BRIEFING NOTE

Permeable education and training systems: reducing barriers and increasing opportunity

European countries are working hard to make education and training systems more flexible, but inconsistencies may reinforce rather than remove obstacles

Geologists tell us that there are many types of permeable rock, for example chalk, limestone and sandstone. Although different, they all allow liquid or gas to move through them in any direction, horizontally, or vertically from one layer to the next, as mother nature decides.

Permeability is also being applied to education and training systems. The idea is for learners to be able to move easily between different types of education, (such as academic and vocational) and between different levels (such as upper secondary, or apprenticeship, up to higher education), as they decide.

The 2010 Bruges communiqué and Europe 2020 strategy stress that permeability is a precondition for having modern European education and training systems that encourage lifelong and lifewide learning (learning that takes place not only in schools, but also at work and in leisure time). But, in Europe, most education and training systems are permeable only to some extent.

Education and training systems, traditionally, have separate and distinct subsystems (general, vocational

and academic/higher education), related to one other in a strict hierarchy of primary, secondary and tertiary. This works well as long as learners follow a predefined route in their chosen area and subsystem. But segmenting education and training creates institutional barriers which can restrict learners' options and choices on moving up to higher levels of learning or moving sideways to study a different subject at the same level. Often learners have to specialise at an early age making it difficult, for example, for vocational education and training (VET) students to switch to academic studies, or combine them later on.

Improving access to higher education

Improving permeability in education and training is, in many countries, linked to enabling more VET graduates to go on to higher education. European Union (EU) Member States have different policies on access to higher education. However, between 2006 and 2010, the proportion of students in uppersecondary education including initial VET giving direct access to higher education increased to over 80% of all enrolled students (Table 1). But progress varies as the indicator increased in 12 countries and fell in five.

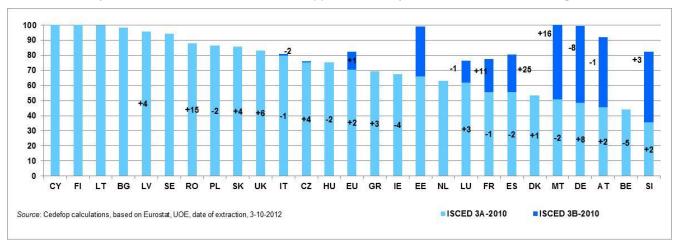


 Table 1:
 Students enrolled in upper secondary education (ISCED 3A and 3B programmes) giving direct access to tertiary education, in % of all students in upper secondary education, 2010, and change to 2006

Countries have different strategies to strengthen links between upper secondary and tertiary education. For example, the *Lehre mit matura* in Austria and the *Yrkesveien* in Norway allow vocational candidates to move directly to relevant studies at tertiary level.

Beyond access: recognising individual learning experiences

Enabling and encouraging formal access to education or training, at any level, is important, but it is only a first step. Real permeability must enable learners to transfer and build on all types of their prior learning – formal, non-formal or informal – wherever that learning took place, at school, work or during leisure.

Consequently, deciding whether someone can:

- have access to certain forms of education and training;
- be admitted to a specific course or programme;
- be exempted from certain parts of it;
- have their prior learning recognised as equivalent to a particular qualification; and/or
- have the right to practise in an occupation;

should depend, not only on formal learning, but also recognise all types of prior learning. For learners this broader view of what is considered as relevant learning makes a substantial difference. It gives value to learning outcomes acquired over time and in different settings.

National practices emphasise recognition of formal qualifications for access or admission purposes. Exemptions from courses and programmes on the basis of prior learning – and so avoiding duplication – are less common and less-widely accepted. For example, universities generally grant access but allow only a few people to skip parts of a study programme because of prior learning (¹). However, experiences with validation in countries such as Finland, France, Norway, the Netherlands and Portugal show that it is possible to move in this direction.

Over the past two decades there has been a steady development of European and national initiatives supporting validation, recognition and credit transfer (Box 1). Increasingly linked to emerging qualifications frameworks, these instruments may be seen as building blocks of a strategy to develop permeability in education and training.

