



# HIGHER EDUCATION, DIGITIZATION AND SKILLS: IS QUALITY ASSURANCE ADAPTING AND HOW?

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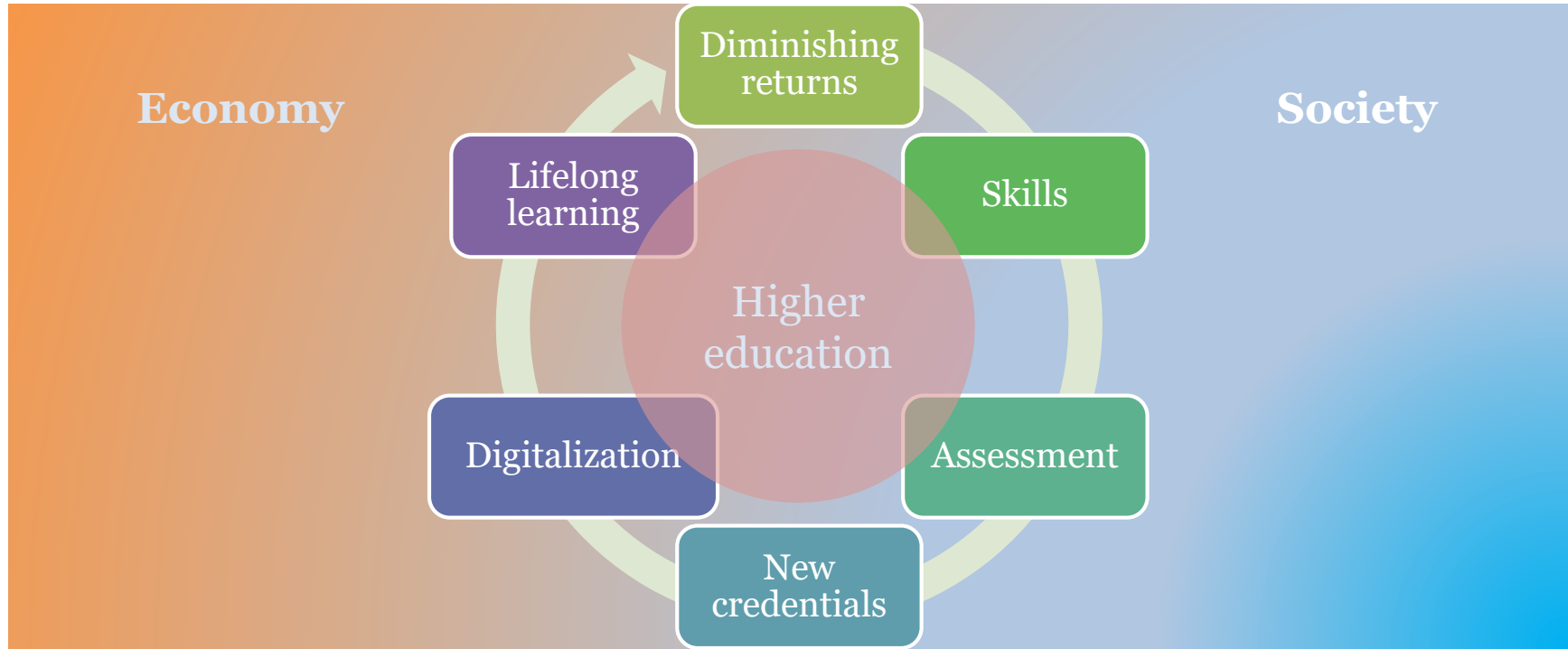
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# WHAT IS HAPPENING?



# Strange things are happening to higher education





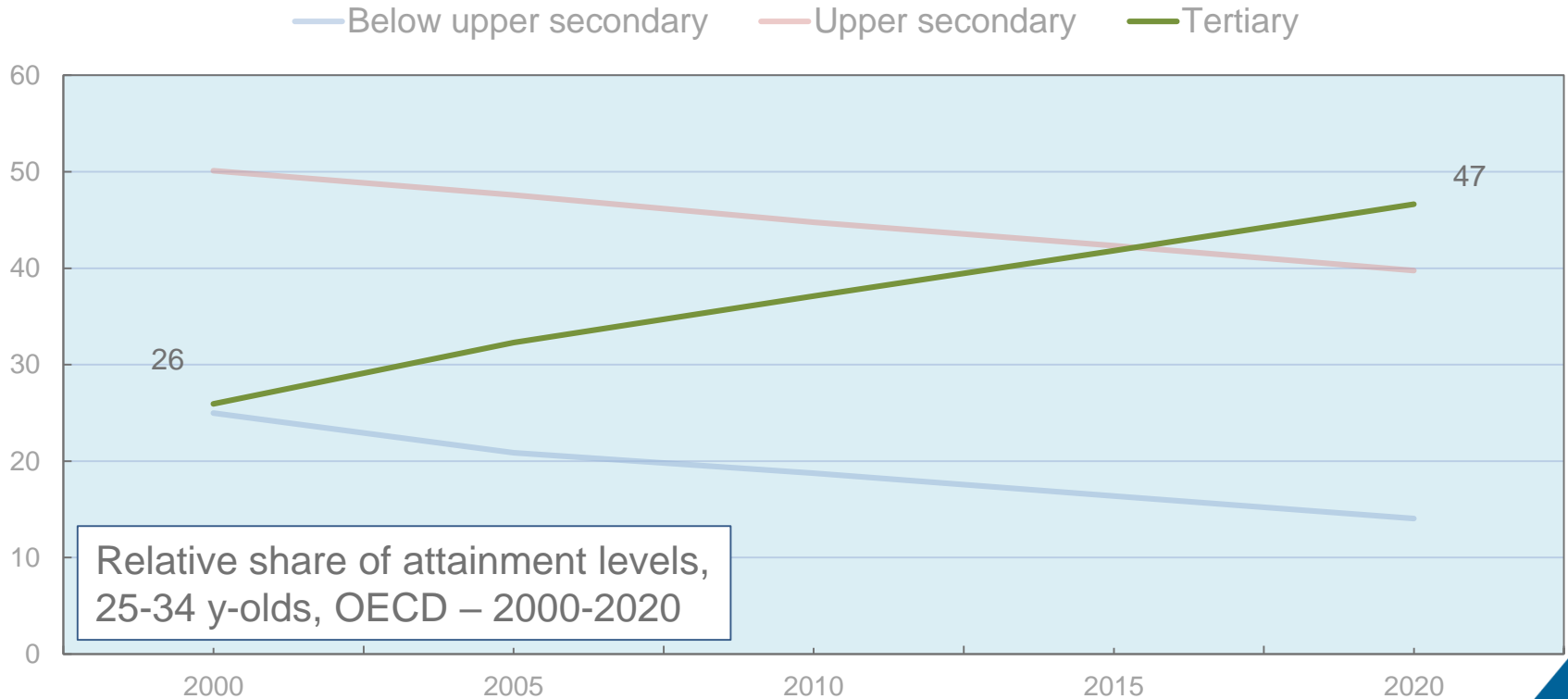
## Diminishing economic and social returns

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- Continued growth in demand, participation and attainment levels
- Concerns about returns, over-qualification risks and substitution of mid-qualified employment
- Skill levels in populations have not increased
- The social contract of meritocracy and social mobility has not materialised
- **The economic and social foundation of higher education is slowly eroding**



