

# Senior Officials Meeting (SOM1) in Austria Krems, 15-17 October 2018

16 October 2018

**The pathways to recognition. A contribution to the Sustainable Development Goals (SDG) from a Lifelong Learning Perspective**

## **Recognition of Skills and Qualifications in a sustainable development context: trends and new perspectives**

Borhene Chakroun  
Section Chief, Youth, Literacy and Skills Development  
Division for Policies and Lifelong Learning Systems  
Education Sector, UNESCO

1. Qualifications agenda in the context of the SDGs and Education 2030
2. Shifts in qualifications and learning pathways
3. Labour market changes affecting qualifications
4. Leveraging digital technologies for recognition of skills and qualifications
5. UNESCO's work in the field of recognition of skills and qualifications

# Qualifications in the context of the SDGs and Education 2030

## 17 Sustainable Development Goals (SDGs)



**SDG 4 : Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

4 QUALITY  
EDUCATION

## SDG 4 : Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

By 2030, SDG 4 calls on Member States to:

- Ensure **equal access** to affordable and **quality** TVET programmes (target 4.3)
- Substantially increase the number of youth and adults with **relevant** skills for employment, decent jobs and entrepreneurship (4.4)
- Eliminate gender disparities in education (4.5)
- Ensure that all learners acquire the knowledge and skills needed to promote **sustainable development** (4.7)

## SDG targets related to Qualifications



### SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all

SDG 8 calls on Member States to:

- By 2030, achieve **full and productive** employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (target 8.5)
- By 2020, substantially reduce the proportion of **youth not in employment, education or training** (8.6)

- Qualifications of Water management workforce
- Qualifications of Health workforce
- Qualifications for Green economies
- Qualifications for culture and intangible heritage

1. Gather and use evidence about changing skills demand to guide skills development.
2. Engage social partners in designing and delivering education and training programmes that are evidence-based and holistic
3. Ensure transparent and efficient TVET quality assurance systems and develop qualifications frameworks.
4. Promote collaboration on enhancing transparency and cross-border recognition of TVET qualifications
5. Promote flexible learning pathways in both formal and non-formal settings;
6. Enable learners to accumulate and transfer credits for levels of achievement;
7. Recognise, validate and accredit prior learning; and
8. Establish appropriate bridging programmes and career guidance and counselling services.



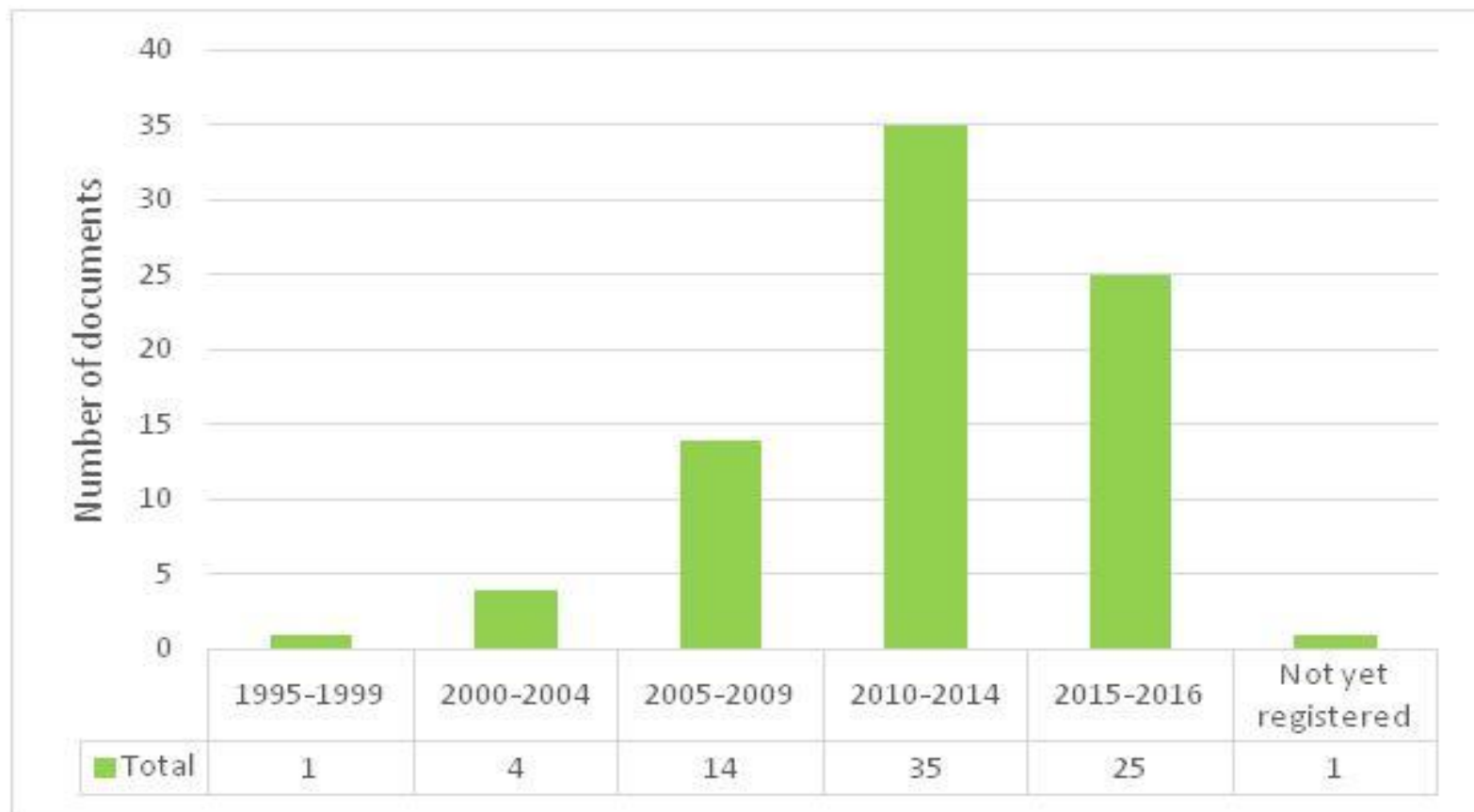
- Shift from access to learning outcomes at all levels from ECCE to HE
- Tool for measuring performance of education and training system
- Driver for lifelong learning and recognising formal, non-formal and informal learning
- Comparable data on learning outcomes (Learning Assessment Capacity Index) provides a snapshot of countries' readiness to produce the data needed to improve learning outcomes and monitor progress towards the Sustainable Development Goal on Education.