Box 1: European initiatives supporting permeability: validation, recognition, credit transfer and qualifications frameworks

At European level

- Validation has been systematically promoted since European principles on validation of non-formal and informal learning were adopted in 2004. Following widespread experimentation in Member States, the European Commission has proposed a recommendation (²) on validating non-formal and informal learning.
- Recognition is pursued in two distinct ways. Networks of academic recognition centres (the European network of information centres (ENIC) and the national academic recognition information centres (NARIC) support learners and institutions with access to and progression in higher education. The EU's directive (2005/36) addresses relationships between professional qualifications and occupations in the labour market through systems of automatic recognition (for architects and health sector professions) and general recognition.
- Work on credit transfer is carried out through the European credit transfer system for higher education (ECTS) part of the Bologna process and the European credit system for VET (ECVET), which is based on the 2009 recommendation of the EU Council and Parliament.
- National qualifications frameworks (NQFs) classify qualifications according to a set of levels based on learning outcomes. NQF levels reflect what the holder of a certificate or diploma is expected to know, understand and be able to do. The European qualifications framework (EQF) covers all levels and types of qualifications (general, vocational and higher education and training). By linking or 'referencing' NQFs to the EQF, learners and employers will be able to compare the levels of qualifications awarded at home and by other countries.

European initiatives must be implemented nationally. Work to develop and implement NQFs seems to confirm that countries are giving priority to making systems more flexible and to strengthening permeability.

Approximately 30 European countries are developing or have designed comprehensive NQFs that cover all types and levels of qualifications. Comprehensive NQFs make it easier to see relationships between different types and levels of qualifications. In many

^{(&}lt;sup>1</sup>) European inventory on validation of non-formal and informal learning, report on validation in higher education: http://libserver.cedefop.europa.eu/vetelib/2011/77645.pdf

^{(&}lt;sup>2</sup>) http://ec.europa.eu/education/lifelong-learning-policy/ informal_en.htm



countries, NQFs have highlighted problems in general, vocational relationships between and academic gualifications. As a result, countries have found different ways to accommodate different types of qualifications. For example, in Germany, Ireland, and Lithuania NQFs combine all types of qualifications at all levels, including the higher ones, but Austria's NQF divides its higher levels into two parallel strands. One covers qualifications awarded by higher education institutions and the other professionally or vocationallyoriented qualifications awarded outside higher education institutions.

Some countries, such as Finland, the Netherlands, Sweden and Norway, are going further, using their NQFs to show links between initial and continuing education and training. NQFs are likely to become a key instrument for identifying all types of learning opportunities at the same or different levels.

Permeability and institutional reform

Relationships between VET and higher education, institutional structures and education and training profiles significantly influence permeability.

A recent Cedefop study (³) shows that developing VET at higher qualifications levels (EQF levels 5-8) is gaining momentum. Developments range from new institutions, Sweden, for example, has introduced advanced vocational education operating at EQF levels 5-7, to strengthening and refocusing existing professional bachelors. Germany, for example, has over 150 courses for professional bachelor degrees, which include practical experience and are fundamental to the trade and industry sectors. Access to professional bachelors requires completion of initial VET (dual system) and professional VET and some years of experience. Other examples are the Brevet de technicien supérieur in France, associated degrees in Belgium and the Netherlands, Istruzione e formazione tecnica superiore in Italy and higher certificates in These qualifications are important for Ireland. increasing permeability because they grant VET candidates access to tertiary education while, at the same time, improving job prospects because they of their value on the labour market.

The blurring borderline between VET and higher education is increasing permeability. To enable individuals to move vertically and horizontally through education and training systems entails providing relevant training at all levels. This requires strengthening vocational and professional elements of tertiary education and taking full account of the role played by general knowledge and transversal skills and competences at all levels of VET. Reducing initial VET to narrow technical skills would seriously limit individuals' ability to pursue lifelong and lifewide learning and so make permeability impossible.

Sinking permeability

While many steps have been taken to make education and training systems more permeable, there is a danger that learners will continue to face barriers to their desired learning paths.