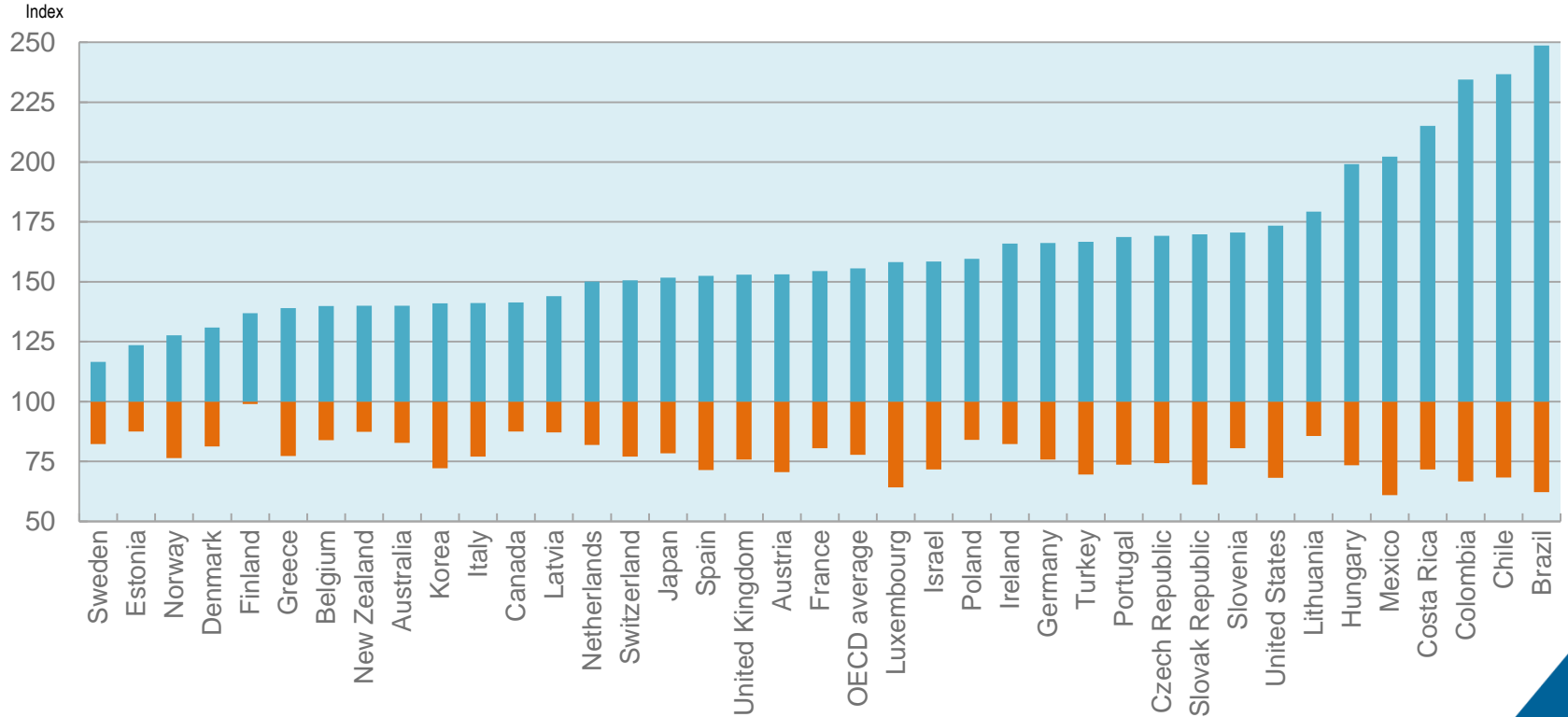
# Increased demand, more qualifications





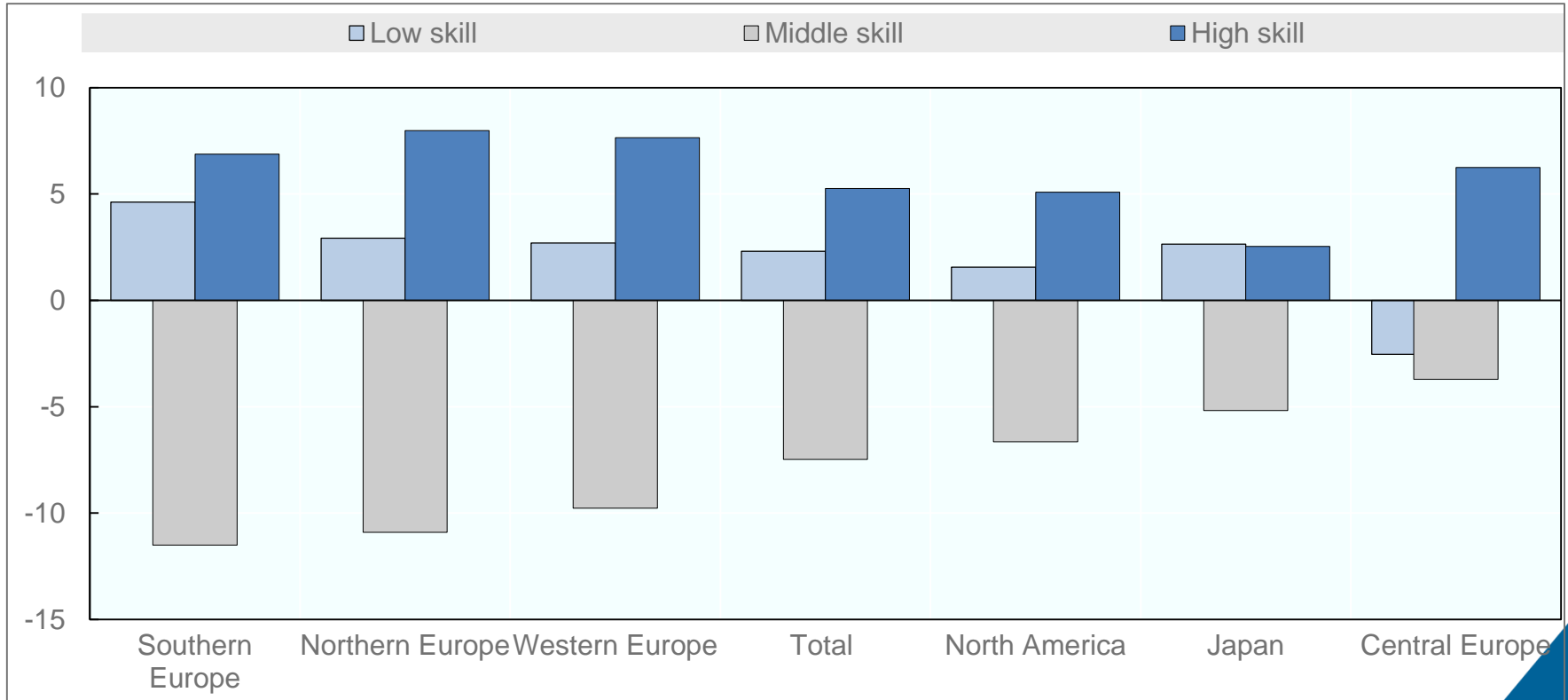
# The monetary value of tertiary qualifications is still high, to a varying degree among countries...

■ Earning disadvantage of adults with below upper secondary education ■ Earning advantage of adults with tertiary education



