

- stimulating learning environments linking school with workplace.

Teaching outcome-based curricula successfully requires well-trained teachers that have not only the right knowledge and skills, but also the appropriate attitudes to bring about curriculum change. New curricula require school leadership and a new learning culture which is not always readily accepted and applied in education and training institutions.

Apart from delivering new curricula successfully, teachers also have to evaluate whether the expected learning outcomes generic skills and key competences, as defined in the curricula, have been achieved by learners. Measuring these skills, competences and attitudes is complex.

These developments require systematic upskilling for teachers in new pedagogy and assessment methods, and close cooperation between teachers in schools and trainers in companies.

Today, the movement away from traditional teaching practices is evident in more and more VET institutions in Europe. New forms of teaching such as independent learning and integrated learning, project work, group work, peer learning and action learning are slowly making their way into teaching practices. New pedagogies aim to develop critical thinking. For example, Greece is using transformative learning that questions assumptions and expectations and aesthetic experience to encourage reflections on art, culture and nature.

Learning outcome-based curricula are more effectively taught in learning environments sensitive to individual differences. These differences may concern a learner's background, prior knowledge and abilities. Learning environments should be designed to make learning a social and often collaborative experience. They need to be highly attuned to learners' motivation and the importance of emotions. In VET, information technology is being increasingly used to create virtual environments and simulate real working conditions.

In conclusion, learning outcome-based curricula can promote learner-centred and inclusive teaching and learning practices. They can be important tools in the hands of teachers to develop autonomous and active citizens who think critically. But the conditions for implementing curricula have to be the right ones if their potential is to be realised.

Briefing note – 9060 EN
Cat.No: TI-BB-11-003-EN-C, ISBN 978-92-896-0741-4
doi: 10.2801/63201
© European Centre for the Development of Vocational Training (Cedefop), 2011
All rights reserved.

Briefing notes are published in German, Greek, English, Spanish, French and Italian. To receive them regularly e-mail us at: briefingnotes@cedefop.europa.eu

Other briefing notes and Cedefop publications are at: <http://www.cedefop.europa.eu/EN/publications.aspx>

P.O Box 22427, 55102 Thessaloniki, GREECE
Europe 123, Thessaloniki, GREECE
Tel. +30 2310490111, Fax +30 2310490020
E-mail: info@cedefop.europa.eu

visit our portal www.cedefop.europa.eu

BRIEFING NOTE

When defining learning outcomes in curricula, every learner matters

Success of learning outcomes approaches to curricula in vocational education and training depends on design, delivery and assessment

Curricula are not just lists of subjects to teach. Curricula guide and are central to the quality of teaching and learning. They are fundamental to improving human capital, motivating people to stay in education and training and to promoting lifelong learning.

Pressure to modernise education and training to respond to the diverse needs of learners and the labour market is changing curricula. In vocational education and training (VET), curricula are becoming broader and are including key competences. The trend is moving away from learning objectives set for teachers, to designing curricula based on learning outcomes (Box 1) defined for learners.

Learning outcome-based curricula value what a learner knows, understands and is able to do. They can also accommodate different learning rhythms and paths.

This shift is particularly evident in VET and higher education and, increasingly, in general education. In 2010, Cedefop published a research paper, *Learning outcomes approaches in VET curricula*, which examines recent trends in and challenges for outcome-oriented curriculum development in nine European countries. Findings suggest that under certain conditions, learning outcome-oriented curricula can improve learning and assessment and match education and training to learner and labour market needs more closely. These conditions concern the whole cycle of curriculum development including design, delivery and learner assessment.

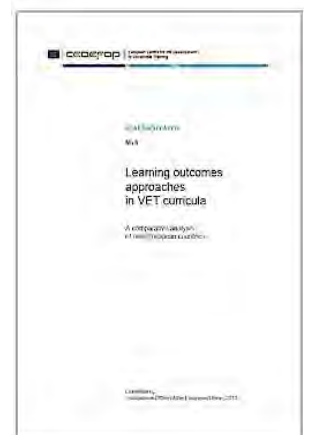
BOX 1. Learning outcome-based versus traditional curriculum

Learning outcomes are statements of what an individual learner knows, is able to do and understand following completion of a learning process.

In some countries, for example, Germany and the Netherlands, the term competence is used instead of learning outcomes. Some distinctive features of learning outcome-based compared to traditional curricula are:

- the focus is on learning that combines knowledge and skills with personal and sociocultural competences;
- knowledge is set in a context and is interdisciplinary;
- focus on the labour market and employment needs (traditional curricula sticks to the educational context and the body of knowledge to be transmitted);
- learning is encouraged in a wide range of locations and by different methods.

Read the report:
Learning outcomes approaches in VET curricula
http://www.cedefop.europa.eu/EN/Files/5506_en.pdf



To support evidence-based policy-making, Cedefop, has launched a comparative study to identify and analyse these conditions in 32 European countries.

Curriculum innovation and reform for lifelong learning

Curriculum policy has long occupied national researchers, policy-makers, and international organisations, including the OECD, Unesco, the World Bank and the European Commission. Cedefop, to encourage debate about innovation in curriculum reform organised two international workshops in 2009 ⁽¹⁾ and 2011 ⁽²⁾ attended by experts from more than 20 European countries.

Participants discussed how outcome-oriented curricula can support learning and benefit learners. They also looked at examples of good practice for the design and delivery of outcome-oriented curricula in different learning environments.

