



# Making micro-credentials work for **lifelong** learners, employers and providers

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 @ProfBevOliver

 Beverley Oliver

**FutureLearn Academic Network Nov 2019**

# About me - and my bubble

**Deputy Vice-Chancellor Education at Deakin University 2013-18**

***Pioneered three types of micro-credentials since 2013***

***Led implementation of full degrees on FutureLearn***

**Now working independently**

**Researching and advising on micro-credential and digital education strategies**

[tiny.cc/agc](https://tiny.cc/agc)

ASSURING GRADUATE CAPABILITIES

HOME

CAPABILITIES

EMPLOYABILITY

MICRO-CREDENTIALS

QUALIFICATIONS

GOOD READS

CONTACT

# Why Credentials?






# Making micro-credentials work

for **lifelong** learners, employers and providers

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## *An analogy*



# Money

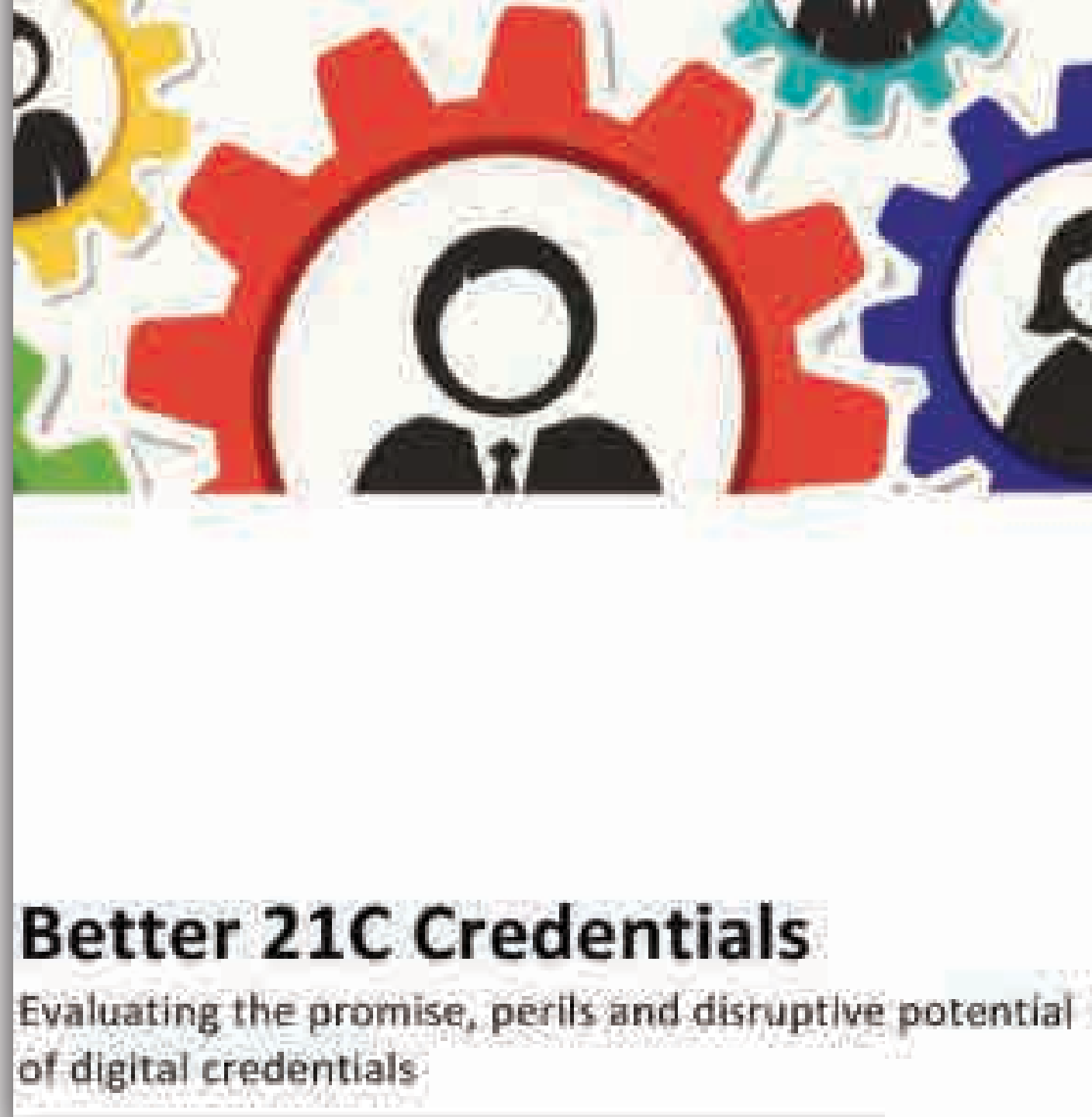
**Global system**  
**Enables exchange of value**  
**Bankable and re-useable**  
**Major recognisable currencies**  
**New currencies can be added**  
**Increasingly digital - even bitcoin**  
**Fraud**



# Credentials

**Could be more global and interoperable system**  
**To enable exchange of value - learning certification**  
**Building on recognisable types: Bachelor, Master, Doctor**  
**Adding new currencies - micro and macro - that build over the lifespan**  
**Increasingly digital - online or blended**  
**Better verification, less fraud - universal challenge**  
**A means to improving your circumstances**





**January 2016**

Are digital badges, micro credentials and MOOCs leading to 'better' twenty-first century credentials?



**August 2019**

How to make micro-credentials work for

- learners
- employers
- providers

And for the future of work... a global view focussing more on the mature learner

# Our situation

# Highest educational attainment - selected countries

Table 1: Educational attainment of 25–64-year-olds (2017) Percentage of adults with highest level attained

