



CEDEFOP

European Centre for the Development
of Vocational Training



Innovation and creativity: learning for the jobs of tomorrow

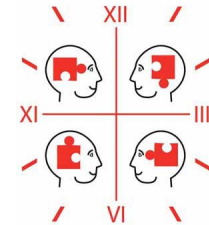
Aviana Bulgarelli,
Director
Cedefop





Innovation as engine for growth and jobs

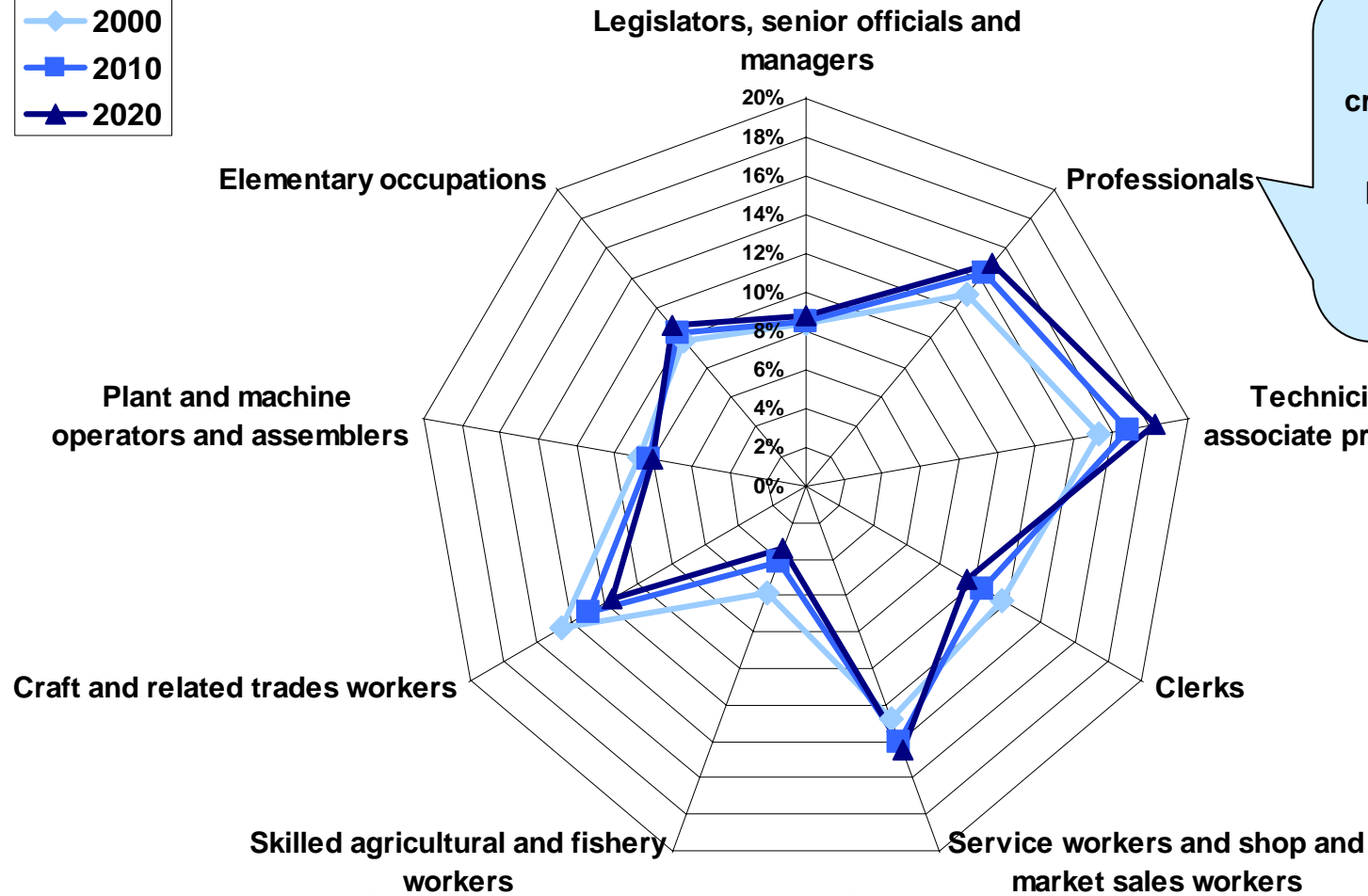
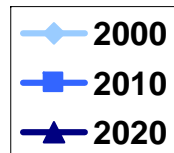
Overview of the presentation