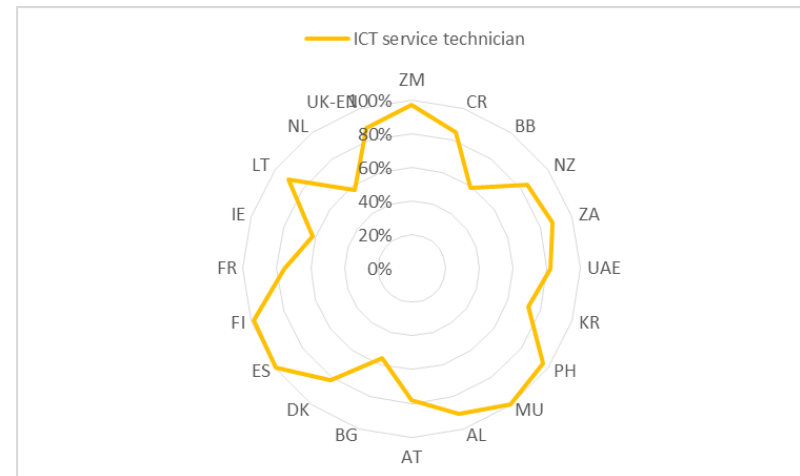
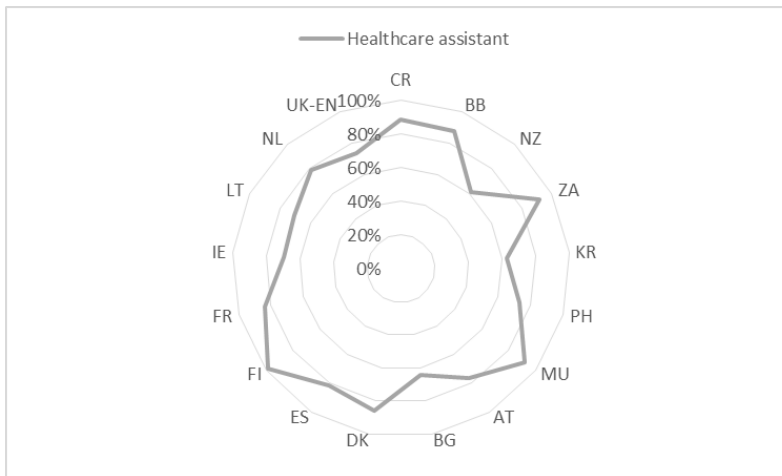
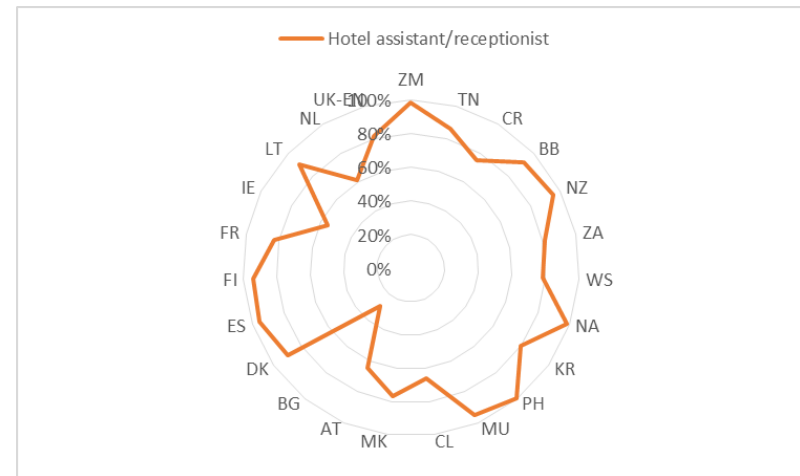
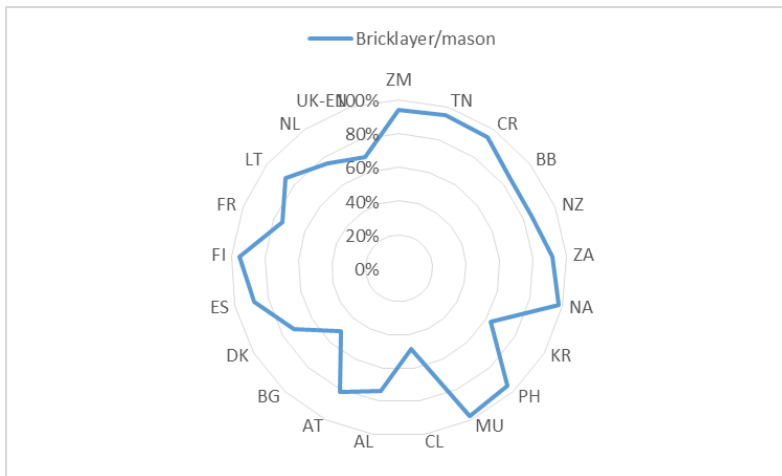
Source: Adapted from Marope, M., Chakroun, B. & Holmes, K (2015)

# SHIFTS IN QUALIFICATIONS AND LEARNING PATHWAYS IN THE CONTEXT OF EDUCATION 2030

- I. Qualifications lifecycle
- II. Qualifications comparability
- III. Growing importance of skills as proxy
- IV. Attractiveness of vocational qualifications
- V. Impact of digitization of on qualifications
- VI. Qualifications in the context of the right to education and right to lifelong learning



## Same qualifications from different countries can differ quite considerably with regard the scope of the learning outcomes