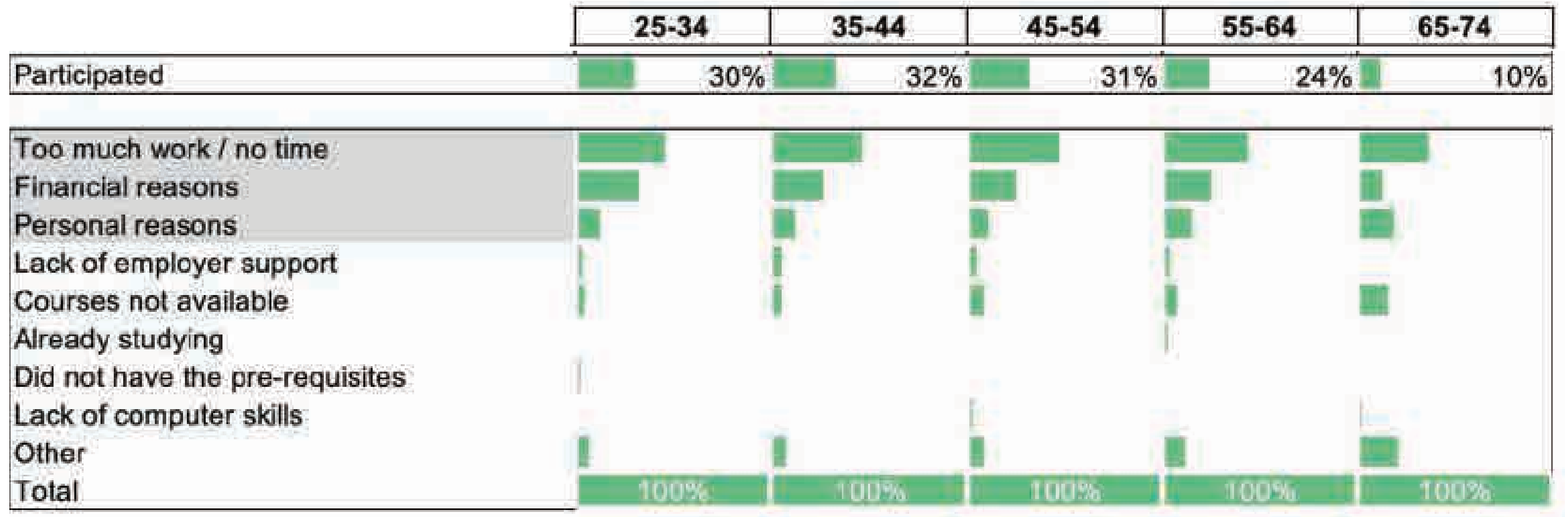
	Lower secondary	Upper secondary	Short-cycle tertiary <sup>1</sup>	Bachelor's or equivalent	Master's or equivalent
Australia	14	30	12	26	7
Belgium	15	35	0	22	17
Denmark	16	42	5	21	13
Finland	9	43	12	17	15
France	14	43	14	10	10
Germany	10	46	1	15	12
Iceland	23	27	3	21	17
Ireland	12	22	10	25	10
Israel	7	36	14	23	12
New Zealand	21	27	4	28	5
United Kingdom	17	19	10	23	12
United States	6	44	11	23	11
Key:	0-9%	10-19%	20-29%	30-39%	40%+

Source: OECD Education at a glance, 2018



# Who engages—or not—in **non-formal** learning?

If not, why not?



Non-formal learning activities are structured training or courses that do not form part of an award or qualification (e.g. Degree or Certificate) recognised by the Australian Qualification Framework (AQF).

Will our current level of engagement in post-compulsory  
formal and non-formal education  
*set us up for a better future and future work?*

What are the key barriers and disincentives?

How can we change them?

# Chaos and confusion

Why bother with a degree?  
What are degrees so expensive?

**What is a micro-credential?**

What do all these micro-credentials mean?

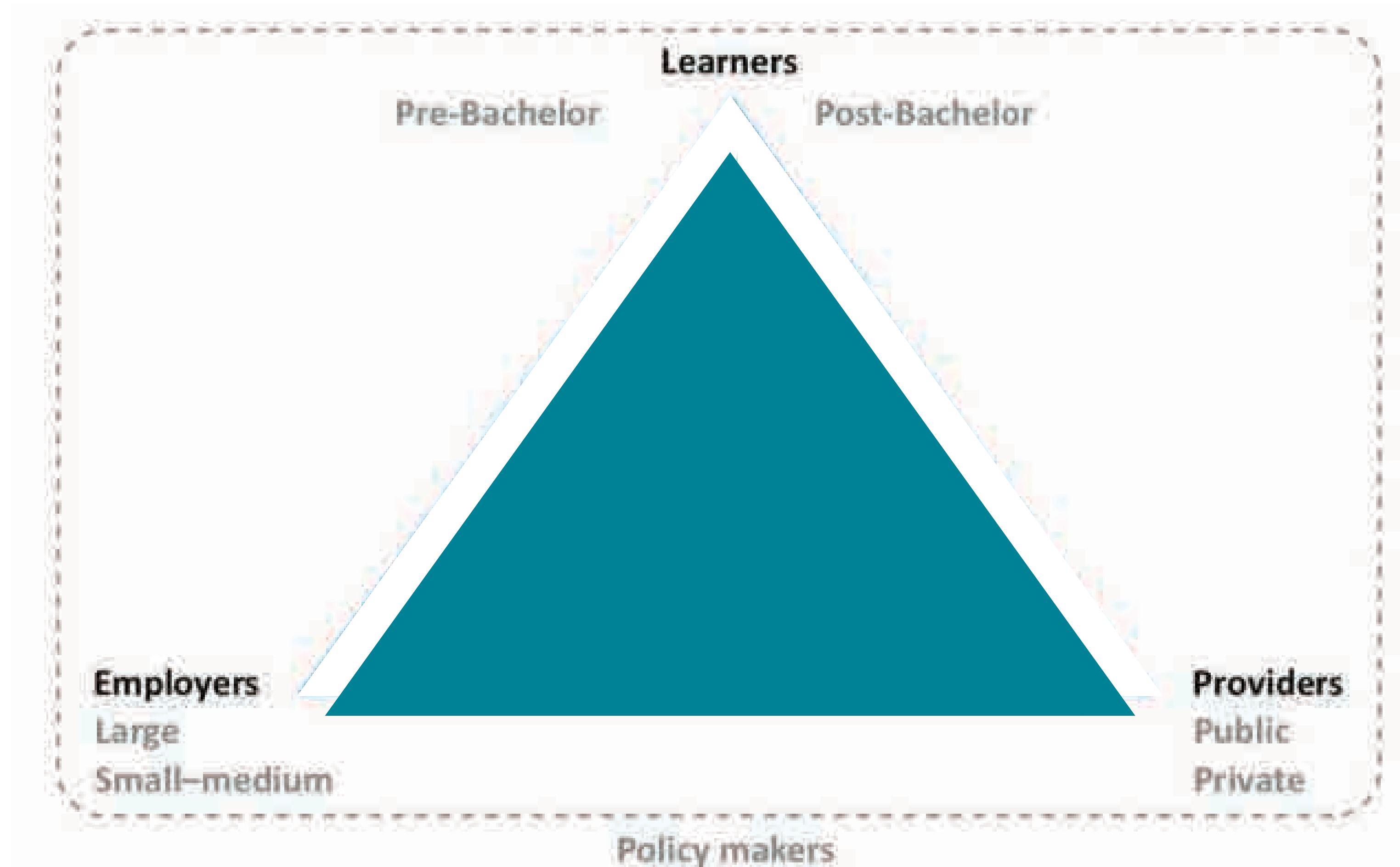
What is their standing?  
Which should we invest in?  
Which should we trust?  
Will they bring value?