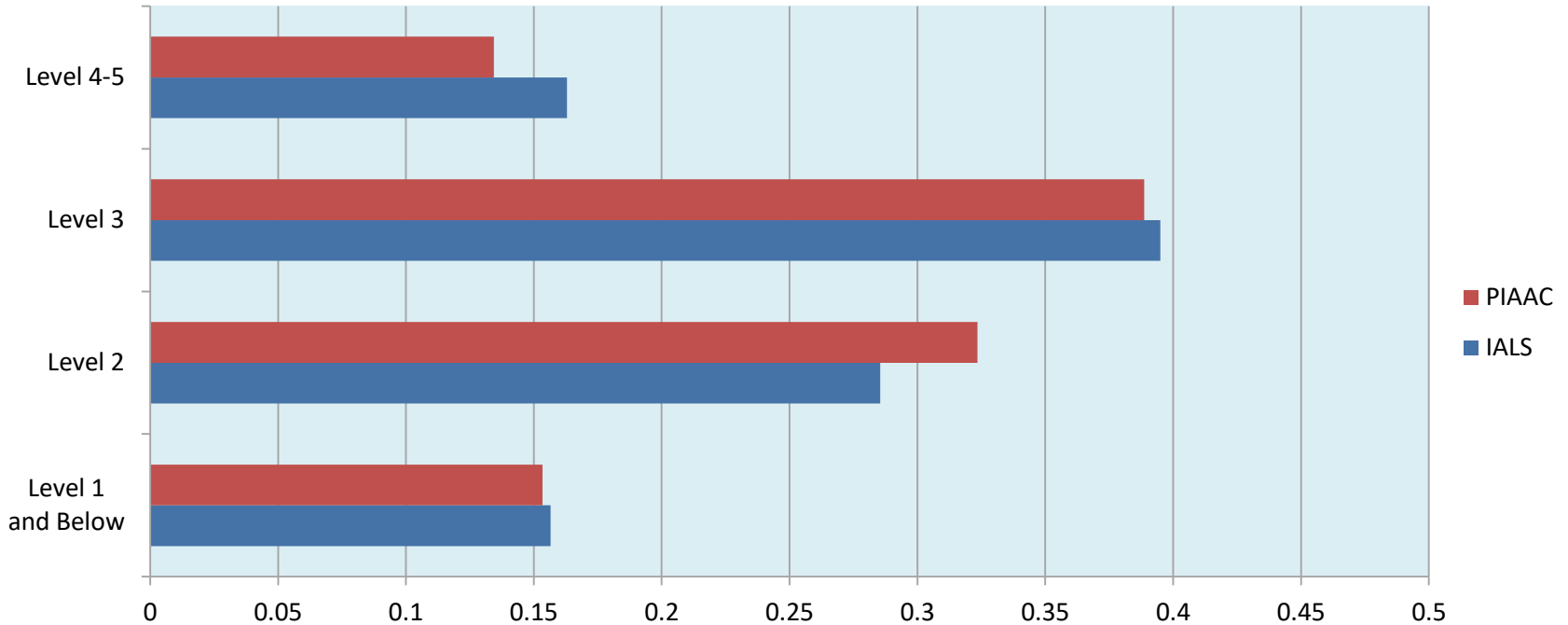


...but might be inflated by substituting the mid-skilled on the labour market (polarization)





# Despite massification, between '90s and 2010s levels of foundation skills have slightly decreased



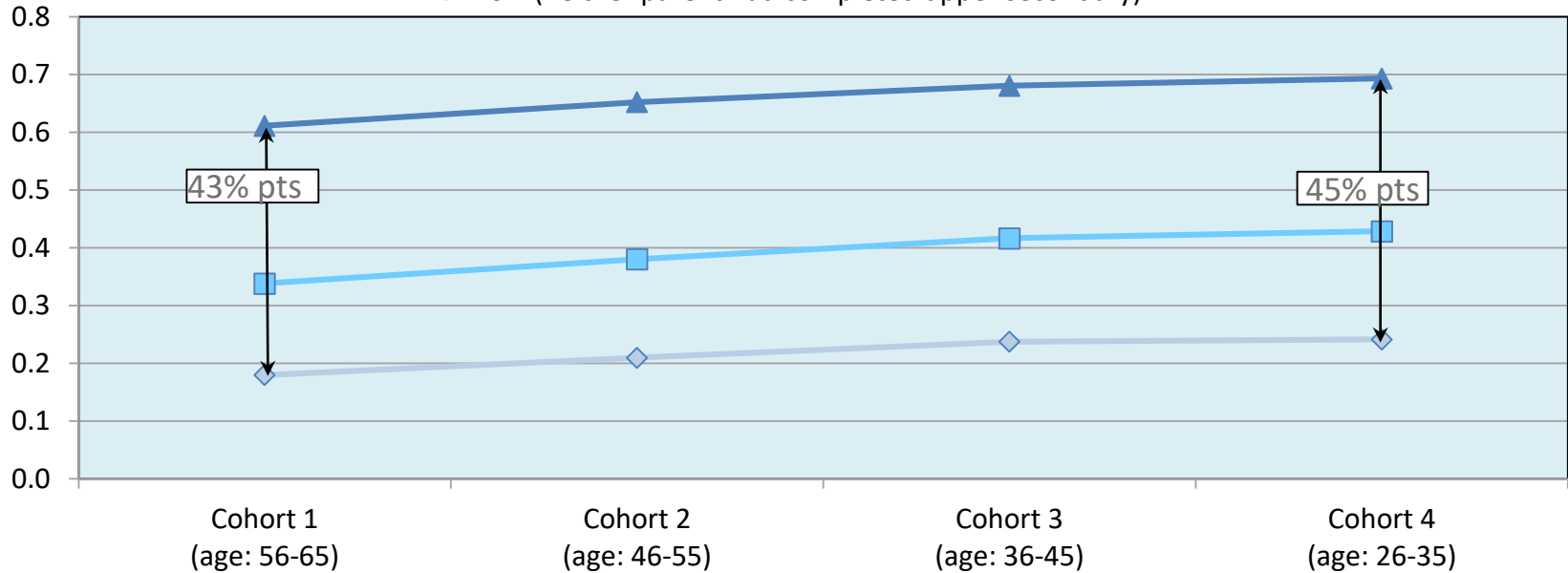




# The social contract has not materialised

Probability of tertiary attainment

- ▲ High (at least one parent had completed tertiary)
- Middle (at least one parent had completed upper secondary)
- ◇ Low (neither parent had completed upper secondary)





## Skills

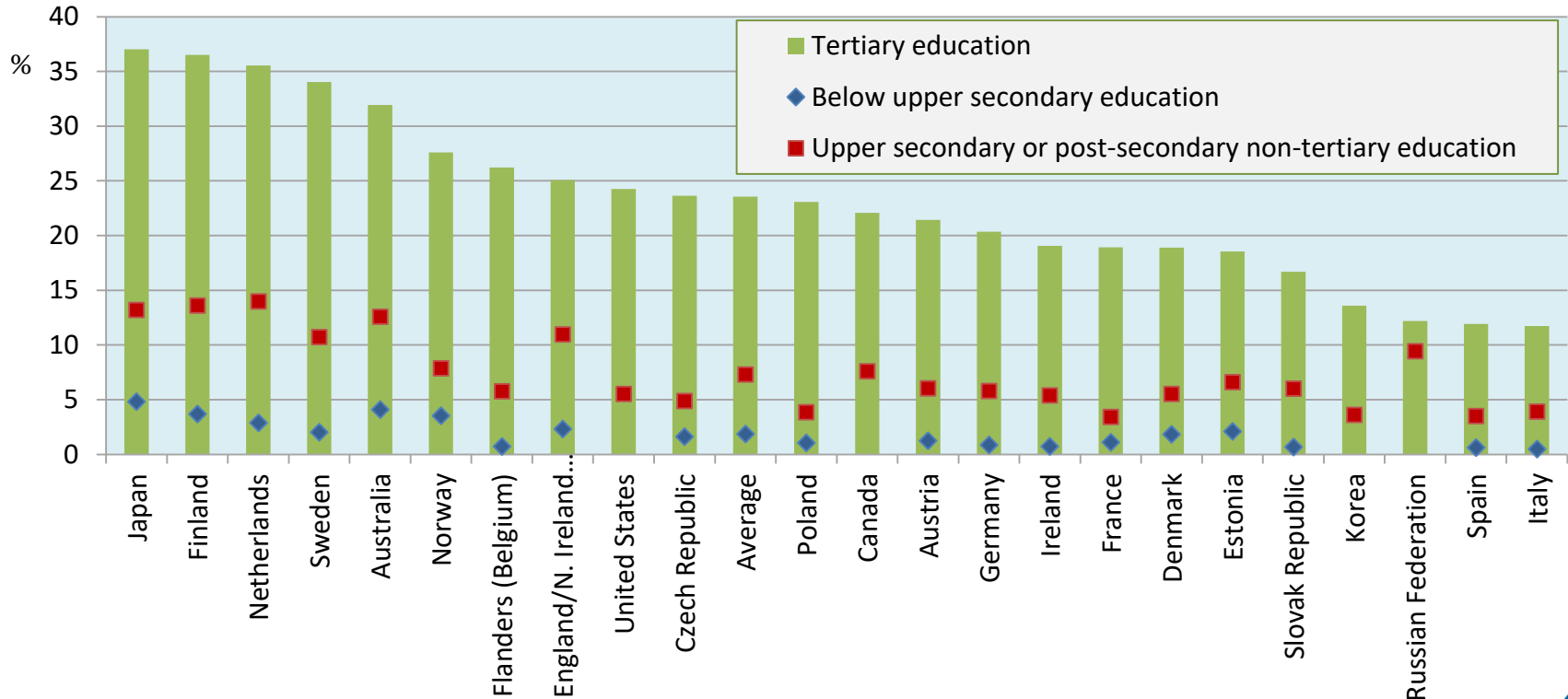
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- Disconnect between qualifications and skills leads to growing mistrust of qualifications
- Many highly valued skills not well signalled by qualifications
- Employers complain that higher education doesn't deliver the skills they need - students are looking for useful skills
- **A fundamental shift from qualifications to skills is taking place, slowly but resolutely**