## ICT Technician – main similarities and differences; occupational skills and competences

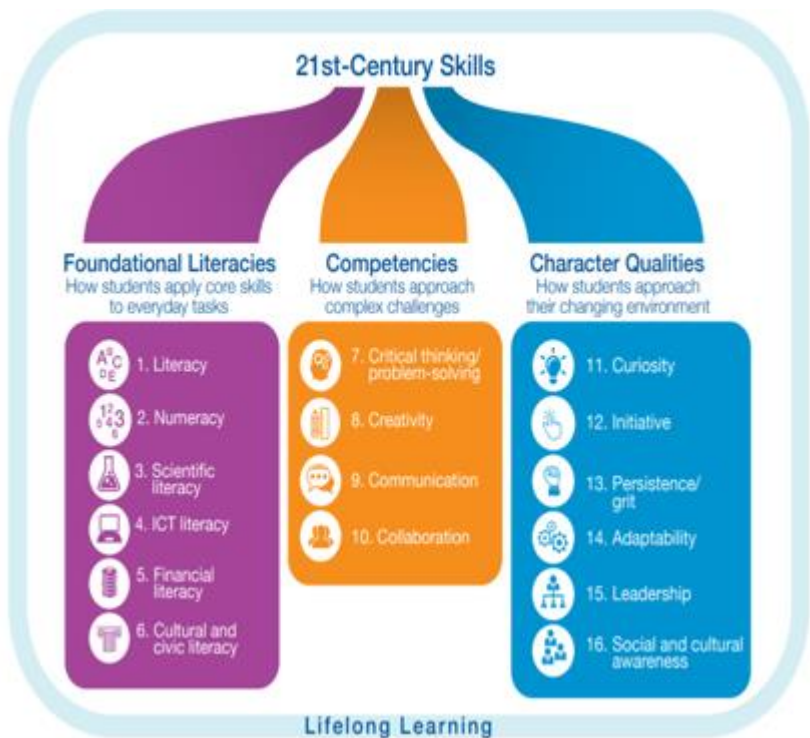
### Present in all countries

- Maintain ICT system
- Perform ICT trouble shooting
- ICT network cable limitation
- Administer ICT systems
- Perform backups
- Repair ICT systems
- Use repair manuals
- ICT communications protocols

### Missing in more than 6-8 cases

- Procurement of ICT network equipment
- Define firewall rules
- ICT encryption
- Computer programming
- ICT system programming
- Service oriented modelling
- Manage ICT system legacy implications
- Operate private branch exchange

Source: J.Bjornavold & B.Chakroun, 2017





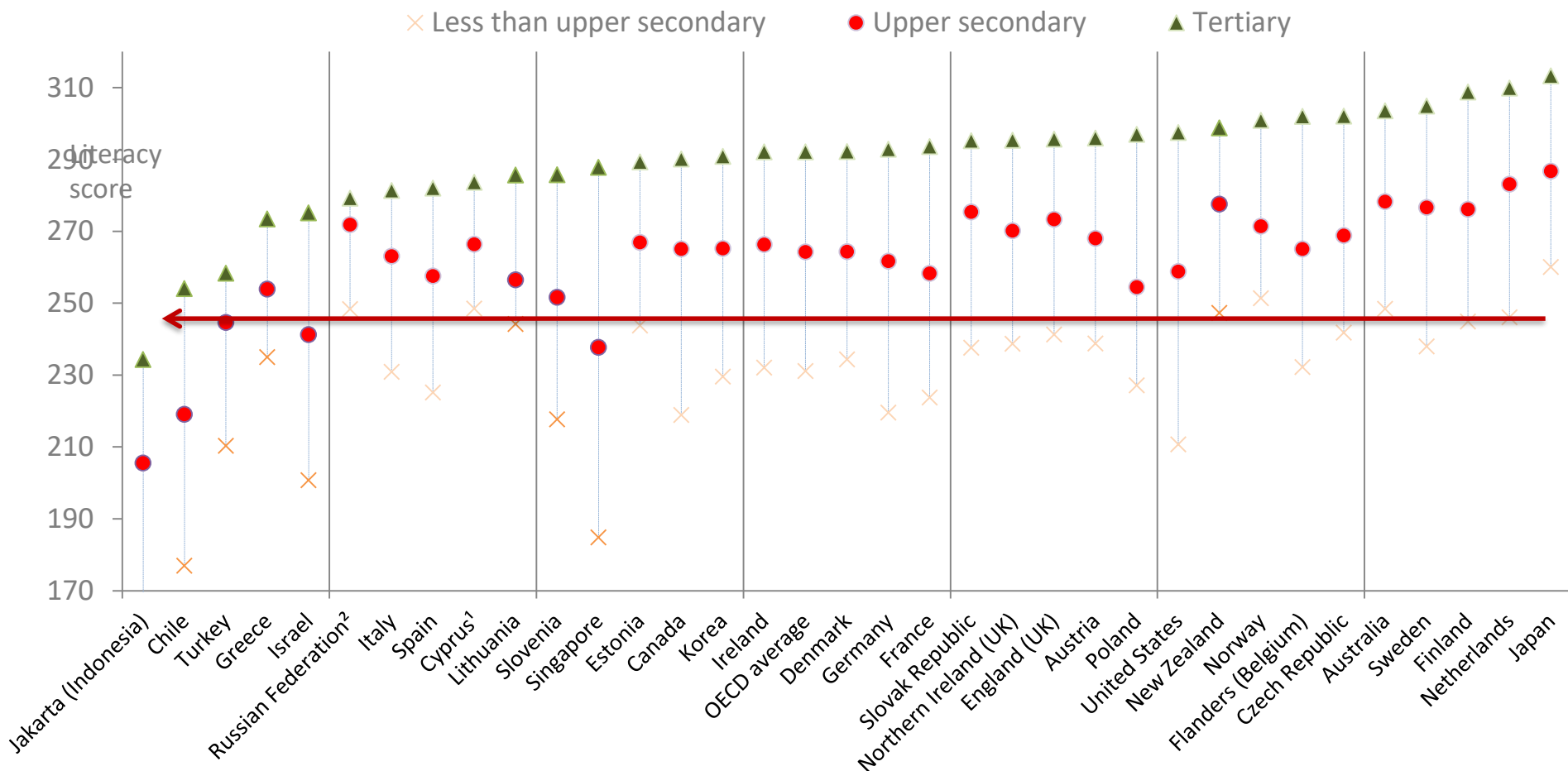
## Case 1:

According to a recent report from Georgetown's Center on Education and the Workforce, liberal arts graduates have an average unemployment rate (9.7%) that is 2.7% higher than the average rate for all graduates (7%).