- **Towards knowledge and skills intensive jobs;**
- **Knowledge and skills for innovation and creativity;**
- **Flexible, conducive and open learning environments;**
- **New forms of partnerships and cooperation;**



Towards knowledge-intensive occupations

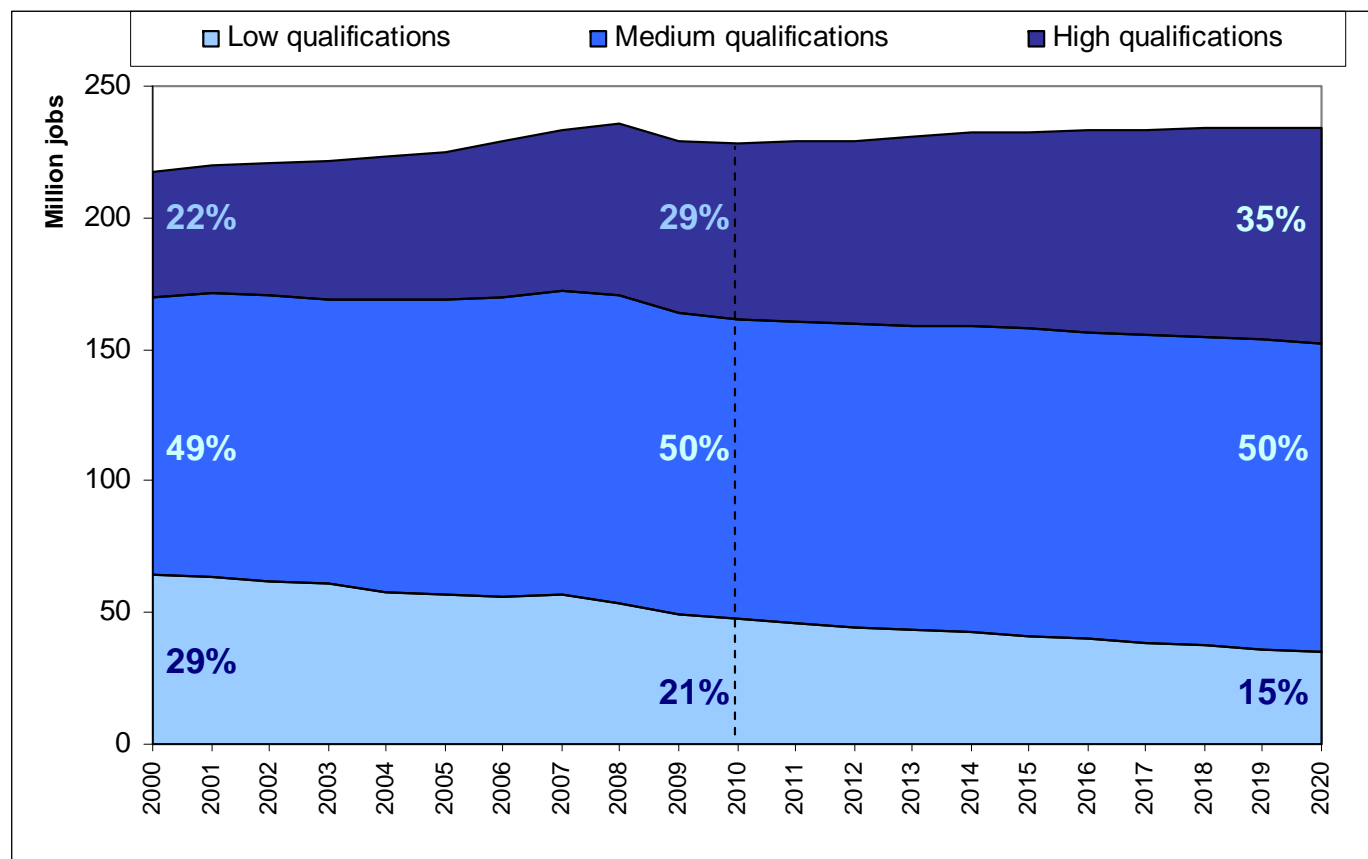


Majority of innovative and creative professions belongs to professionals but also to technicians and service workers