VET curricula defined in terms of learning outcomes are not new. They have been used for more than two decades in countries such as Germany, France, Finland and the UK. However, the change in focus to learning outcomes in VET curriculum development is now apparent across the European Union.

Recent reforms show that core curricula designed at national level have been complemented by school-based curricula adapted to local needs. Courses have been broken down into modules to provide greater flexibility. The understanding, purpose and role of curriculum have also evolved. Curricula now guide a wider variety of education parameters such as teaching and assessment methods and tools, learning materials and the design of learning environments.

More benefits for learners

Compared to traditional subject-based curricula, learning outcome-based curricula aim to be more comprehensive and flexible. This is often achieved by organising curricula into modules and granting autonomy to teachers to develop and deliver them. They also aim to be more inclusive and more motivating for learners.

⁽¹⁾ See: <http://www.cedefop.europa.eu/EN/events/4432.aspx>
⁽²⁾ See: <http://events.cedefop.europa.eu/curriculum-innovation-2011/> and related article:
<http://www.cedefop.europa.eu/en/articles/17686.aspx>

Learning outcome-based curricula can empower learners by giving them the opportunity to shape their learning process and build individual learning paths.

Developments in countries such as Lithuania, Malta, the Netherlands and Finland suggest that learning outcome-based curricula can increase learner motivation (encouraging people to go on to further studies and reducing drop-out rates) and improve labour market integration.

In Finland, there is evidence that learners understand better what is expected of them, feel more committed and participate more in the learning and assessment process.

In Slovenia, links between theoretical and practical learning are seen as much stronger under the learning outcome-based curricula which learners find more relevant. Curriculum relevance has also been strengthened through closer cooperation between VET institutions and business and industry which are now playing an important role in curriculum design and learners' assessment.

Conditions for designing outcome-oriented curricula

Introducing learning outcomes approaches in VET curricula has raised many issues about their design. These include: the weighting to be given to different kinds of learning outcomes; how to balance work-related outcomes with the broader social and personal skills and competences regarded as fundamental to modern working life; how to identify, define and combine skills and competences at curriculum level.

While different methods and approaches are used in European countries, two conditions appear to be crucial when developing curriculum:

- consistency in using learning outcomes;
- proper alignment of intended learning outcomes and the methods used to assess the extent to which they have been achieved.

There are differences between and within countries and even between institutions over the understanding, function and role of learning outcomes in curricula. For example, some define learning outcomes as the overarching goals of VET. Others define them as the results of a study programme or teaching unit.

Outcome-oriented curricula in some cases have a regulatory function aiming to ensure quality. In other cases curricula have a purely didactic function serving as a framework for the teaching and learning process.

Learning outcomes also have different names. The terms competence and learning outcomes are frequently used in very different, and sometimes in confusing and contradictory ways.

Whatever the level of curriculum design, national, sector or school, it is important to ensure consensus among the different actors involved on the understanding of the concepts used and the purposes learning outcomes serve. Learning outcomes defined and introduced inconsistently in curricula, may undermine transparency and credibility and raise questions about the validity and reliability of the assessed learning outcomes.

BOX 2. Definition of learning outcomes as a set of knowledge, skills and competences

Knowledge

Outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices related to a field of work or study.

Skills

Ability to apply knowledge and use know-how to complete tasks and solve problems... skills are described as cognitive (involving use of logical, intuitive and creative thinking) or practical (involving manual dexterity and use of methods, materials, tools and instruments).

Competence

Proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

To establish a common language and understanding of learning outcomes, evidence shows that terminology used in European tools, such as the European qualifications framework ⁽³⁾, is increasingly used by Member States (Box 2).

Methods to identify and define learning outcomes in curricula also vary among countries and institutions. In Europe, the three prevailing competence models – those of Germany, France and the UK – have evolved

⁽³⁾ See: http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm

over time and influenced taxonomies and typologies developed in other countries often seeking to combine and balance inputs with outcomes at the level of curriculum (Box 3).

BOX 3. Balancing inputs and outcomes in curricula

There is no pure type of input- or outcome-oriented curriculum defined in theory. Curricula are always mixed and the kinds of "outcomes" they define vary hugely between countries. Even two outcome-oriented curricula can look very different.

Often, learning outcomes do not replace learning inputs (contents, teaching and learning methods, timetables, etc.) but in most cases, they may have a more or less prominent role that defines what the inputs are and their relative importance.

Independent of the method used, quality assurance in curriculum development is crucial. This is usually ensured by participation of both education specialists and employers. In many cases, learners also have an active role in curriculum design.

Learning and assessment has become increasingly interconnected. How learners are assessed can shape the learning process for good or ill. Assessment tools and curricula should, therefore, be designed closely together (as in Scotland) but also allow room for validation of non-formal and informal learning.

The introduction and use of outcome-oriented curricula have required a rethink of traditional assessment tools in many European countries. Slovenia and Spain, for example, have developed special tools to assess soft skills. Finland has well established self-assessment for learners which has created a more positive assessment culture both for teachers and learners. Most Member States use formative assessment to provide learners with substantial, regular and meaningful feedback and to inform teachers of the progress being made and if any changes to the learning process are needed.

Conditions for delivering outcome-oriented curricula

Implementing outcome-oriented curricula depends on several factors, including:

- well-trained teachers who apply appropriate pedagogic practices;