

# **Competences and Innovation: The role of Vocational Education and Training.**

**A perspective from the European Union**

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and Polytechnics (WFCP)**

***“Riding the Wave: Education in Turbulent Times“***

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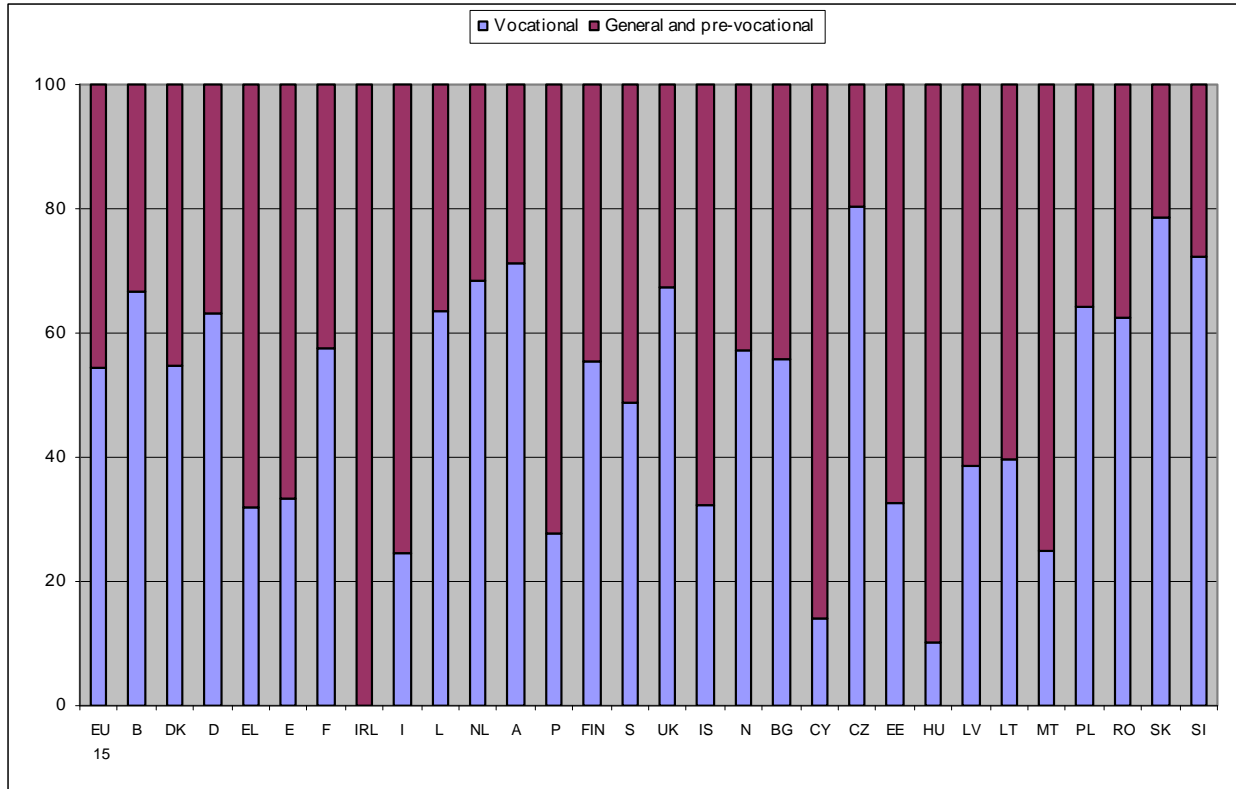
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# 1 VET IN EUROPE: participation and attainment

## 1.1 Vocational education

As the table shows, there are more students in vocational education than in general education. The mean is about 50%; in some countries it is even 70 %.



