have lower levels of youth unemployment in the future.
- Apprenticeships formally combine and alternate company-based training with school-based education and lead to **nationally recognised qualification upon successful completion**. Most often there is a contractual relationship between the employer and the apprentice.
- Companies providing apprenticeships are likely to benefit from a **net profit on their investment**, either during the apprenticeship or soon after by employing a fully trained worker. At the same time, apprentices learn valuable workplace skills in a professional environment, ensuring a greater degree of future employability. It is a win-win scheme for all: the company, the learner and society as a whole.
- Employers highlight the benefit of having a greater voice in education policy that the MKI-DS has given them. Credit was given to the government which opened the door to a **dialogue in social partnership**.

Source: Adams, 2010.