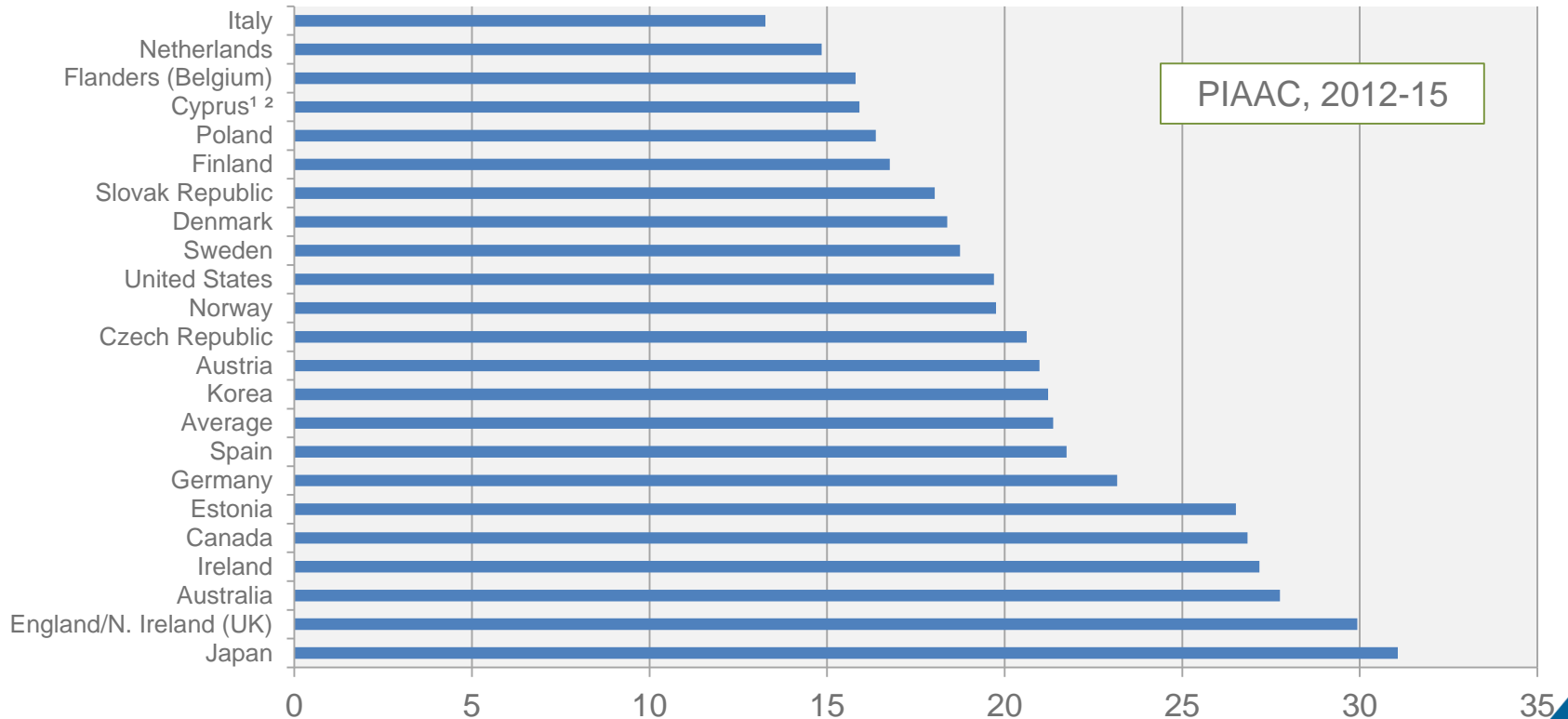
# Qualifications do not deliver on the skills equivalent they promise

Proportion of 25-64 year-olds scoring at PIAAC numeracy level 4 and 5, by educational attainment of the population





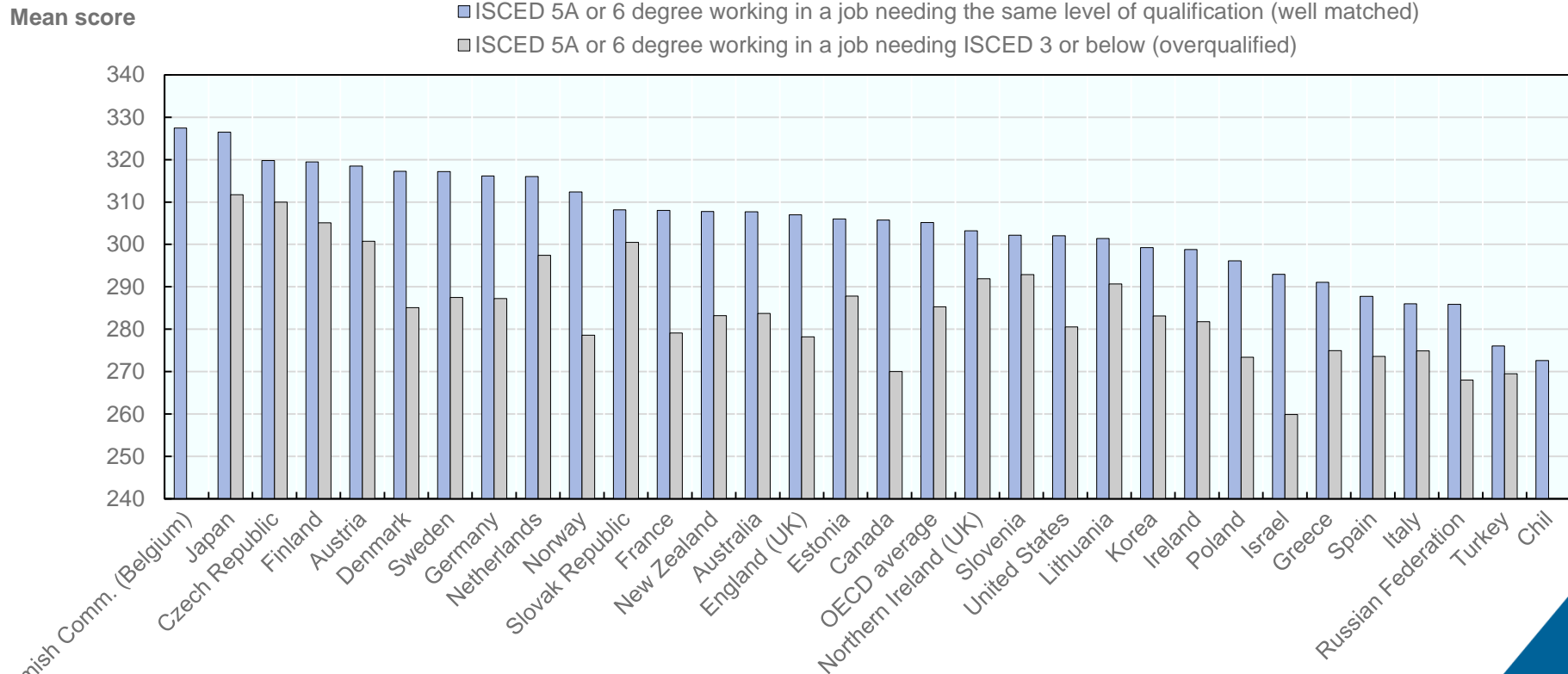
# The prevalence of over-qualification





# The skills risk of over-qualification

Mean numeracy score among adults with ISCED 5A or 6, by selected qualification match or mismatch among workers (PIAAC, 2012 or 2015)