According to Burning Glass by coupling liberal arts education with additional set of skills (Data analysis, graphic design, etc.), individuals can nearly double the jobs available to graduates, while also offering an average salary premium of \$6,000.

## Case 2:

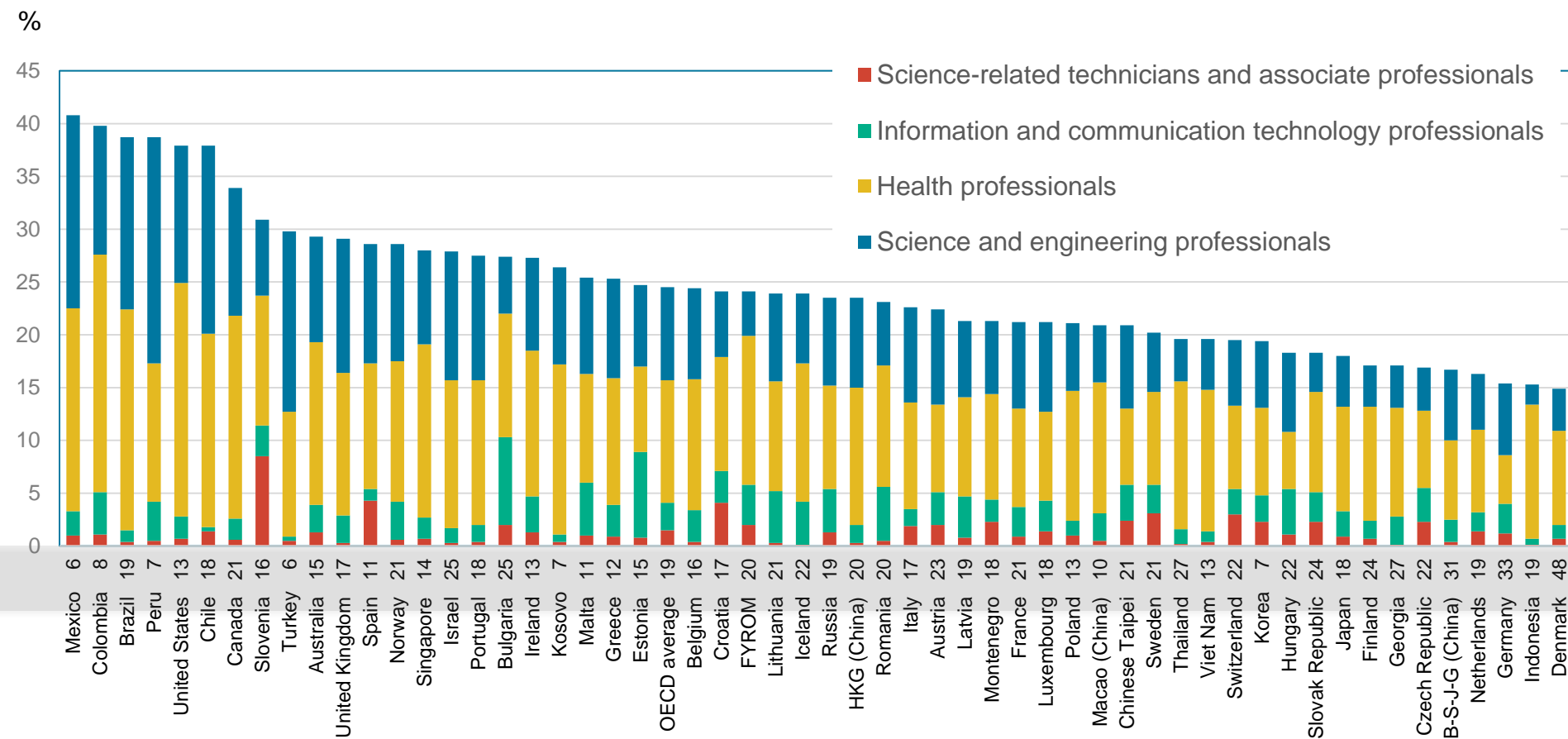
Analysis of the job markets in Denmark, France, Germany, Slovakia, South Africa, Spain, and Switzerland reveals that a one standard deviation increase in complex problem-solving skills is associated with a 10–20 percent higher wage.