Technicians and associate professionals

Source: Cedefop, 2010

Demand for qualifications rising

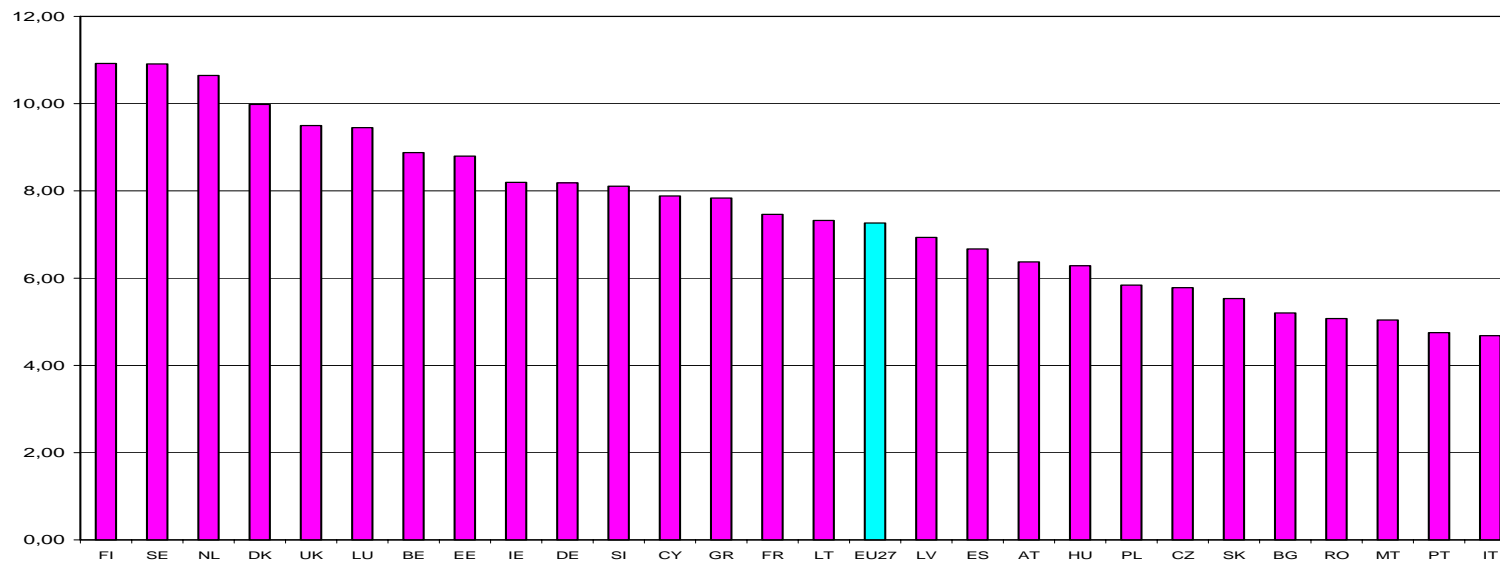


Source, Cedefop, 2010



Europeans working in creative occupations

Percentage of population aged 15-64, average 2006-2007



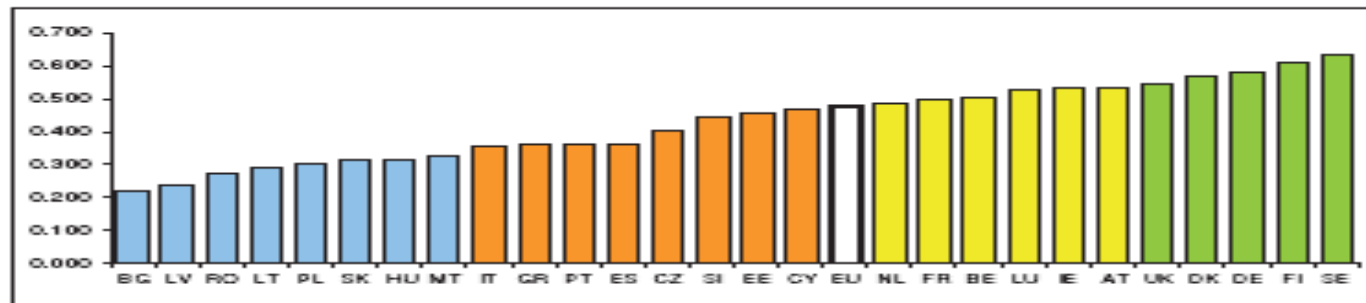
European Commission, 2009; data source: Eurostat