# Qualifications becoming irrelevant?

**make it**

SUCCESS MONEY WORK LIFE VIDEO



CAREERS

## Google, Apple and 12 other companies that no longer require employees to have a college degree

Published Mon, Oct 8 2018 · 12:51 PM EDT · Updated Mon, Oct 8 2018 · 12:51 PM EDT



Courtney Connley  
@CLASSICALYCOURT

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### Trending Now

**1** Americans are flocking to these 9 southern cities where business



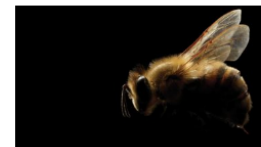
EDUCATION

# Does Higher Education Still Prepare People for Jobs?

by [Tomas Chamorro-Premuzic](#) and [Becky Frankiewicz](#)

JANUARY 07, 2019 **UPDATED** JANUARY 14, 2019

WHAT TO READ NEXT



[Rethinking Efficiency](#)



# Assessment

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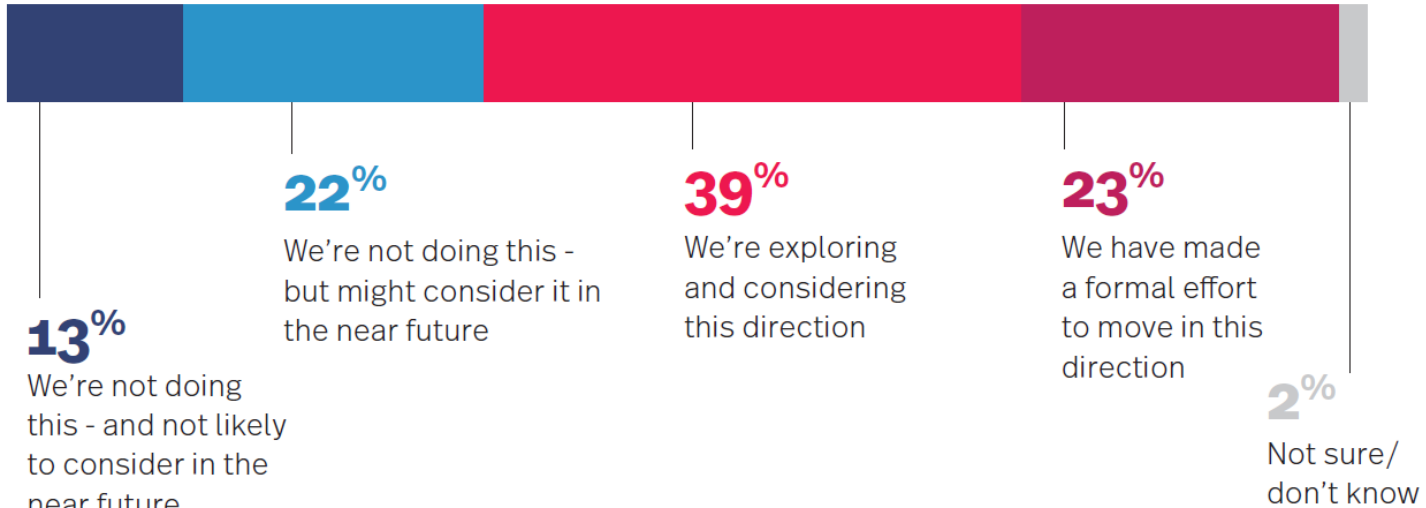
- Instead of relying on the signalling value of qualifications, employers and recruiters gradually turn to their own assessments
- Explosion of assessment industry
- New skill-based assessments (performance tasks) proliferate
- **Higher education is gradually losing grip on the assessments that matter in life**





# Skill-based assessments in hiring practices

**Figure 4. Extent to Which Organizations Have Formal Skills-Based Hiring Initiatives Underway or Are Considering a Strategy That De-Emphasizes Degrees and Prioritizes Skills**



Source: S. Gallagher (2018), *Educational credentials come of age. A Survey on the Use and Value of Educational Credentials in Hiring*



## New credentials

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- To bridge the gap between learning and assessment, or to bypass qualifications, employers and students join forces in adopting new credentials:
  - Certificates
  - Digital badges
  - Micro-credentials
- **Higher education's qualifications now have to compete with a chaotic bazaar of credentials**



# Professional certificates most in demand by employers (US, 2017)

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<b>Top 5 Professional Certificates</b>	<b>Number of Requests</b>
<b>Certified Public Accountant (CPA)</b>	276 880
<b>Project Management Certification (PMP)</b>	202 971
<b>Certified Information Systems Security Professional (CISSP)</b>	91 981
<b>Automotive Service Excellence Certificate (ASE)</b>	67 973
<b>Cisco Certified Network Associate (CCNA)</b>	67 746



# Digitalization

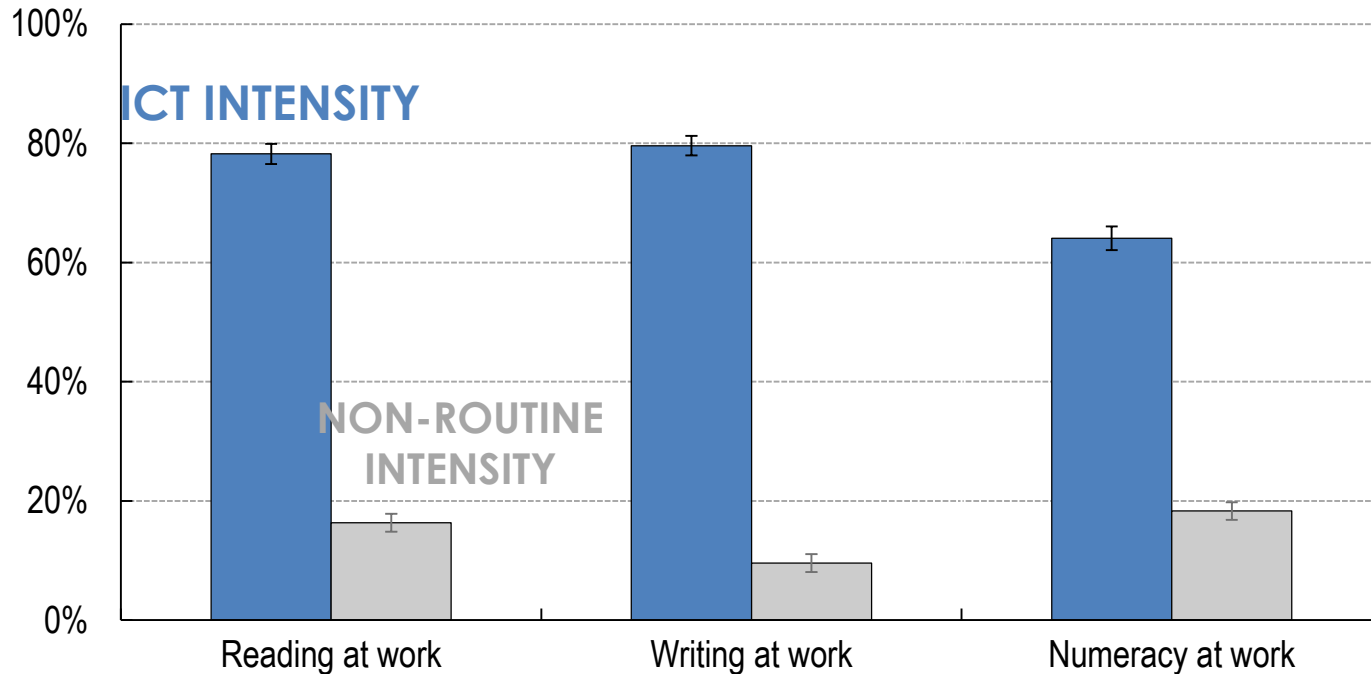
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- Transforming work and changing the demand for skills
- Fostering skill development
- Incentivizing re- and up-skilling
- Lowering the half-time life of qualifications
- Transforming the delivery modes of education and the participation modes in learning
- **Digitalization and AI will obviously transform higher education**