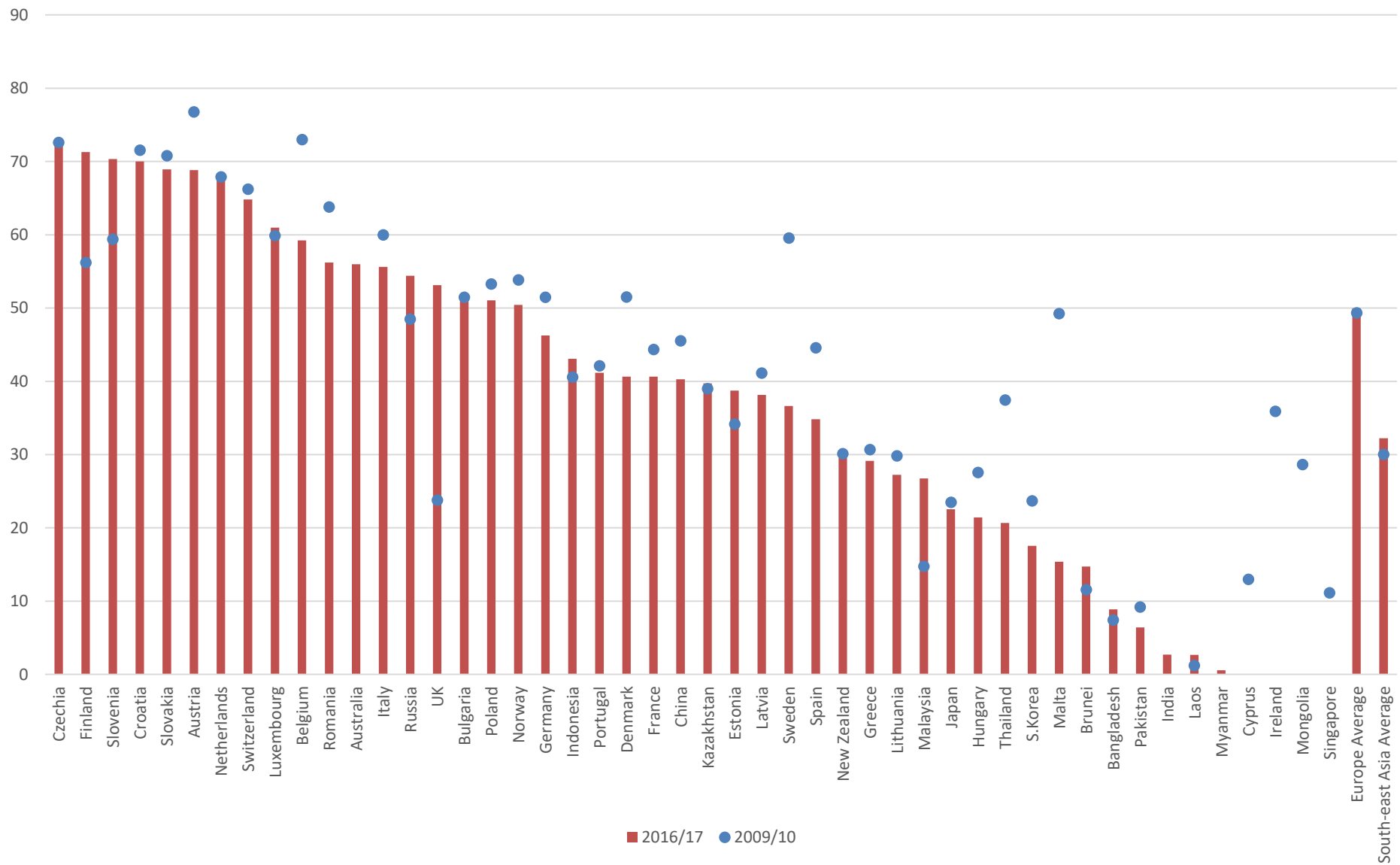
Source: OECD, 2016

Figure I.3.2

Percentage of students who expect to work in science-related professional and technical occupations when they are 30



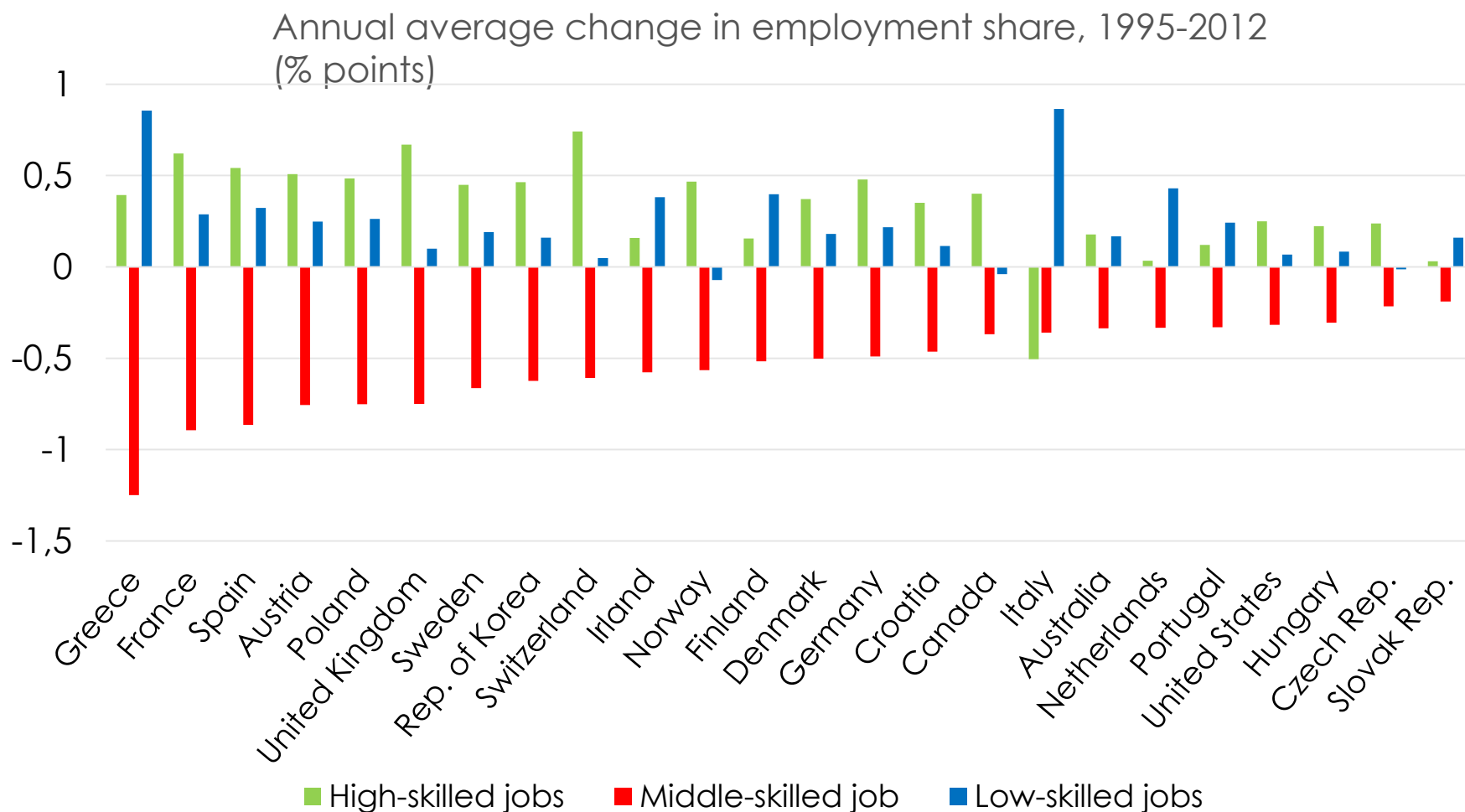
## Share of all students in upper secondary education enrolled in vocational programmes (%)