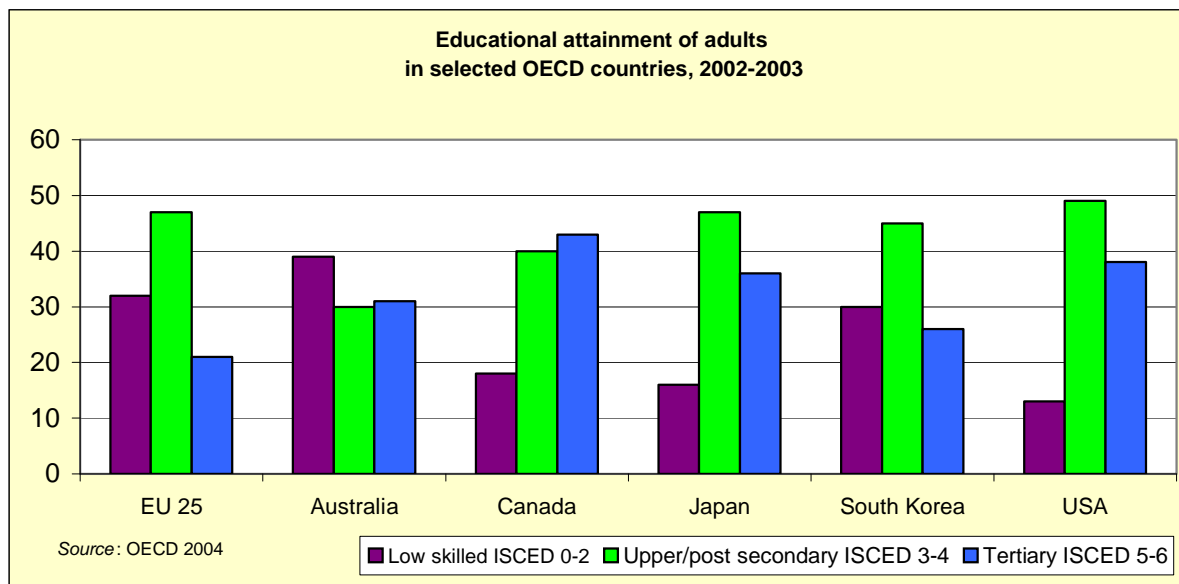
## 1.2 In-company training

Training in companies is basically fully provided in big companies. Only 56 % of small companies provide training. See the next table. For educational institution this is a special market. However, the more traditional model of courses is not very suitable for this group. Training requires special arrangements. I will come back on this later in this article.

	EU 15
<b>10-49 employees</b>	<b>56</b>
<b>50-249 employees</b>	<b>81</b>
<b>250 employees and more</b>	<b>96</b>
<b>Total</b>	<b>62</b>

### 1.3 Educational attainment.

Educational attainment in Europe is high at lower and upper secondary level, but low at tertiary level, as compared with other parts of the world.



Within Europe, some countries have a higher productivity than others: Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands and Norway. Here, the challenge is to raise employment levels. It has been argued that the Nordic countries are most successful. (QCA, 2004)

### 1.4 The European Forum of Vocational Education and Training (EfVET)

European institutions have organised themselves in the European Forum of Vocational Education and Training (EfVET). EfVET provides the learning and innovation platform for 1500 VET institutions in Europe. The Annual conference (in 2005: Budapest 26-29 October), the website [www.efvet.org](http://www.efvet.org) (20.000 hits per year) and the newsletter assist members in this.

EfVET also functions as a partner for member-projects for dissemination and "valorisation" purposes. From the policy point of view the organisation is the knowledge-partner for the European Commission and the European Parliament through regular formal and informal meetings.

Finally, the platform opens the doors to partners outside Europe e.g. through special agreements with VET organisations in Russia and China and of course as the founding member of the World Federation of Colleges and Polytechnics.

## 2 The world is changing

### 2.1 The Lisbon Strategy

Europe is well aware that the world is changing and that Vocational Education and Training plays a crucial role to compete with the USA and the Asian countries and China. European Countries have agreed to set up a strategy to be competitive by 2010. This has become known as the Lisbon Strategy (European Commission, 2005)

### 2.2 Changes in society

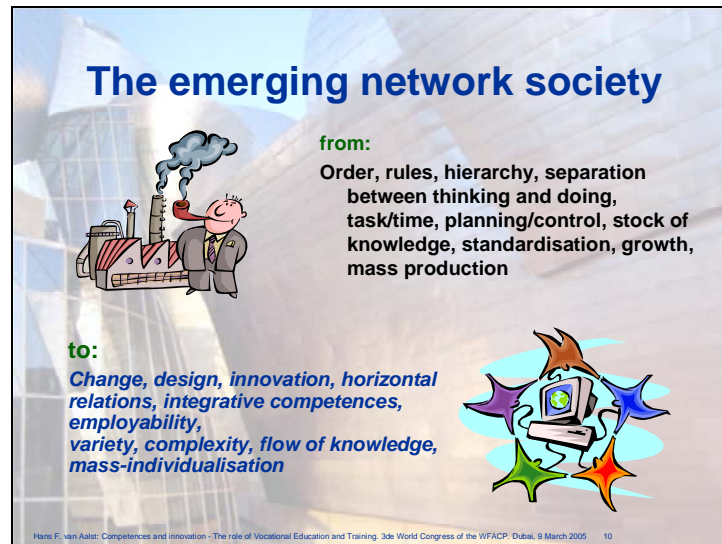
Driving forces behind this need for change have been analysed as threefold (van Aalst, 2002, 2003):

1. changes in our understanding of **knowledge**
2. changes in **identities** and **social texture**

### 3. globalisation

Together, these changes are labelled as the **emerging network society**, a term introduced by Castells (1996).