# Qualification distopia

For traditional learners, displaced workers, and displaced migrants



# Distopia - a degree of dissatisfaction for stakeholders



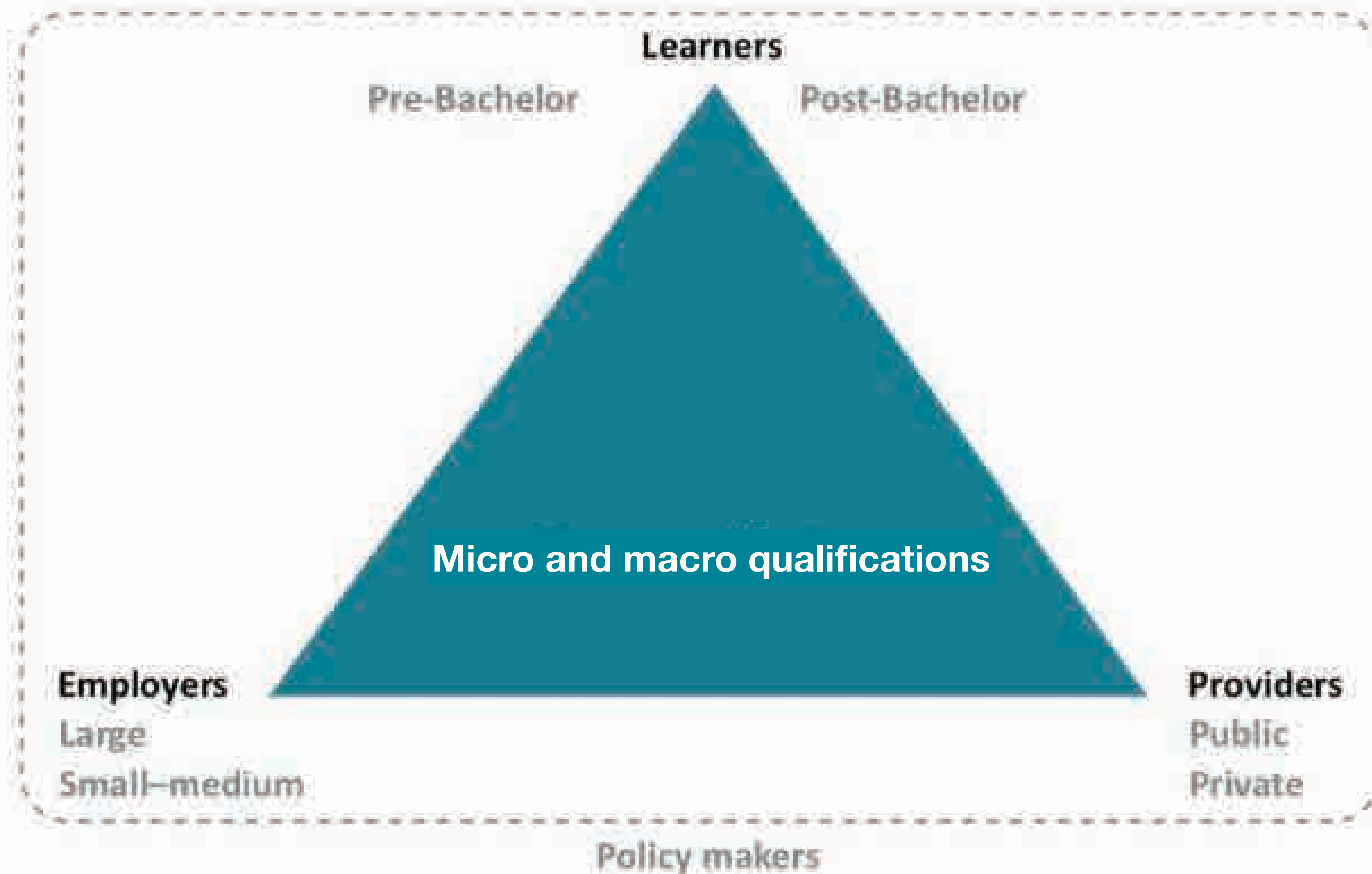
**Cost outweighs value, inc. career outcome**

**Trustworthy ?**

**Not interoperable across the lifespan, life stages and borders**

**Please attribute re-use of this material: @ProfBevOliver**

*Figure 1: In an ideal qualifications system, policy makers manage levers to incentivise equitable benefits for the major stakeholders*