Europe improving

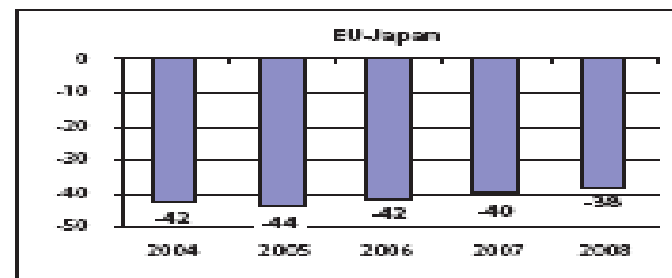
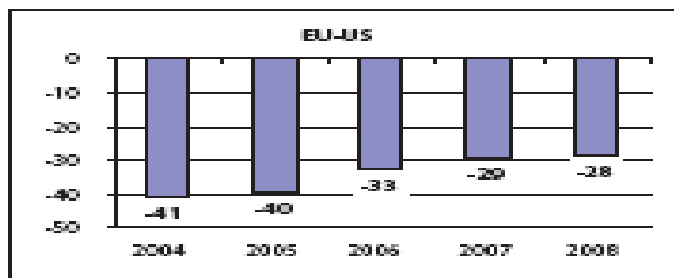
- but a gap towards the US and Japan still existing

Summary innovation performance EU Member States (2008 SII)



Note: The Summary Innovation Index (SII) is a composite of 29 indicators going from a lowest possible performance of 0 to a maximum possible performance of 1. The 2008 SII reflects performance in 2006/2007 due to a lag in data availability.

EU Innovation gap towards US and Japan





Knowledge and skills for creativity and innovation

- **Importance** of transversal skills and competences (critical and lateral thinking, problem solving, risk taking and managing failure) at all levels and in all types of education and training and all stages of life;
- **Balance** between transversal skills and specific competences;
- **Solid** theoretical/technical knowledge and understanding are prerequisites for effective **use of skills in innovative ways and new situations**;
- **Activate** tacit knowledge and make it **usable**;
- The role of the **arts education**.



Flexible, conducive and open learning environments

Turning workplaces into learning places

- **New modes of production – new methods of learning – better use of knowledge and skills;**
- **Collaborative working and learning;**
- **Mentoring and coaching;**
- **Theory and practice combined.**



Integrated and flexible routes to skills and competences

- Access, progression and qualifications through **several routes**;
- **Breaking barriers and removing obstacles** for vertical and horizontal educational and occupational mobility;
- **Flexible training programmes** accompanied by support guidance and counselling schemes;
- **Individualised learning paths** and documentation of learning outcomes;
 - **European principles and tools** (EQF, Europass, ECTS, ECVET);
- **Trust and quality assurance.**





Learners at the centre

- Learners as **co-creators** of the learning process;
- Shaping **conducive learning environments**: content, role of teachers and trainers, learning/teaching methods, formative and summative assessment;
- Problem and project-based learning;
- Supporting talent and intrinsic motivation of all learners;
- Transformation of educational institutions into **creative and innovative institutions** – educational leadership.



Achieving the goals of today and tomorrow through partnership and cooperation

- **Better coherence and synergies** between innovation, education and training, employment and skills policies;
- **New types of and wider partnerships** between schools, universities, research institutes, companies, guidance services; involving cultural organizations and creative industries;
- **Systems in place to exchange and disseminate** knowledge and best practices;
- **Networking**, establishing joint training centres using the latest technologies (e.g. new wind power training centers in Bremen).

Thank you for your attention

More information:

www.cedefop.europa.eu