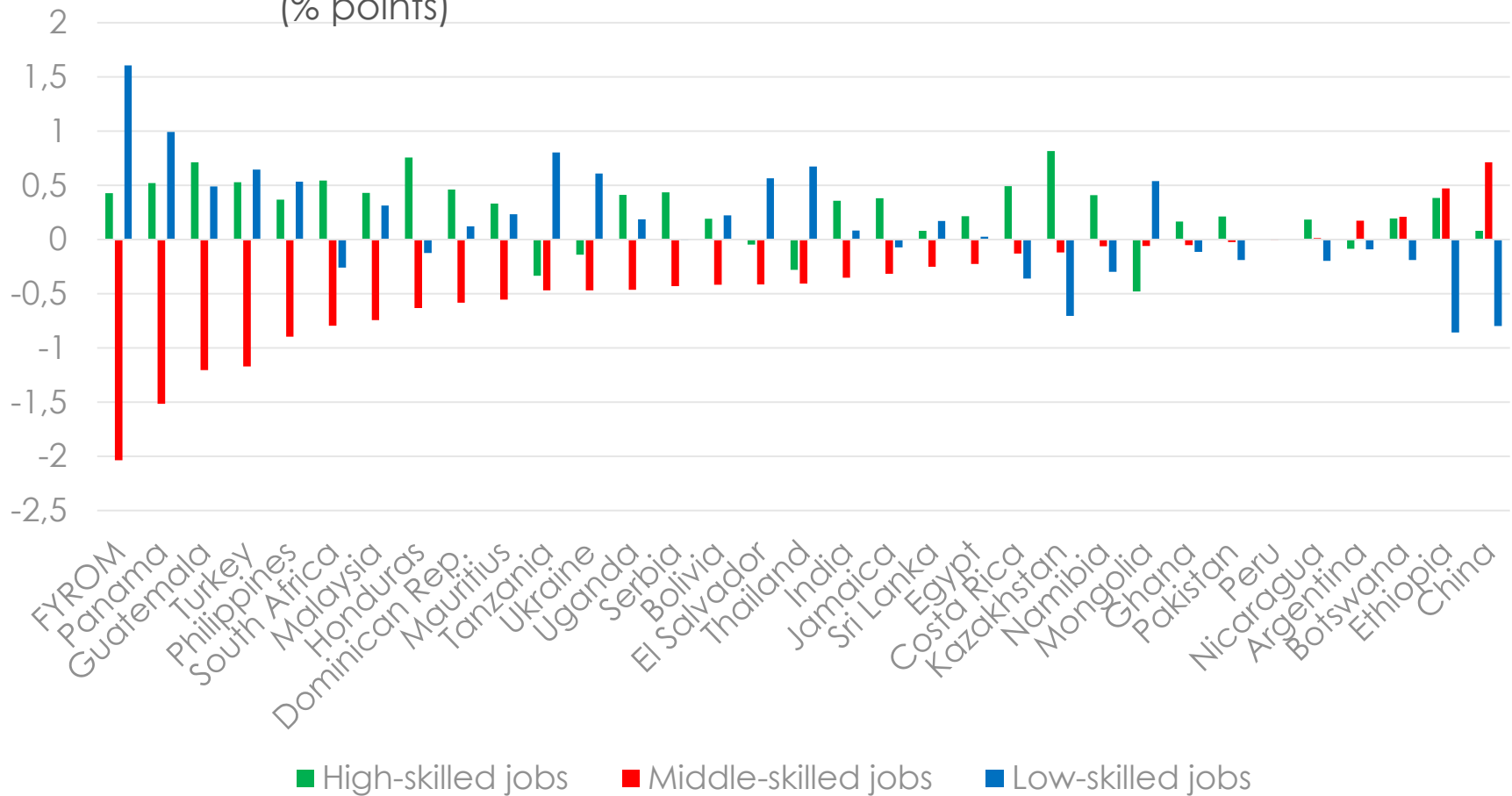
## **Labour market changes affecting qualifications**



## Polarisation of Labour Market and Risks of Automation



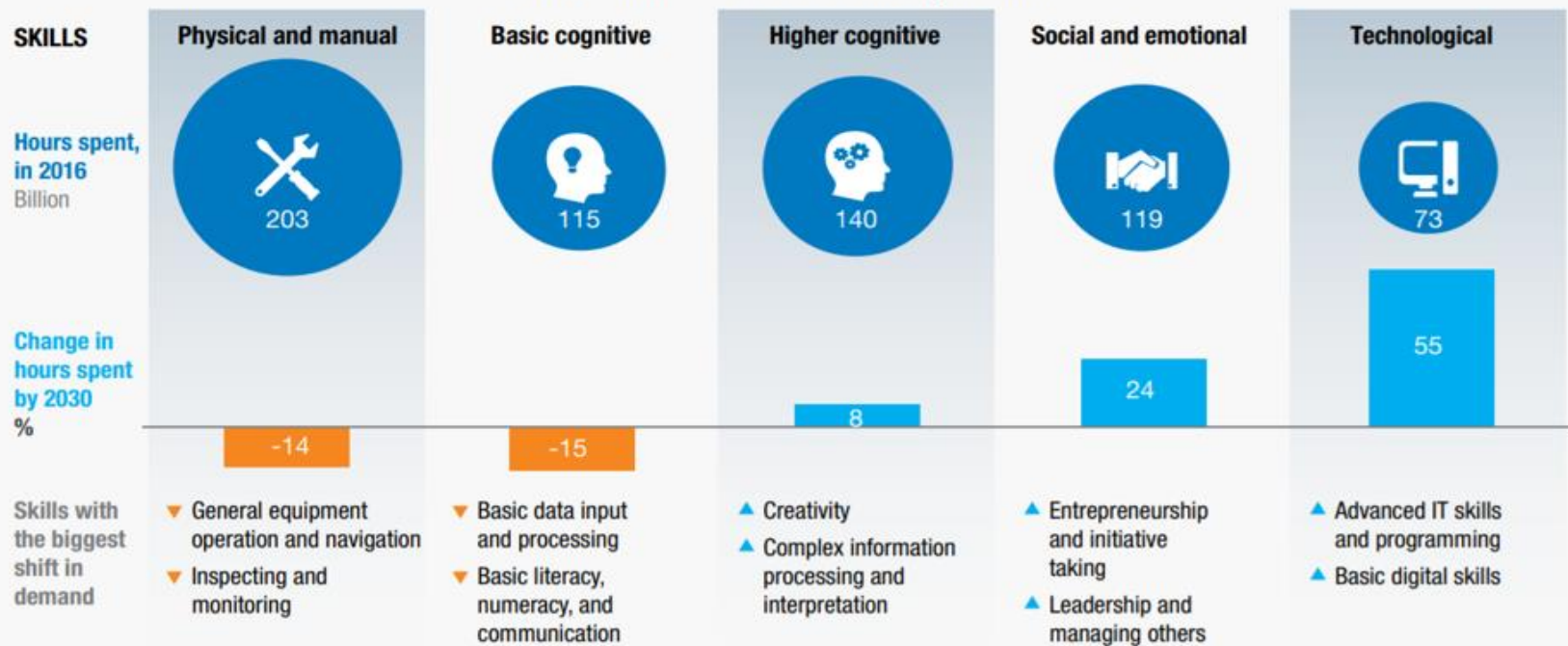
Annual average change in employment share, 1995-2012  
(% points)