**Value outweighs costs**

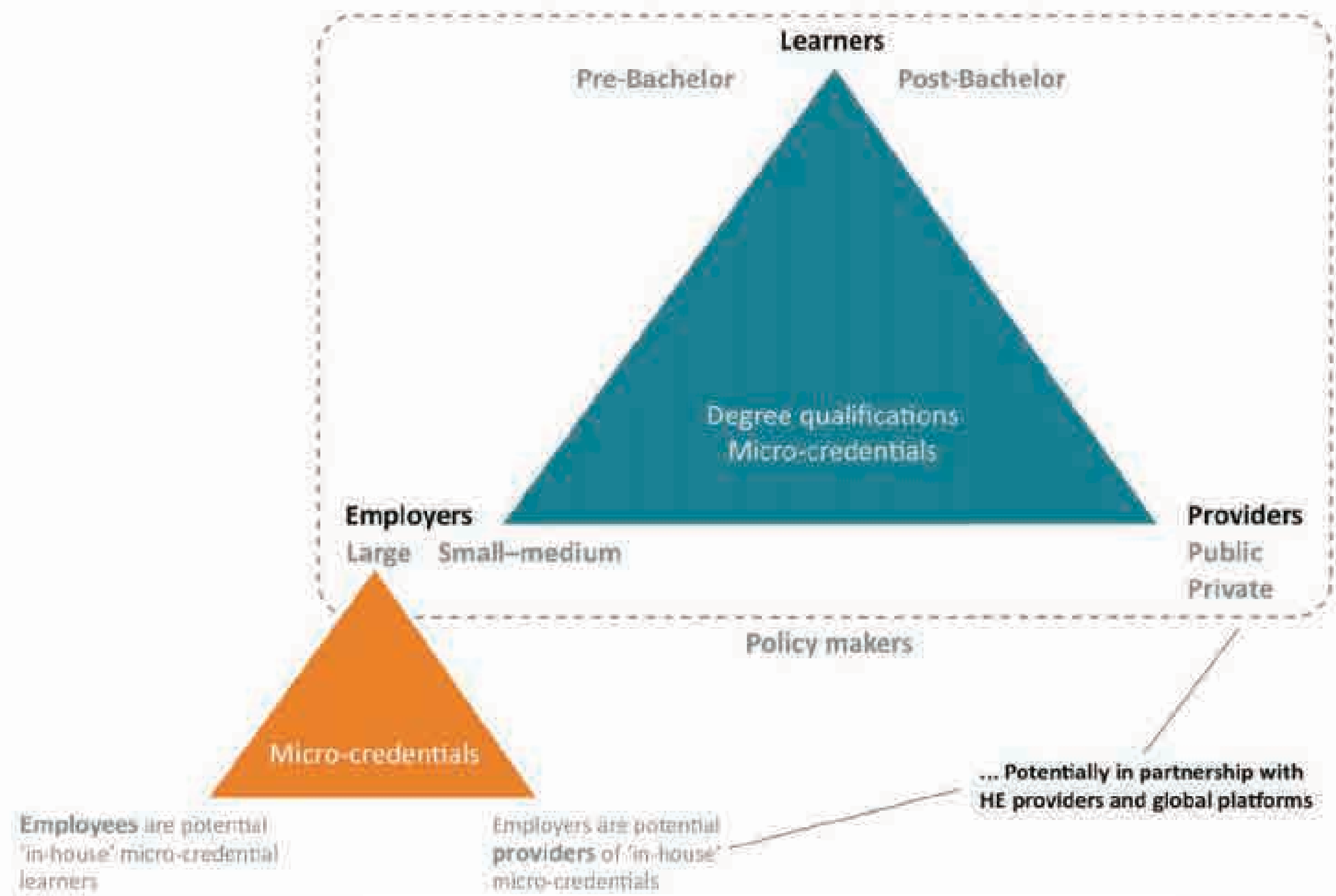
**Trustworthy: verified**

**Interoperable across the lifespan, life stages and internationally**

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# The emerging landscape

Figure 5: Today's evolving micro-credential ecosystem – with major employers and more private providers offering micro-credentials





# Badge system 'future-proofs' EY employees

Edmund Tadros

EY has issued hundreds of digital badges to local staff for developing new skills, as part of a nascent in-house training program designed to provide on-demand education at a lower cost.

The EY Badge system, launched in late 2017, allows staff to earn badges for completing courses ranging from data visualisation through to design thinking and cyber security.

The firm, formerly known as Ernst & Young, has issued almost 400 badges across 18 courses to staff locally as part of the internally designed and assessed training system.

The model cuts down on the cost of classroom-based training by emphasising online learning combined with internal and client-based application of the knowledge.

"The badges are designed around the modern way of learning. So that's moving towards bite-sized content on demand. You can learn wherever, whenever," said Anne Fenwick, the firm's learning and development leader.

The badges have four levels - bronze, silver, gold and platinum - and require the staff member to complete a combination of online learning and application of the knowledge.

The original design of the levels has been loosened to make the system more accessible to staff members. A bronze badge still demonstrates basic knowledge in an area, but the silver

and gold badges, originally designed for staff with significant client responsibility and subject matter experts, are now available more broadly.

In a similar way, the platinum badges, originally designed to be for the 1 per cent of EY staff globally who are industry experts, is available to any staff member who fulfils the learning requirements.

"There's three dimensions to the badges. There's the learning component and for the bronze level, you've got to demonstrate a basic understanding of the skills by doing about 20 hours of learning. There's a portal which curates different types of learning, whether it's with webcasts, Ted Talks, it might even be classroom learning that you can use to contribute to that badge," Ms Fenwick said.

"Then you have to apply it, you have to activate that skill through different experiences, and there is some structure and ideas around what type of experiences you can use.

"And then the third dimension is around contribution. So, how do you give back to the firm, to our community in the application of that learning?"

The firm has designed its own curriculum for each level of badge, and the assessment is also done internally.

"An individual's counsellor, which is like their development leader, reviews the [staff member's work] and then the badge's [subject matter expert] reviews it to make sure that it's relevant, that it's deep enough... [the] level of review gets

## Lifelong learning

Badges awarded by EY Oceania

Each Badge requires a combination of learning, experience and contribution

Course	Bronze	Silver	Gold	Platinum	Hours
Data visualisation	83	8	3	2	96
Data integration	30	4	1	1	36
Data science	24	4	1	1	30
Data platform	3	1	1	1	6
Data architecture	3	1	1	1	6
Information strategy	3	1	1	1	6
Cybersecurity	5	1	1	1	8
Digital	32	1	1	1	35
Transformational leadership	15	1	1	1	18
Executive Intelligence	8	1	1	1	11
Global team leadership	3	1	1	1	6
Robotic process automation	34	4	1	2	41
Artificial Intelligence	14	1	1	1	17
Blockchain	13	1	1	1	16
Design thinking	71	15	1	1	88
Power & Utilities	2	1	1	1	5
Oil & Gas	2	1	1	1	5
Financial products	2	1	1	1	5
<b>Total</b>	<b>345</b>	<b>27</b>	<b>6</b>	<b>5</b>	<b>388</b>

**Levels**  
Bronze: Has a basic understanding of business concepts, tools and applications.  
Silver: Has knowledge of specific subject area and a strong understanding of sector best practices.  
Gold: Has in-depth knowledge of advanced concepts, tools and applications and is able to apply this knowledge to the business.  
Platinum: Has the deep-level learning across all capabilities in the area.



a little bit more stringent the higher badge level is," she said.

Casey Barr, a senior consultant in the firm's tax technology and transformation business, has taken advantage of

the badges system to pivot away from his economics background. The 25-year-old has already earned two platinum badges, in robotic process automation and data visualisation.



EY's Anne Fenwick says the system is designed around the modern way of learning, and Casey Barr, who has taken part. PHOTO: DOMINIC LOMBERG

"I don't have a technology background, that's why I pursued these because I work at EY day-in, day-out doing this work.

"For me, it's a way to future-proof myself," he said.

The platinum badges required at least 80 hours of training, which he did at home and at work.

"The online learning tends to be outside of work hours, the contribution and experience tends to be during work hours," Mr Barr said.

"For data visualisation, I had to work on a really high number of engagements and apply the entire spectrum of tools. I had to have used [computer applications] Tableau, Power BI and Qlik. I also had to contribute to forums, I had to write a piece that was published within EY on my views on how visualisation is changing the industry."

Ms Fenwick said the badges currently sit alongside traditional classroom-based learning, which is "probably the most expensive way to learn because you generally have to fly people into one location."

"These are tailored to what [the staff member] needs and I think that the idea of 'choose your own adventure', that's absolutely what we hear that people want."

[Browse](#) > [Information Technology](#) > [Support and Operations](#)

Offered By

# Google IT Support Professional Certificate

The launchpad to a career in IT. This program is designed to take beginner learners to job readiness in about eight months.