# Digitalization fosters skill development

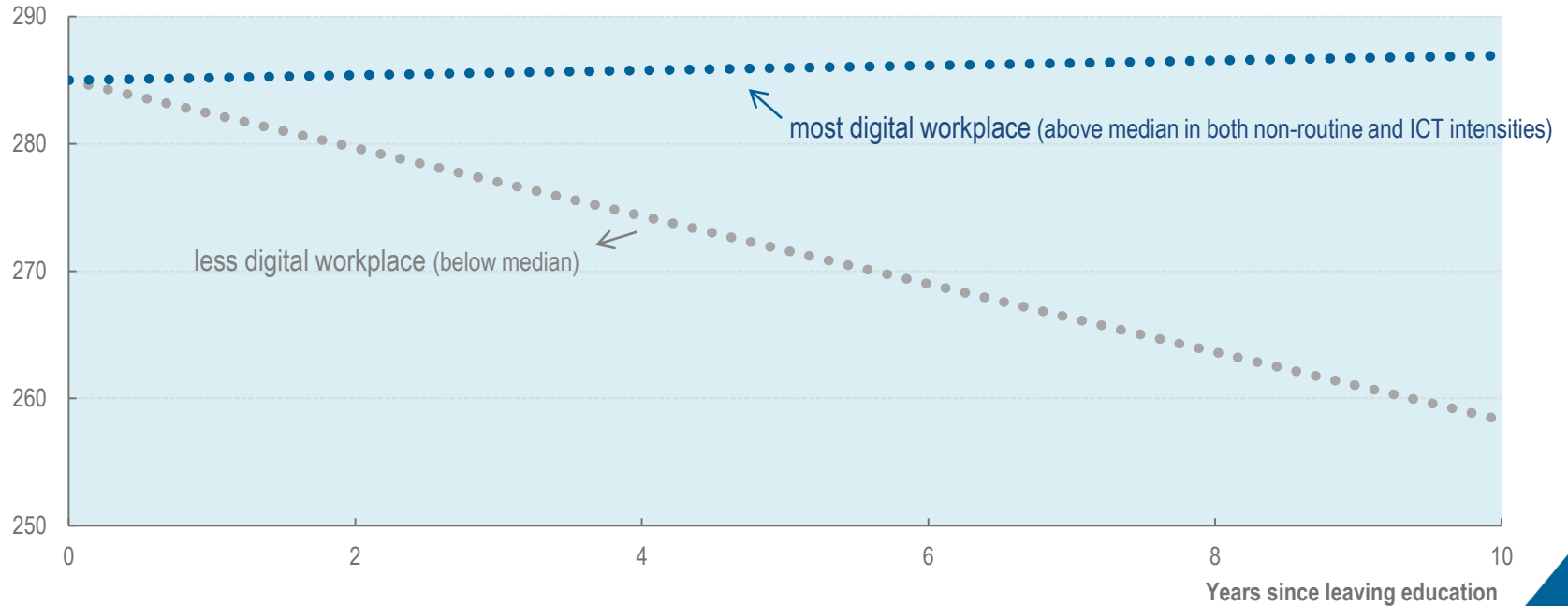
Expected effect of increase from 50<sup>th</sup> to 75<sup>th</sup> percentile of digital exposure on cognitive skill intensity





# Less digital workplaces lead to skills obsolescence – more digitalization fosters skills

Expected problem solving skills

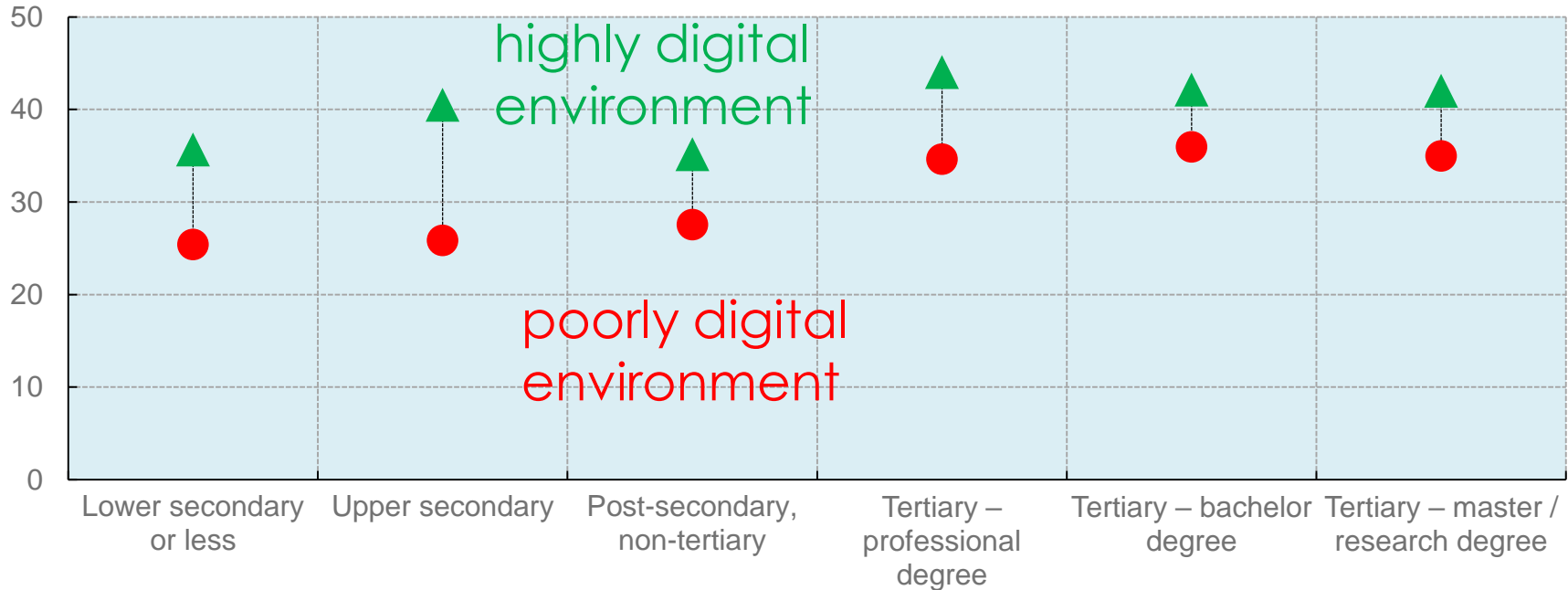


Source: Survey of Adult Skills (2012, 2015)



# Digitalisation drives the need for further learning

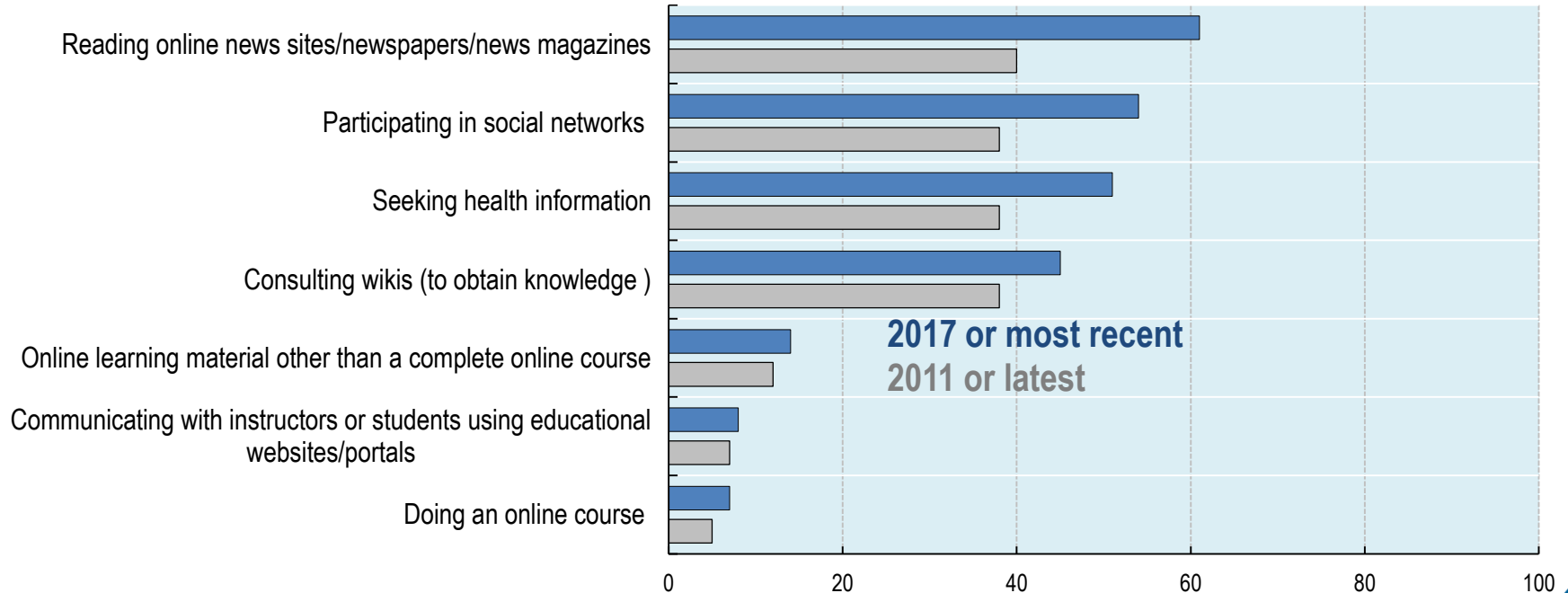
Share of workers reporting needing further training for their job by education level (%)