Validation, recognition, credit transfer and qualification frameworks are only slowly becoming permanent features of the European education and training landscape. In many cases, they cover only parts rather than the whole education and training system and, paradoxically, are reproducing the segmented and hierarchical structure they are meant to bridge.

For example, European credit transfer systems for VET and higher education are being developed separately, potentially reducing rather than increasing permeability. The situation for academic recognition is similar. Some centres in the academic recognition networks ENIC and NARIC support VET students and provide information on VET qualifications, but this is not a specific task of the network. A more systematic exchange of information on recognition of VET qualifications throughout Europe is needed.

There are similar problems with validation. Countries have largely chosen to develop validation arrangements linked to subsystems, such as VET and higher education. Few initiatives have emphasised the links between different subsystems and institutions. An exception is France where all qualifications registered in its NQF can also be awarded through validation.

Problems bridging different parts of the education and training system and their respective institutions are not confined to the public sector. A new Cedefop study (⁴) on validating non-formal learning in European enterprises illustrates problems of coordination between the public and private sectors. While a large proportion of the 400 enterprises in the study have established validation systems to assess and record competences, hardly any interact with public validation systems developed in recent years. The study points

^{(&}lt;sup>3</sup>) Cedefop (2011), VET at higher education and training levels, http://www.cedefop.europa.eu/EN/publications/18646.aspx

^{(&}lt;sup>4</sup>) Cedefop (2012, forthcoming), The use of validation by enterprises for human resource and career development purposes

to the need for practical solutions to enable employees to use acquired skills and competences in choosing further education, training and new employment.

That different instruments need to work together is well understood. The key link between enterprises and the public sector in developing and implementing European and national validation initiatives is emphasised as a prime objective. But links and interaction between different private and public sector instruments can only be established in the longer term. But the almost total absence of contact and communication between actors and institutions is, perhaps, a warning sign that things may not work as hoped.

Permeable minds

Permeability is not only about institutional and bureaucratic barriers. Family background is a major factor influencing education and training choices and careers. Cedefop's recent study on labour market outcomes (⁵), shows that learners' education and training preferences are still strongly influenced by their parents' educational backgrounds. This includes choosing between general education and VET and deciding whether or not to go on to tertiary education. The study argues that this consistent (it has not changed in recent decades) 'reproduction of inequality' partly sustains a structure of higher education, which is perceived as inflexible and of limited relevance. This implies weak intergenerational mobility both between occupations and education levels.

Absorbing the lessons

Moving towards permeable education and training systems requires bridging subsystems and reducing barriers between levels and institutions of learning and qualifications. The European Commission and Council's 2012 joint report said that segmentation of education and training systems is an obstacle to developing flexible learning pathways.

Many countries have taken significant steps to bridge the divide between different parts of their education and training systems. Instruments are partly in place, but the challenge of implementing them is substantial. Progress is, sometimes, hampered by a lack of coordination. Strategies that strengthen links and encourage synergy between European and national initiatives are needed. Similarly, deciding levels of qualifications on the basis of learning outcomes provides a real opportunity to make education and training systems more permeable and interactive. However, the full potential of learning outcomes can only be realised through close cooperation and dialogue between sectors and education and training subsystems.

The danger is that learning outcomes will be implemented differently in general, vocational and academic education and training, cementing rather than reducing existing barriers. If the shift to learning outcomes is to support permeability, there must be common agreement as a basis for dialogue, understanding and trust. Work on implementing NQFs and learning outcomes has demonstrated the need for comprehensive strategies if future developments are to succeed.

As for changing attitudes, increased visibility of VET at tertiary level could increase intergenerational mobility. This requires a focus on the overall transparency of education and training systems, showing how learning may be pursued in close relation to employment and career opportunities. Establishing such visible pathways requires systematic removal of dead-ends and barriers. Learners should be aware of possible vertical and horizontal learning pathways and their options.

An education and training system's permeability should be judged by its ability to encourage individual learning and offer various learning pathways. Learners need opportunities to continue learning throughout their lives to avoid being caught between a rock and a hard place.



^{(&}lt;sup>5</sup>) Cedefop (2012), From education to working life http://www.cedefop.europa.eu/EN/publications/20448.aspx