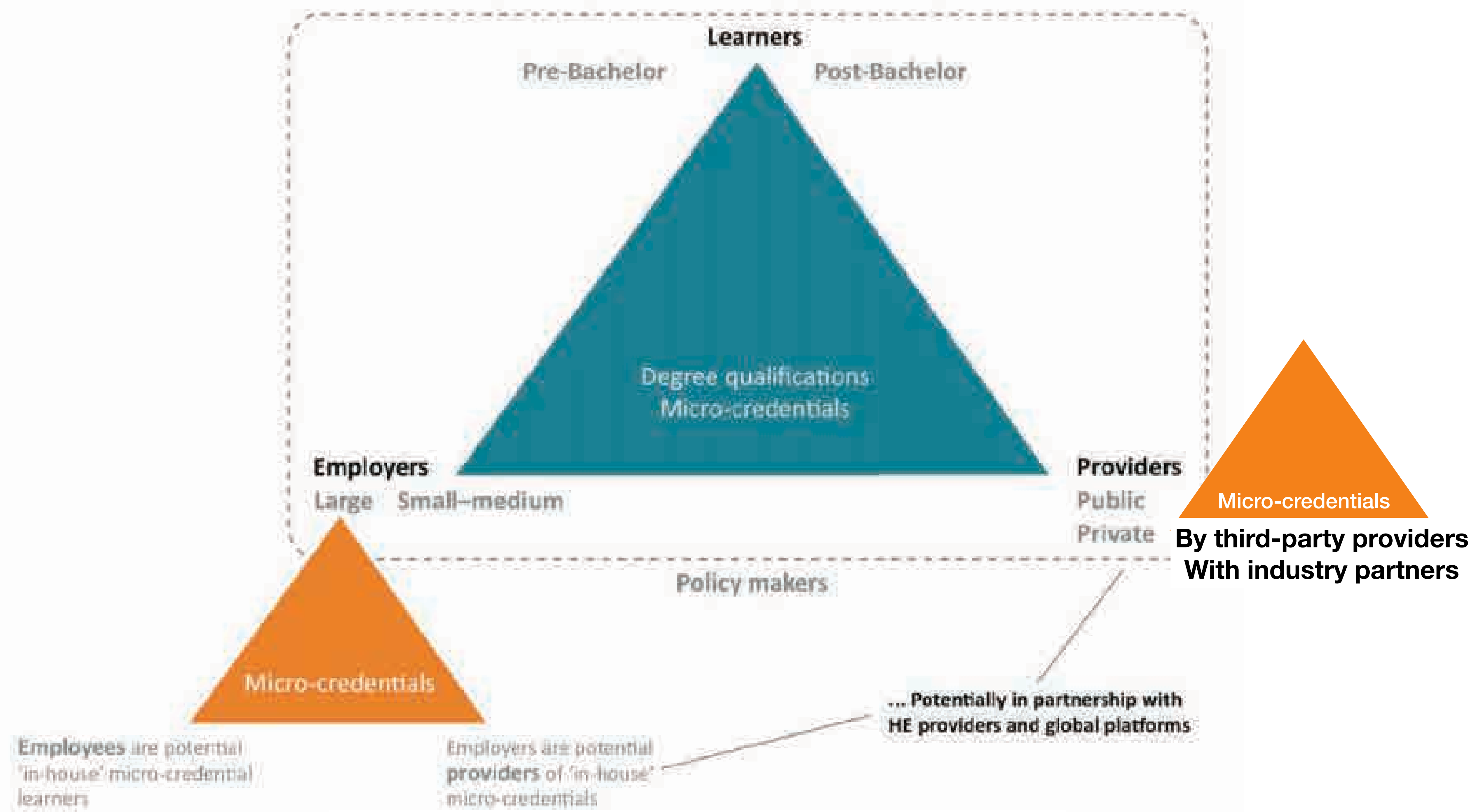
**Enroll for Free**  
Starts Jul 15

**Try for Free: Enroll to start your 7-day full access free trial**

79,253 already enrolled!

Grow with Google

Figure 5: Today's evolving micro-credential ecosystem – with major employers and more private providers offering micro-credentials



# BECOME A WEB DEVELOPER IN 24 WEEKS

## What graduates receive

- A robust portfolio of projects to demonstrate your working knowledge of web development.
- Graduates benefit from a Project Demo Day—quarterly networking event with local professionals to showcase their final projects.
- Continued one-on-one career coaching with your Career Director post-graduation.
- A Certificate of Completion from Monash University showcasing your accomplishments to future employers.

The Monash University Coding Boot Camp is offered in partnership with Trilogy Education Services (Australia) Pty Ltd., a 2U, Inc. brand.

### About Trilogy Education Services

Trilogy Education is a workforce accelerator that empowers the world's leading universities to prepare professionals for high-growth careers in the digital economy. Thousands of people around the globe have completed Trilogy-powered programs, and more than 2,000 companies—including 50% of the Fortune 100—employ them.