# Digitalization opens up many channels and opportunities for learning

Share of individuals in European Union (28 countries)







## Lifelong learning

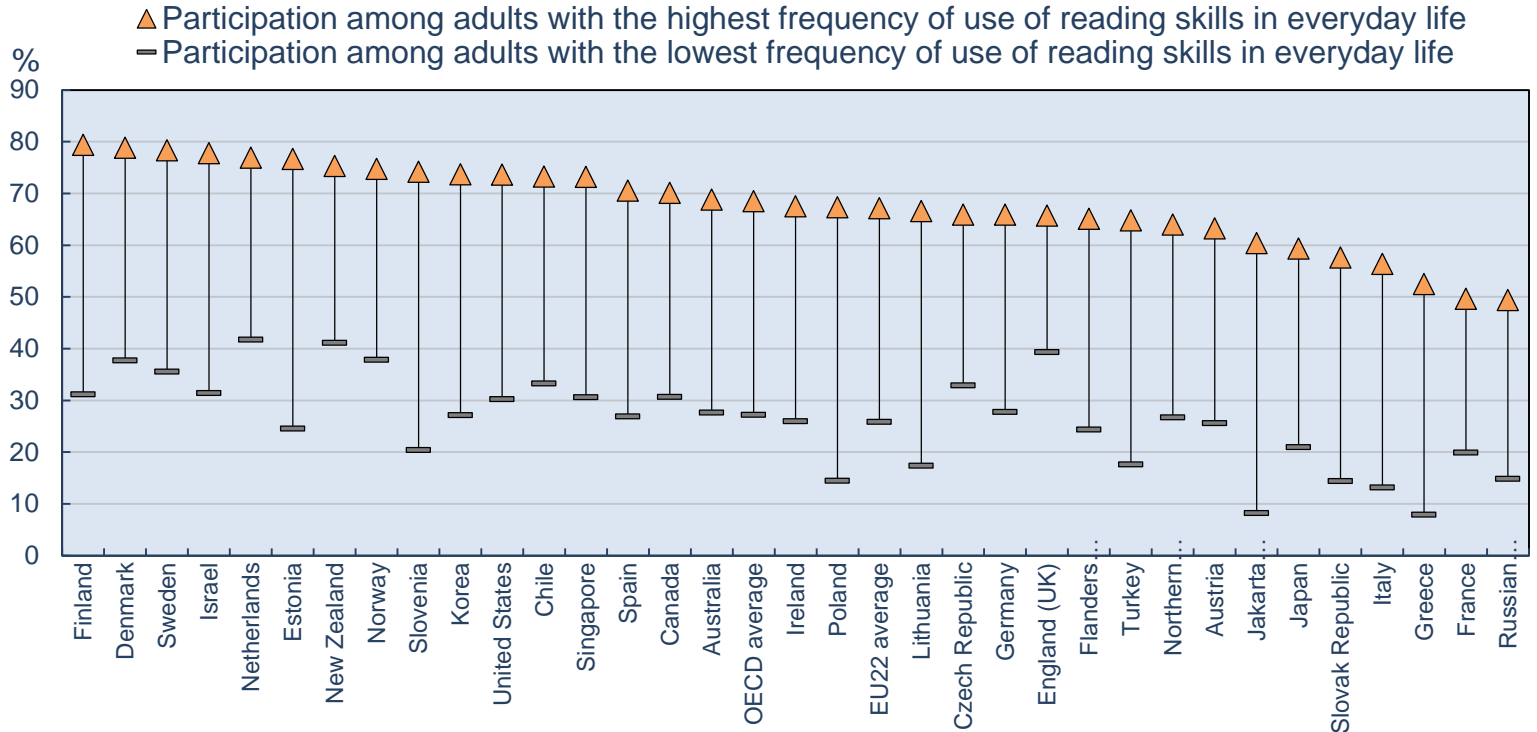
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- In the digital age, the lifelong learning imperative evolves from a noble, but soft idea into a hard reality
- Qualifications don't last a lifetime, their benefits need to be upheld by experience, skills and skills use
- Concentrating educational investment in the first third of a lifetime doesn't make sense anymore
- Learning opportunities abound, barriers fade away, but pressures also increase
- **Lifelong learning urges higher education to rethink its place in the learning life-course**



# The reinforcement of skills use and learning

Adult participation in formal and/or non-formal education, by frequency of use of reading skills in everyday life (2012 or 2015)