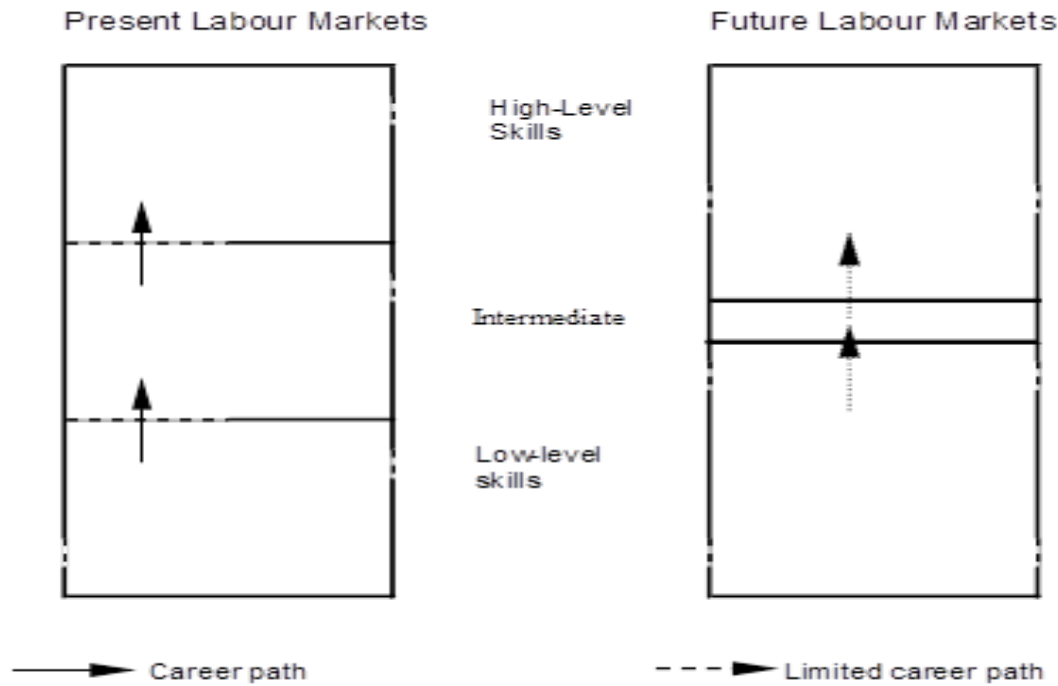


## Automation and AI will change the skills needed in the workforce

Total is for United States and 14 Western European countries



Source:  
McKinsey&Company, 2018



1. Learning (Australia, France, Singapore);
2. Recognition of prior learning (Brazil, Norway and France);
3. Career guidance and counselling (France & Denmark); and
4. Other rights: Right to information/internet, social security, privacy, etc. (EU social right, GDPR, etc.)

# LEARNING PATHWAYS: ARTICULATION OF TVET WITH HIGHER EDUCATION



CEDEFOP

European Centre for the Development  
of Vocational Training



## Findings

- Making NQFs work requires 4 fundamentals: proportionate legislation; sustained stakeholder bodies; specialised institutions; national quality assurance strategies.
- Most impact: move to outcomes in qualifications; transparency of systems of qualifications; Validation of non-formal learning; stakeholder engagement in qualifications.
- Less impact: visibility to learners and employers; pathways within national systems.

- **Pathway 1:** Entrants from initial TVET (ISCED 2–3). This transition is critical in removing the stigma of a dead-end from the vocational track.
- **Pathway 2:** Entrants from short-cycle post-secondary TVET (ISCED 4–5) to higher education (ISCED 6–8).
- **Pathway 3:** Entrants from working life, including the informal economy.

**Appropriate measures will depend on country circumstances e.g**

- **Level of education and training system fragmentation or complexity**
- **Education system performance**
- **Structure of labour market**

### Examples of specific measures:

- Support credit recognition
- Develop RPL systems
- Offer quality career guidance and counselling



## Examples of specific measures:

- **Embed general and transferable skills and knowledge into TVET programmes to support lifelong learning**
- **Provide optional bridging or access programmes to post-secondary education**

## Examples of specific measures:

- **Widen participation in post-secondary education, including funding arrangements for TVET graduates**
- **Develop short-cycle post-secondary vocational programmes**
- **Meet the needs of adult students**

# **Leveraging digital technologies for recognition of skills and qualifications**

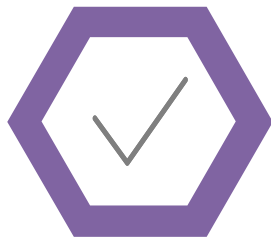
- Open learning, MOOCs and Open Degrees;
- Digital Badges;
- Digital repositories;
- Connecting learners records.