**MONASH**  
University

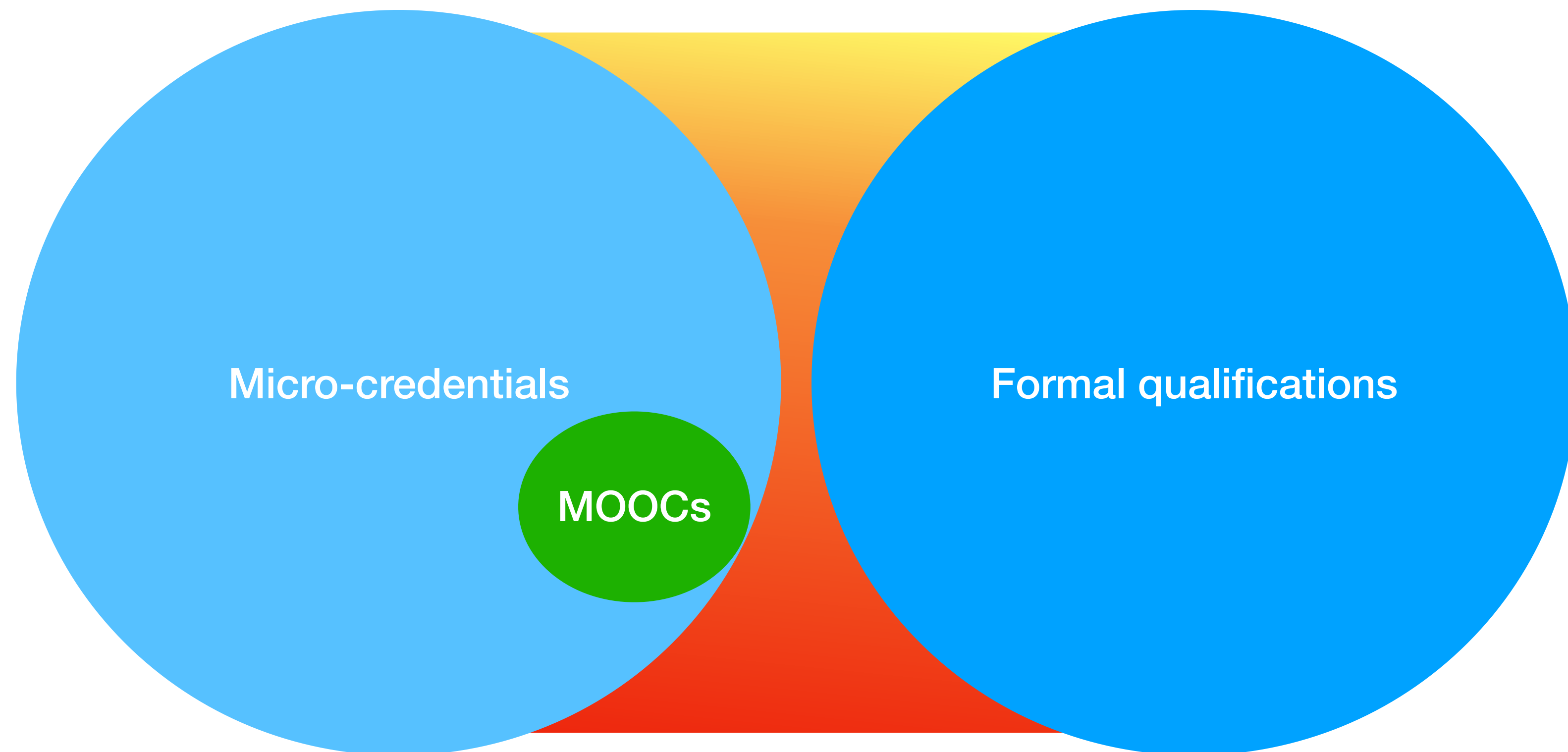


**TRILOGY**  
EDUCATION SERVICES

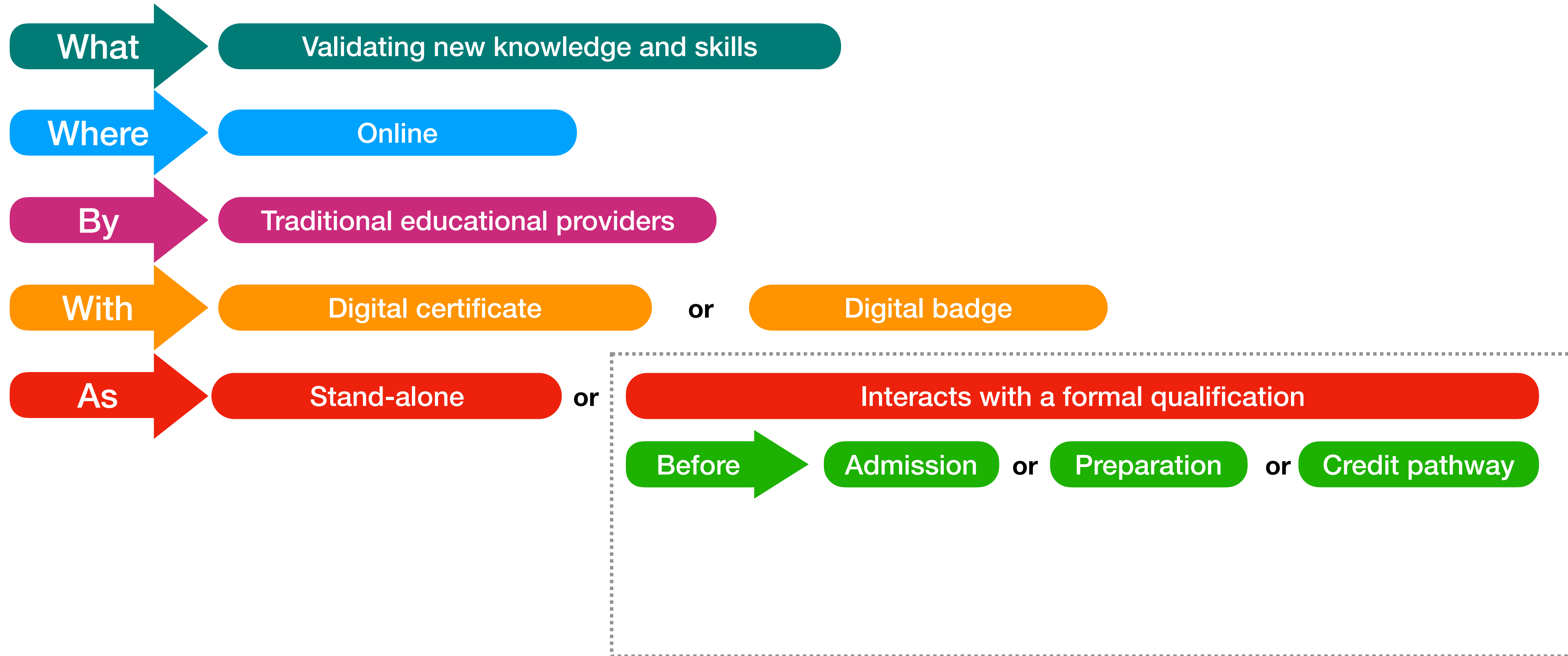


## Micro-credentials

**A micro-credential is a certification of assessed learning that is additional, alternate, complementary to or a component part of a formal qualification.**