The rise of the network society has drastic consequences for the way organisations are functioning. In stead of more traditional management concepts as *order, rules, hierarchy, separation between thinking and doing, task/time, planning/control, stock of knowledge, standardisation, growth, mass production*, organisations are now managed by concepts such as: *Change, design, innovation, horizontal relations, integrative competences, employability, variety, complexity, flow of knowledge, mass-individualisation*.



### 2.3 Higher and different demands on people

These changes in society pose more demand on people. Consequently: people express higher demands for work, life and education. However, demands are also and predominantly *different*.

## 3 Strategies to meet higher and different demands

Which changes in Vet may accommodate those higher and different demands?  
I suggest at least the following:

1. Lifelong learning : up-skilling throughout life; special emphasis on low and unskilled
2. Investment in VET
3. Competences for the future
4. Institutional change
5. Branding

### 3.1 Lifelong learning - key issues

#### 3.1.1 Key Issues of Lifelong Learning

The Memorandum on Lifelong Learning of the European Commission ( 2001) lists the following strategies to develop a system of lifelong learning. These issues are well recognised as essential in European countries:

- Valuing learning (including non-formal and informal learning)
- Information, guidance and counselling
- Investing time and money in learning
- Bringing together learners and learning opportunities
- “Basic skills”

- Innovative pedagogy

### 3.1.2 Up-skilling Low and unskilled

Although up-skilling during life is a need for all, special emphasis is on low and unskilled workers. By 2010 almost half of additional jobs will require tertiary level education and almost 40 % upper secondary level. A major decline in job prospects for the low skilled is expected because workers with lower education attainment have six times lower chance to participate in training. 80 million EU citizens are low skilled. These include older workers, workers in declining industries (Poland, re-skilling mining regions), migrant groups (Romania), workers in small companies.

Currently, only 5 EU member states reach the EU 2010 target: UK, Finland, Denmark, Sweden, Netherlands, plus Norway and Iceland.

## 3.2 Investment in VET

Investment in VET is seen as essential for economic and social development of Europe, with major importance for individuals, enterprises and society. Investment in skills for middle and lower range jobs is at least as important as investment in high level skills. In Europe, about 50% of youngsters participate in VET. Participation should increase to about 70%. A mix of financial resources is preferable above government funding only.

However, the traditional design of VET institutions is not very suited to fulfil this role. Future-oriented design is needed. Innovation in SME's is a top priority; this requires special arrangements.

## 3.3 Competences for the future

Developing broad occupational competencies through workplace learning is now the key factor for VET reform in Europe and validation of informal and non-formal learning opens doors to further learning. Effective, real and valid competences can only be developed at regional or even local level. Qualification structures on national and European levels are useful as points of reference for validating such competences and codify them e.g. in **Europass** documents.

### 3.3.1 The wider concept of Human Capital of the OECD

There are several initiatives to modernize Human Capital. The OECD (2002) suggests a difference between *Basic Human Capital* and a *wider concept of Human Capital*. Basic human capital includes: Productive capacities and characteristics (like carpentry skills, physical strength, creativity, communication ability). These can be thought of as "skills", broadly defined. However, these "Basic skills" explain only half of the wage differences. Employability can only be explained by a wider form of human capital, defined as the characteristics that allow a person to build, manage and deploy his or her skills. This includes: the ability to learn, to identify one's learning needs and to manage one's learning activity, career planning, job search skills, and the ability to blend working and personal objectives and personal characteristics (like trustworthiness and motivation)

### 3.3.2 CeDeCo - Definition and Selection of Competencies

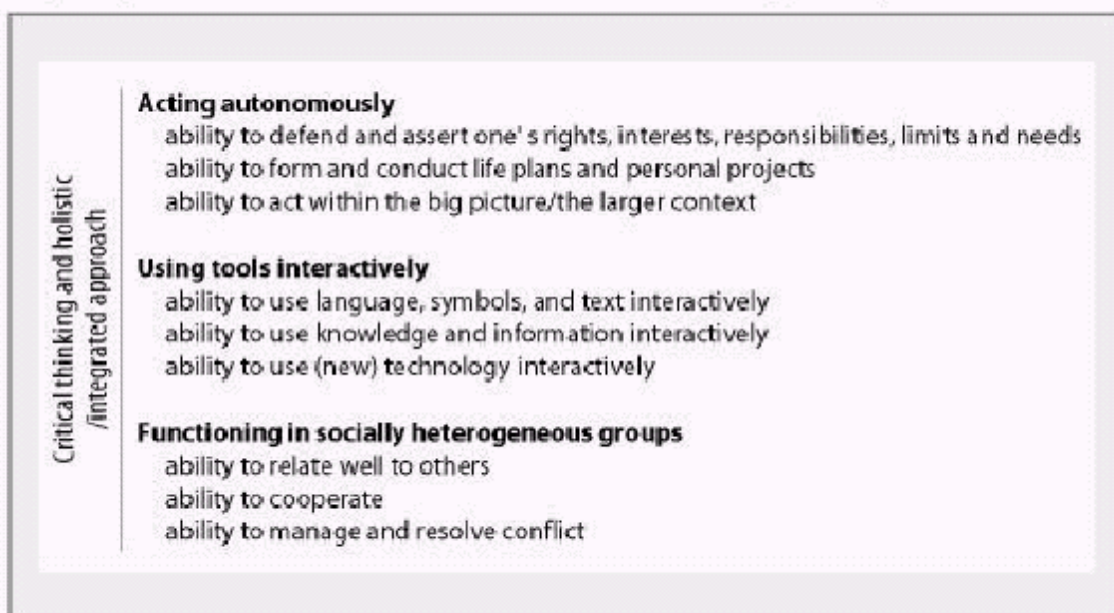
The DeSeCo project (Definition and Selection of Competencies, 2002) suggests three *Key Competencies* for a successful life and well functioning society:

- Acting autonomously
- Using tools interactively
- Functioning in socially heterogeneous groups

A specification is given in the figure below.

FIGURE 2

### Key competencies for a successful life and well-functioning society



Source: Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo), 2002

### 3.3.3 EU Working group on Key Competences

The EU working group on key competencies suggests the following key competencies:

- Communication in the mother tongue
- Communication in a foreign language
- Mathematical literacy and basic competences in science and technology
- Digital competence
- Learning to learn
- Interpersonal and civic competences
- Entrepreneurship
- Cultural expression

The working group emphasizes that Key Competences replace “basic skills”, and are to be developed at all levels and are context dependent.

### 3.4 Transformation of institutions

The new emphasis on Lifelong Learning and the changes in society in terms of knowledge, identity and social texture and globalisation requires a different set-up of institutions. Basically, institutions should transform their focus from production of courses and numbers of graduates to *services to Lifelong Learning* for people, businesses and communities *in a networked organisation*.

#### 3.4.1 Service for individuals

Service for individuals would assist individuals to manage their personal development through lifelong learning. Services would include:

- guiding and coaching – matching Personal Development Plans with resources (including training), people and learning communities.
- Assessment of earlier experience
- Assessment of learning, validation of Portfolio's
- ICT services at home, in the workplace and in the local community

### **3.4.2 Services to SME's:**

Services for Small and Medium-sized Enterprises (SME's) would include:

- Contractor to business and public institutions to ensure Human Capital,
- students, consultants and SME's working together for specific innovations (tri-angulation-arrangements)
- arranging and managing learning networks of SME's

### **3.4.3 Back office as network organisation**

The focus of institutions on services will require high-quality back-offices. In- and outsourcing (brokering) of high quality learning resources (including ICT and Multi Media resources) is inevitable. Individual institutions will therefore specialise in the production of specific courses and not only use these themselves, but outsource them to other front office institutions, locally and internationally. The back office will be organised as a network organisation.

### **3.4.4 Conditions for Institutional change**

Such transformation will require specific conditions in terms of management and government, including:

- Greater regional autonomy and valid structures for regional cooperation.
- Demand articulation
- Organisation of active counter forces on local and regional level (clients, ombudsman, stakeholders)
- Learning organisations
- Focused public accountability (public information and quality-methods)

## **3.5 Branding of VET - Five Core Elements**

It is well known that VET suffers from low public knowledge and appreciation (van Aalst, 2003). The reasons are partly embedded in the history of education-systems in western countries. However the brand of VET is also not very clear and has often internal contradictions. Mary Dicky (2003) suggests the following key elements of a stable brand of VET:

- VET gives you freedom - to manage your own investment in learning, your career path, the skills challenge - equipping you for the future
- VET reflects the real world - real world skills, changing work, career trends and economic developments
- VET leads to valuable, desirable and valued qualifications - diverse range, different levels
- VET is a first class option, the right choice at the right time
- VET leads to careers - not just jobs - helps you manage a range of career paths and seize opportunities

## **4 Conclusion**

VET in Europe has a rather high participation rate, and quality is up-to-date. However, there is a strong need for transformation, based on changes in knowledge, identities and social texture and globalisation. This so-called rise the network-society puts heavy demands on VET institutions, as has been recognised by the European countries in adopting the Lisbon Strategy.

Institutions will have to change towards service-focused organisations, with high quality back-offices in a network of providers.

Specific issues include

- Lifelong learning: up-skilling throughout life for all and with special emphasis on low and unskilled workers and unemployed
- Investment in VET
- Competences for future human capital
- Branding

The European organisation of VET institutions EfVET plays a crucial role to assist members in this transformation process and to keep the dialogue between practitioners and European policy makers frequent and productive.

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