



CEEMET VIEWS ON THE MODERNISATION OF HIGHER EDUCATION

Innovation, knowledge and human capital are at the core of progress in our economies and societies, and the capability of higher education to address the changing skills, knowledge and competence requirements is fundamental in preparing students for the future work life. A highly skilled workforce is the locomotive of economic growth and crucial for the EU and EU-based companies in order to be positioned well in an increasingly competitive global market. Better access to competent labour is a factor that will make Europe more attractive to companies in the future.

Across most of Europe, the metal, engineering and technology-based (MET) industries form the biggest industry sector and lead in European exports. In the context of a globalized economy, there is consensus on the fact that only high value-added business strategies based on high value-added products, services and solutions are sustainable for European industry. These strategies rely on the immediate and future

availability of a highly skilled workforce. And yet, companies in a number of countries report twenty per cent unfilled vacancies for skilled workers or engineers while unemployment rates remain high, especially among young people. Against this background, the importance of the education sector and the higher education (HE) sector in particular for a robust, sustainable industry must not be underestimated.

These developments challenge both HE as well as vocational education and training (VET) systems. New kinds of qualifications going beyond initial VET are needed, calling for new kinds of alliances and modernisation of the education and training systems. Increased competition is expected to raise the skills, knowledge and competence requirements in the MET industry for many jobs.

There is no simple definition of HE. In our view, it includes all types of education beyond the secondary level provided by a variety of institutions including general and vocational HE institutions. They all need to be able to support European economies and societies facing current and future challenges. We consider that this requires:

- improved cooperation between HE institutions and industry allowing continuous adaptation to changing requirements, resulting in new kinds of learning solutions;



- increased permeability between VET education and HE;
- a more evidence-based approach in ascertaining quality.

1. More responsive and innovative through cooperation : promoting qualifications and degrees that lead to a job

Cooperation between the industry and educational institutions is an effective way to better identify future employment needs and skills gaps, helping to ensure that graduates have the necessary training to contribute to the competitiveness of companies and succeed in society. While HE institutions perform differently from one country to another, in general, HE institutions need to be attentive to business regarding industry's skills needs and must be able to adapt to changing requirements. Responsiveness must be a core value of HE management.

It is a fact that more individuals are needed with high and medium education levels in order to be both competitive and address specialised labour market needs. Particularly, skills in science, technology, engineering and mathematics as well as in informatics/computer science are required in order to support innovation and sustainability of economic growth. However, young people and women in

particular show a lack of interest in technical or scientific studies or professions in the MET industry in many EU countries. These are adverse patterns in today's society which HE institutions need to help address notably through guidance.

Two-way communication will allow for better matched services provided by HE institutions and also contribute to more innovative approaches towards teaching and learning methods and thus towards a more skilled, creative and flexible labour force. It is increasingly important that the MET industry and HE institutions together can promote learning environments that connect and involve industry representatives, students, teachers and researchers in joint learning and RDI initiatives.

This also applies to strongly research-oriented universities. Continuous two-way communication with business will facilitate translation of research into innovation. Cooperation and projects on applied sciences must be supported as a way forward bringing together industry research and education for their mutual benefit.

Ultimately, two-way communication between HE institutions and business will contribute to a better placement of students who will successfully enter and remain in the labour market, and sustained competitiveness of the European economy.



2. Permeability between VET and HE

Permeability between VET and HE has to be promoted as part of modern HE systems. This will allow:

- to reach the EU target of at least 40% of 30-34 year olds having completed tertiary or equivalent education by 2020
- to promote employability of graduates
- to promote mobility between industry and academia
- to open up opportunities to non-traditional learners (look over teaching and learning methods as many of these learners will have work experience)
- to promote flexible learning pathways and lifelong learning.

There is too much divide between general education and VET, between VET and HE in particular. Students should take for granted that VET and HE are parts of **a single ensemble with pathways between them** and that the choice of one path does not exclude the other. To achieve this, bridge-ways from VET to HE opportunities and vice versa need to be built and promoted through proper guidance so that the notion of being pigeon-holed is taken away. Acknowledging the fact that HE can also be higher vocational education is also a crucial part of this process.

Further, the **transparency of competence profiles** is highly important in contributing to permeability. The generalisation of the description of qualifications in terms of skills, knowledge and competence (learning

outcomes) will facilitate the interface between VET and HE, making visible the overlapping areas of the competence profiles of VET and HE qualifications. This should be taken into account by Member States when implementing the European Qualifications Framework. The EQF and the NQFs need to be comprehensive and open and include all levels of education. This should also be reflected when moving forward in the implementation of ECVET and ECTS, both systems using “points” that need to be a common currency at all levels of the education system.

Permeability should also concern **pedagogical approaches**. In this regard, HE could usefully integrate some patterns from VET including notably **more work-related education**. Gaining work experience, which is practice in VET, should become more common also in more academic HE. Work experience and project-based learning in industry can be very valuable in helping students to develop and internalize the theoretical knowledge gained in HE in a context where a more holistic and interdisciplinary approach is often needed. Integrating work-related parts in HE is necessary also to allow students to apply their knowledge and skills to real business challenges and to gain more ‘soft’ competences needed in today’s work life. Whether or not on vocational courses, students should have work placement opportunities and the support necessary to reflect on these experiences.

Continuous education also needs to be developed in HE whereas it is already an integral part of VET. With increasing technological change and the development of a



'knowledge-based society', continuous learning and retraining are a high priority to ensure economic competitiveness. At the HE level, the full implications of Lifelong Learning have not yet been realised. Academic HE institutions have not yet worked out in their strategies what kind of role they could successfully play in the provision of continuous education services.

3. More evidence-based approach to ascertaining quality in HE.

Policy makers at European and national level and the public increasingly pay attention to the outcomes of HE. Nevertheless, efforts to improve the quality and impact of teaching and to enhance learning outcomes are slowed by significant information gap. HE qualifications currently tell us very little about what and how students learn in HE. The reputation and ranking of HE institutions are based largely on research performance. This distorts leadership and management as institutions engage in a costly and damaging one-dimensional race, often to the detriment of teaching and learning.

Consequently, we believe that **current quality and ranking systems should be complemented with labour market-related criteria**. The shift towards the learning outcomes approach that is currently promoted through various European initiatives (e.g. EQF and ECVET) needs to be associated with the development of tools allowing assessment of learning outcomes in HE institutions and eventually a comparison. The employability of graduates is also an outcome

of HE that should be taken into account when assessing the quality and impact of teaching. This is the case in few European countries where it is recognised officially as criteria for funding or for accreditation. **Modern education systems require modern quality and impact assessments.**

To conclude, we believe that the modernisation of HE systems should result in **bringing closer academic and professional HE institutions, VET institutions and industry** and in **optimising HE institutions responsiveness** to society needs, including business needs.

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