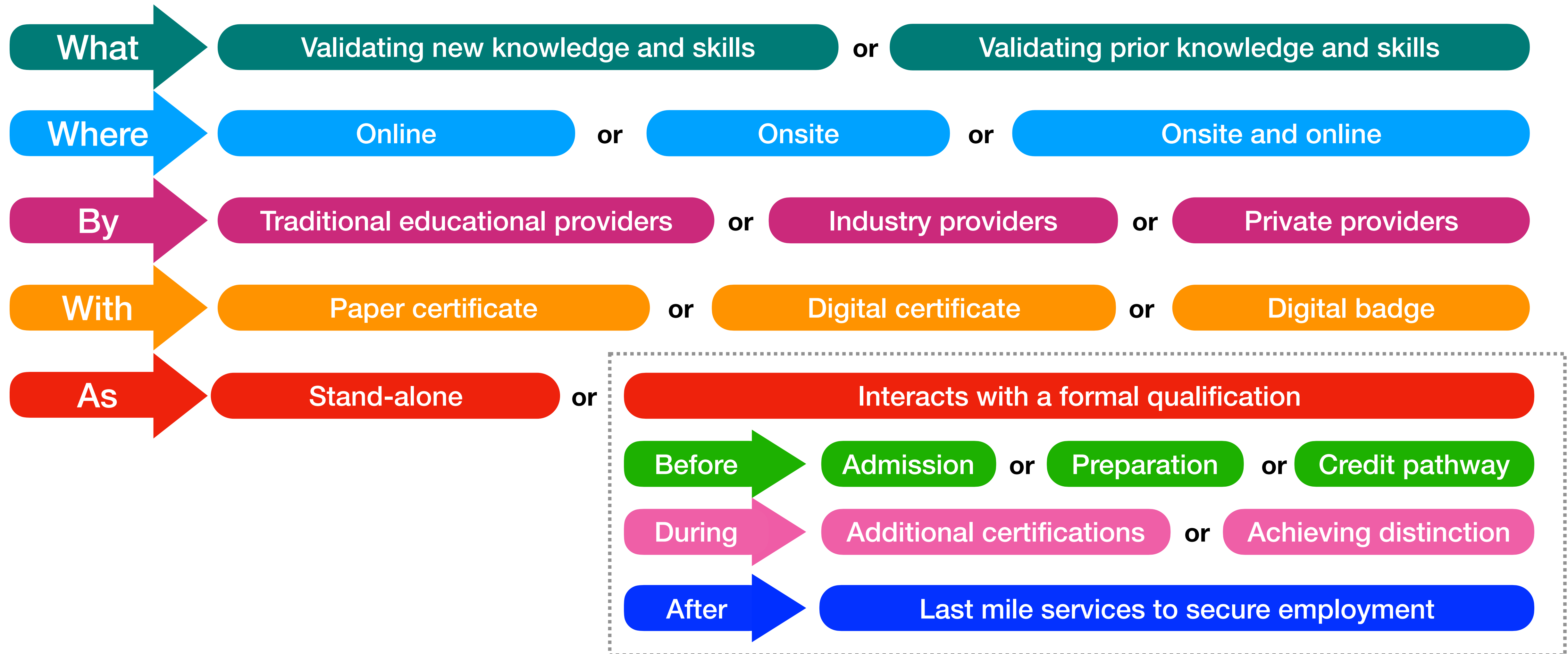


# MOOCs

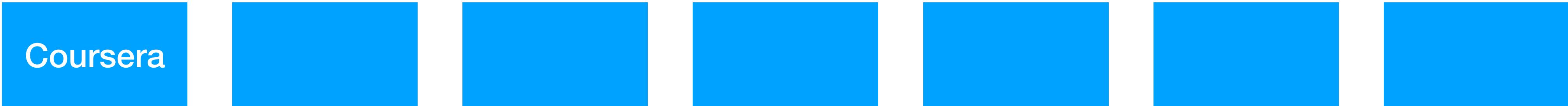
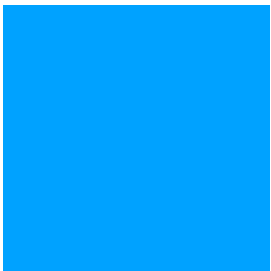


# Micro-credentials now

Also known as alternative credentials, MOOCs, certifications, short courses, bootcamps, intensives, MicroMasters, masterclasses, nano degrees , Specializations...



What’s a micro-credential, and what is not (in the world of ‘MOOCs’)?





## Two definitions

**A micro-credential is a certification of assessed learning that is additional, alternative, complementary to or a component part of a formal qualification.**

**Credit-bearing micro-credentials** lead to an offer of admission to or credit towards at least one formal qualification, regardless of whether or not the offer is taken up by the learner. They mirror and contribute to the academic standards required in the target qualification. The duration and effort required are in keeping with the amount of credit earned.

Table 3: Information that could be included in a critical information summary

Title and brief description (30 words)	Insert name of certificate
Certified learning	In up to 100 words, describe what the successful learner knows and can do based on their assessed learning
How learner participated	Choose one: Online only, Onsite only, Both onsite and online
Effort required (including assessment)	Insert number of hours (for typical learner)
Complexity of main assessment task	Choose one (best fit): No assessment Testing recall of facts Application of a skill to a routine problem Application of a skill to a complex problem Application of multiple skills to routine problems Application of multiple skills to complex problems Portfolio and reflective evidence for validation of proficiency
Supervision and identity verification	Choose one (best fit): Unsupervised, no identity verification Supervised <b>online or on-site</b> , identity not verified Supervised <b>online</b> , identity verified (one factor) Supervised <b>online</b> , identity verified (two factors) Supervised onsite, identity verified (one factor) Supervised onsite, identity verified (two factors)
If assessed, equivalent level (main task)	Choose one: Not at degree level/Pre-Bachelor/Bachelor/ Pre-Masters/Masters/Doctorate
Quality assurance	Nil, or insert names of governing or endorsing bodies
Successful learner earns:	
• admission to a degree program	Choose one: No/Yes – state degree(s) and institution(s)
• credit towards a degree program	Choose one: No/Yes – state degree(s) and institution(s)
• If yes, how much credit?	State credit in units (a unit is a typical semester of study in a degree program). For example: Credit is less than one unit: 0.4 unit Credit is one unit: 1.0 unit Credit is more than one but less than two units: 1.5 units

How could we make the value clearer?

Critical information summaries



## Critical information summaries

Title and brief description (30 words)	Caring for older people: a partnership model
Certified learning	Successful learners can: describe partnership-centred care; explain the benefits of a partnership-centred model of care for older people, their family and healthcare teams; explore how partnership-centred care strategies can be developed and applied to best support the needs and preferences of older people.
How learner participated	Online
Effort required (including assessment)	6 hours
Complexity of main assessment task	Application of a skill to a routine problem
Supervision and identity verification	Unsupervised, no identity verification
If assessed, equivalent level (main task)	Not at degree level
Quality assurance	Deakin University supported by the Wicking Trust
Successful learner earns	
• admission to a degree program:	No
• credit towards a degree program	No
• If yes, how much credit?	

## Deliver value

Offer micro-credentials that deliver the promised benefits, particularly a path to decent work through quality education



# Global developments that could make **lifelong learning** work



United Nations  
Educational, Scientific and  
Cultural Organization

# UNESCO

IN BRIEF

WHAT WE DO

WHERE WE WORK

PARTNERS

*"Building peace in the minds of*

Home > Higher education > Recognition of higher education qualifications > Global Convention on the Recognition of Higher Education

## Global Convention on the Recognition of Higher Education Qualifications Project





## **CHAPTER 1.**

World Reference Levels for lifelong learning: A tool for comparison and recognition of learning outcomes

## **CHAPTER 2.**

Beyond qualifications as we know them today: Digital credentials and interoperability

## **CHAPTER 3.**

The role of learning outcomes in governing and reforming education and training: Reflections on strengths and limitations

## **CHAPTER 4.**

RVA that counts: What data do we need to nurture recognition, validation and accreditation of prior learning?

## **CHAPTER 5.**

Recognising prior learning experiences of migrants and refugees for inclusion

## **CHAPTER 6.**

Assessing and acquiring skills and qualifications: Connecting people to national qualifications frameworks