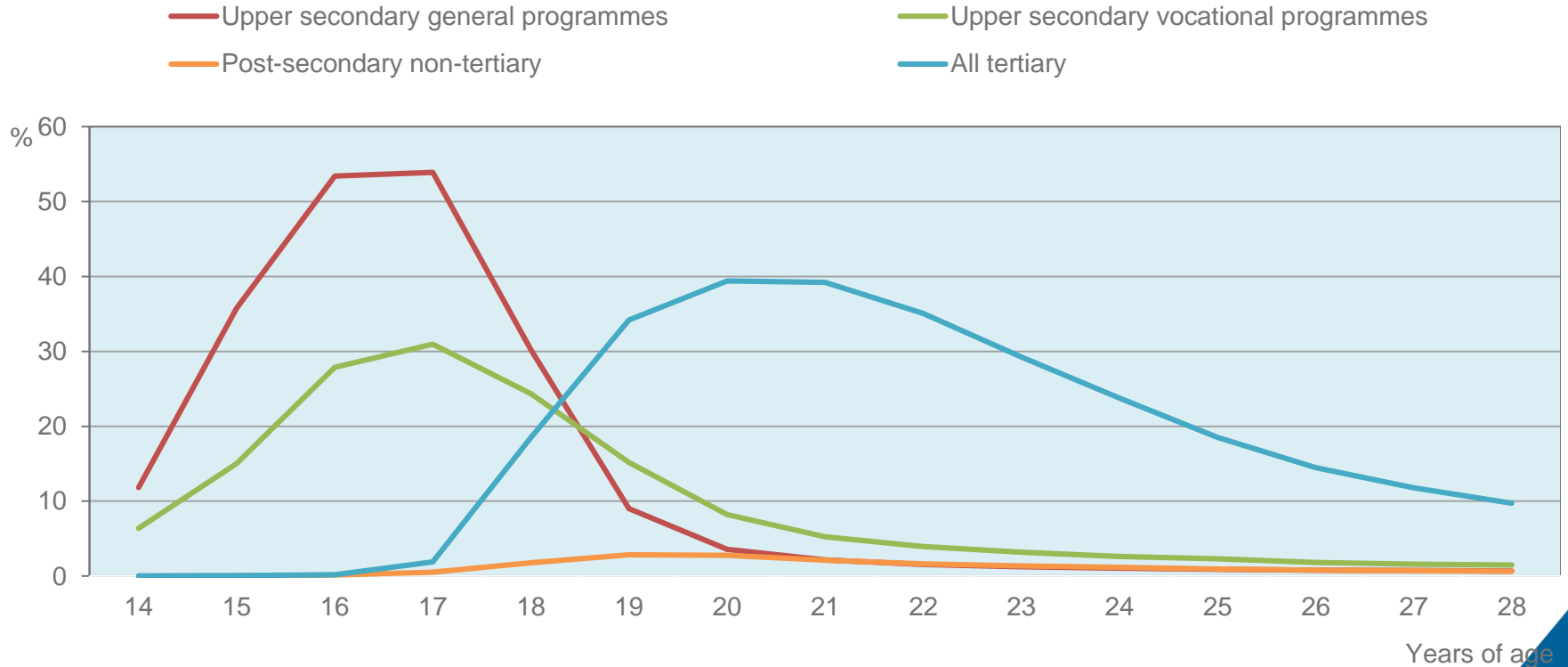


# IS HIGHER EDUCATION ACCOMMODATING?



# Higher education is not yet attracting older learners

## Enrolment rates by age in OECD countries (2017)

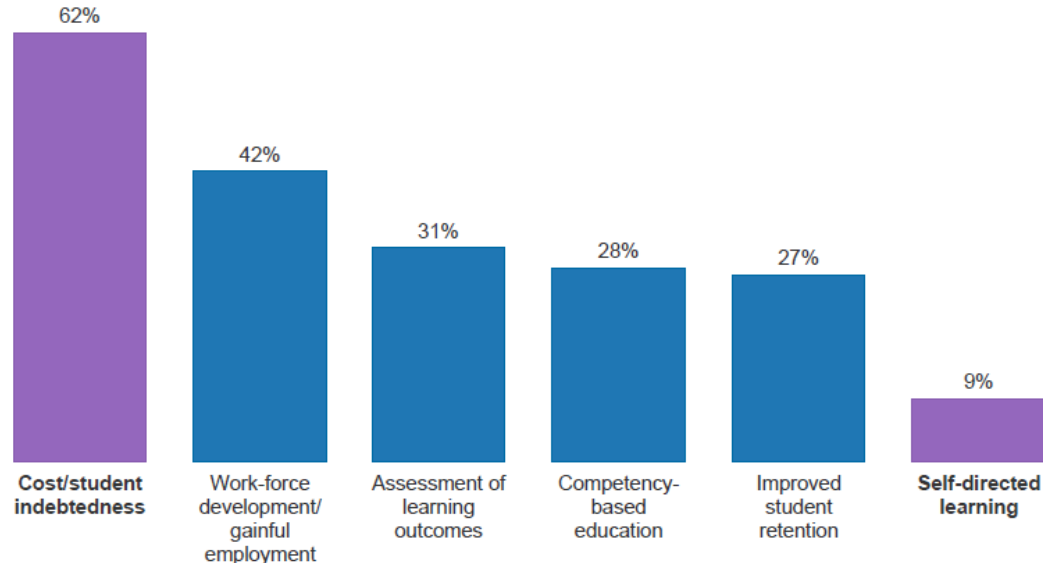




# Transforming education in a digital world is not what keeps leaders awake at night

## What Factors Will Have the Greatest Impact on the Future of Higher Education?

Issues ranked “most important” or “second most important”:



Note: Despite respondents' focus on costs, only 2.4 percent of academic leaders at colleges offering MOOCs said their main goal was to "explore cost reductions."



# It is NOT a revolution

## California's multi-million dollar online education flop is another blow for MOOCs

*Once-celebrated online courses still haven't lived up to the hype*

by RYAN DEROUSSEAU

April 14, 2015

“**R**einvent.”

That was the giddy catchword of a plan by the University of California to create an all-digital “campus” that would revolutionize higher education by providing courses online for students shut out of the system’s brick-and-mortar classrooms at a time of high demand but falling budgets.

Three years later, the Online Instruction Pilot Project has become another expensive example of the ineffectiveness—so far, anyway—of once-vaunted plans to widen access to college degrees by making them available online, including in massive online open courses, known as MOOCs.

“We spent a lot of money and got extremely little in return.”



California Gov. Jerry Brown lowers his head while listening to Lt. Gov. Gavin Newsom speak about today's technology during a meeting of the UC Board of Regents Wednesday, Jan. 16, 2013 in San Francisco. Gov. Brown is



## Change is real, but slow – higher education has the opportunity to adjust

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- Digital supply of education and new credentials are growing slower than expected, often concentrated in a few fields of study and increasingly integrated in regular educational delivery
- For many employers the signalling value of qualifications is still important, but they are also considering other evidence of skills and learning
- Students still seem to have a preference for regular courses and qualifications



AGAIN, IT'S ALL ABOUT  
QUALITY





## The quality issue is real, urgent and shared

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- There are real concerns among employers, students and the wider society about unregulated educational delivery and credentials
- In a digital world, trustworthiness is everything, but traditional forms of reputation provide a vulnerable defence
- Thinking that regular qualifications will gain from distrust in the quality of alternative credentials is short-sighted
- The higher education and quality assurance communities have a shared interest in dealing positively with the quality issues emerging from new realities



# Standards and quality frameworks are being developed to address new realities

Good evidence that the training scheme or micro-credential enables learners to achieve the intended outcomes and purpose

Good evidence that the training scheme or micro-credential is made up of components structured in a coherent way to achieve the outcomes and addresses the relevant needs of learners (if applicable)

Good evidence that the education organisation has the capability and resources to provide the training scheme or micro-credential

Good evidence that the education organisation can manage the impacts of any specific training scheme or micro-credential requirements

No significant gaps or weaknesses in the training scheme or micro-credential

No significant gaps or weaknesses in the self-assessment report, and/or the underlying capability and resources of the organisation

Demonstrable evidence that the learning outcomes and activities match the purpose of the micro-credential

Evidence the micro-credential addresses the identified unmet skill needs and is required or supported by relevant industries, employers or communities

Evidence that the micro-credential is in addition to current learning, and typically does not duplicate current quality-assured learning approved by NZQA

Source: New Zealand Qualifications Authority (2019[7]), *Guidelines for applying for approval of a training scheme or a micro-credential*, [www.nzqa.govt.nz/providers-partners/approval-accreditation-and-registration/micro-credentials/guidelines-training-scheme-micro-credential/](http://www.nzqa.govt.nz/providers-partners/approval-accreditation-and-registration/micro-credentials/guidelines-training-scheme-micro-credential/)



# Examples of recent QA frameworks for alternative credentials

	New Zealand Qualifications Authority (2018)	Expert Panel for Review of Australian Qualifications Framework (2019)	New Paradigms in Recognition project (2018)	European MOOC Consortium (2019)	German Forum for Higher Education in Digital Age (2019)	US Council for Higher Education Accreditation (2019)	Rutgers' School of Management and Labour Relations and Lumina Foundation (2019)
Intended learning outcomes	○	○	○	○	○	○	○
Qualifications	○	○	○	○	○	○	○
Verification / assessment	○	○	○	○	○	○	○
Workload	○ (up to 40 credits)	○	○	○ (100-150 hours)	○ (100-150 hours / 3-5 ECTS)	○	
Verification of learner identity		○	○	○	○	○	
Accreditation / recognition				○	○	○	○
Employers' demand	○				○	○	○
Level			○	○ (EQF level 6-7)	○ (EQF level 6-7)	○	
Provider's capability	○		○			○	○
External or internal review	○	○			○		
Learners' demand	○				○	○	
Mission / purpose	○	○				○	
Absence of significant weaknesses	○						
Accessibility and affordability							○
Labour market outcomes							○
Non-duplication	○						
Orientation						○	
Stackability							○
Transparency							○



## Fundamental challenges remain

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- QA should not only look at the institutional supply side, but at the quality of the learning and learning outcomes
- Coping with the fact that learners combine various routes and practices of learning, formal as well as non-formal and informal
- Quality of assessment practices and trustworthiness of credentials is becoming a critically important area of work
- Stronger voice of employers, society at large and learners themselves in QA is to be welcomed



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# Thank you!

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