**Learning outcomes and learners records**

**Qualifications Lifecycle**

**Career guidance and counselling**

## Some emerging themes



Verification

**How to verify somebody's achievements digitally?**



Content

**What's in a digital credential and what does it look like?**



Storage

**How to store a learner's qualifications for the long term?**

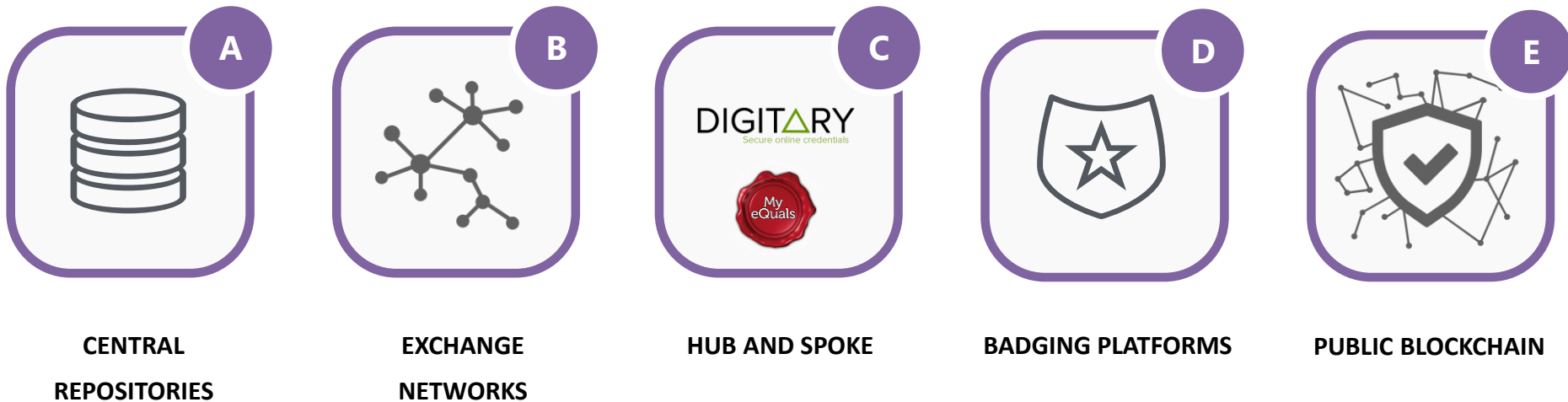


Exchange

**How to exchange credentials quickly, securely, and reliably?**

Source: Andy Dowling, 2018

## Some existing architectures



Source: Andy Dowling, 2018







Lone Star College's data-driven program review process



1. **Competent personnel who have the latest labour-market information at their fingertips to steer learners**
2. **Qualifications that are coherent and easy to interpret**

# UNESCO's Work

## **Normative instruments on TVET**

- Recommendation Concerning Technical and Vocational Education and Training (2015)

## **Normative instruments on HE**

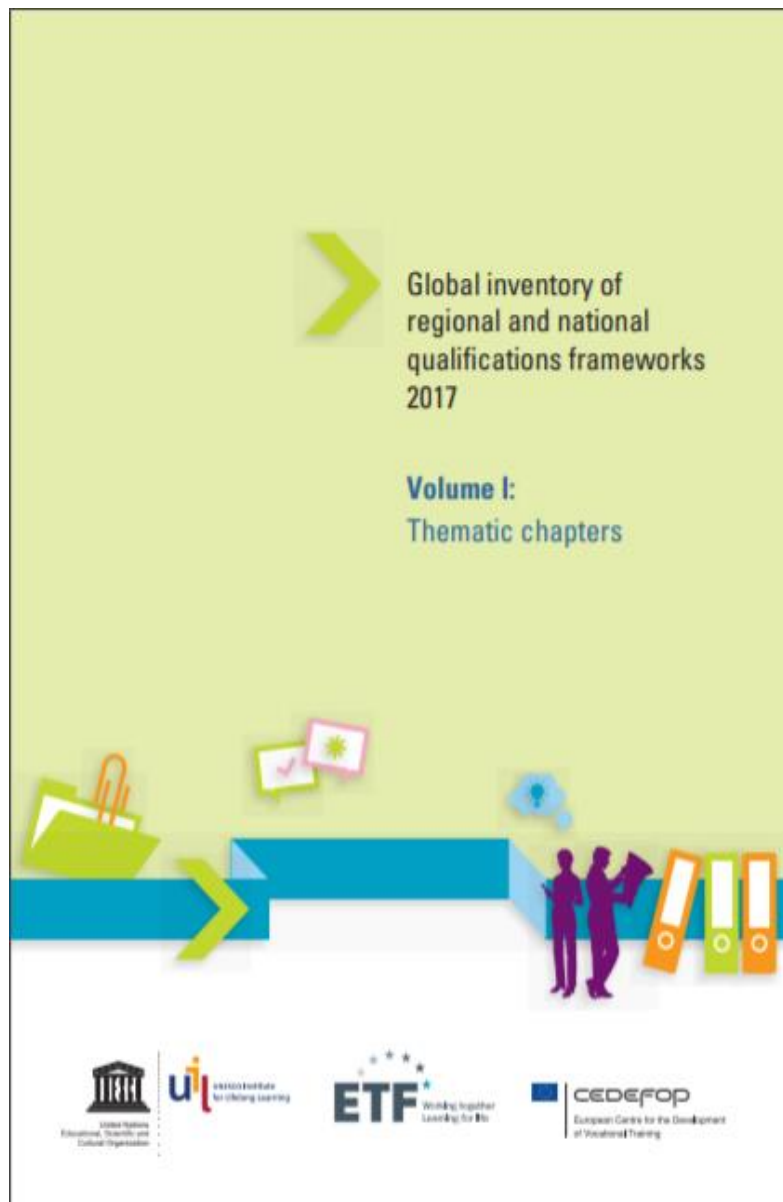
- Regional Conventions
- Work on Global Convention

## **Normative instruments on Right to Education**

- The Right to Education Recommendation

## **Guidelines**

- UNESCO-OECD guidelines on quality assurance in HE
- UNESCO guidelines on quality assurance of certification
- UNESCO guidelines on qualifications frameworks



## Digital Credentialing

## Implications for the recognition of learning across borders



To translate any outcomes-based qualification, credential, entry requirements, job specification or framework level into an internationally recognised form of description which can be used in deciding on comparing qualifications or negotiating recognition or progression arrangements

# Thank you

Borhene Chakroun  
Chief, Section of Youth, Literacy and Skills Development  
UNESCO  
[b.chakroun@unesco.org](mailto:b.chakroun@unesco.org)