# Push for greater tertiary value on micro-credentials



**National qualification frameworks are evolving  
Some are interacting with micro-credentials**


# More and better recognition of prior learning and experience

## Why a national strategy for validation?

*Sweden*

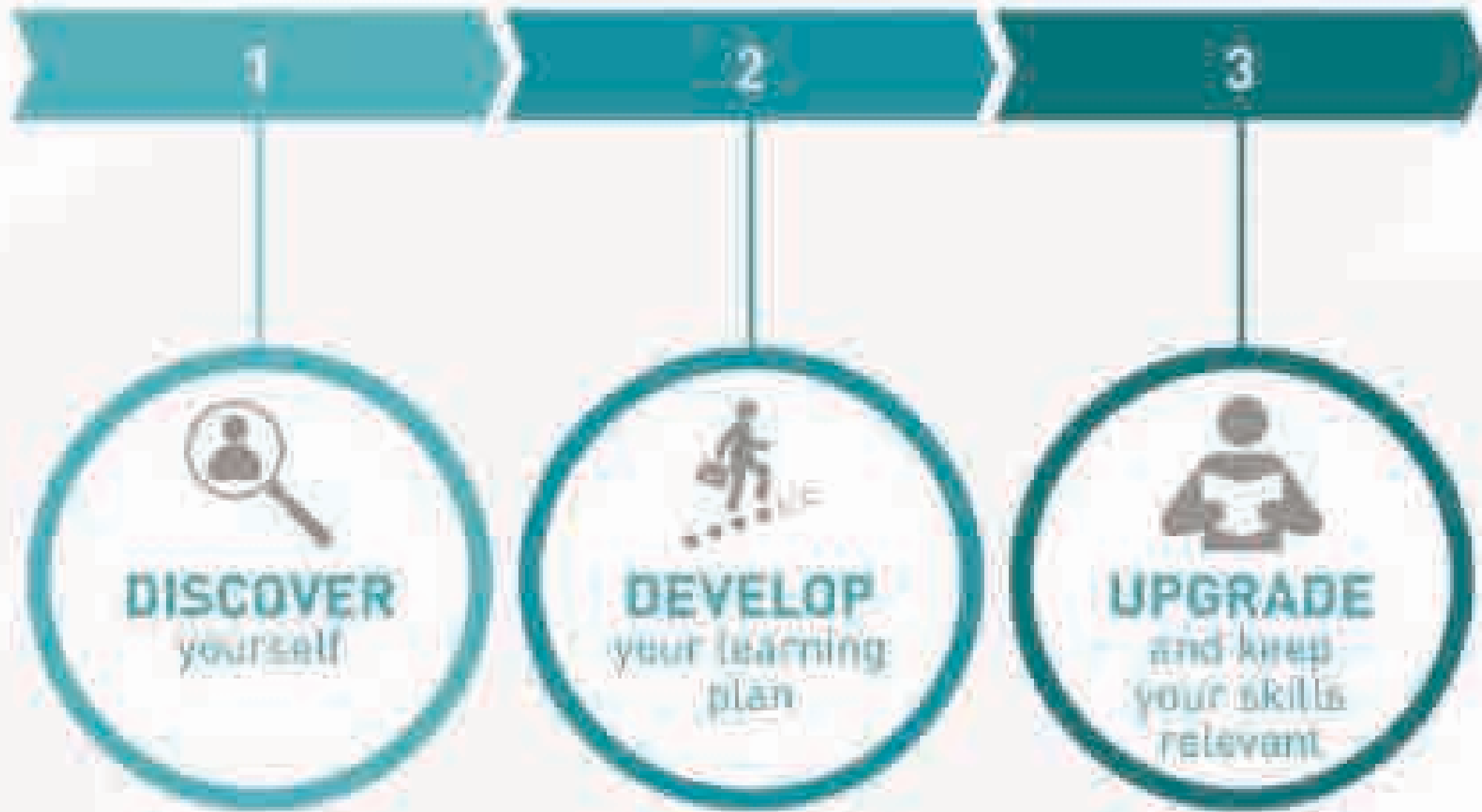
To meet the demands of today's working life, a higher level of competence and professional skills are needed. But learning does not only take place in formal study programmes. It also takes place informally at work and during leisure time, and through non-formal learning in, for example, staff training and study circles. Validation means recognising and making skills visible, regardless of how the individual has acquired them.




# Lifelong learning accounts Credit banks

 @ProfBevOliver

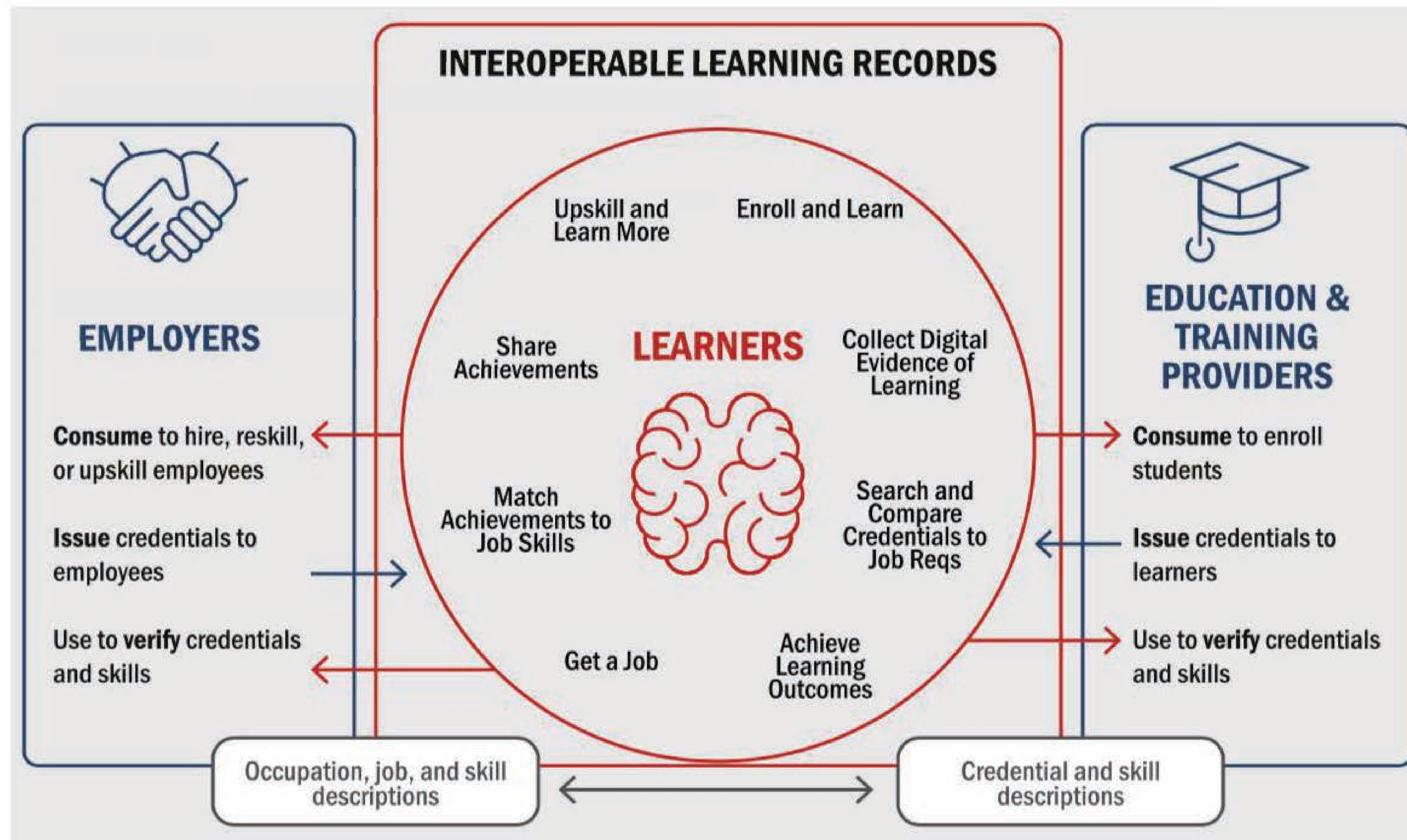
**I CAN plan my learning journey**

Take ownership of your self-development and career progression by planning your learning journey in 3 simple steps with [MySkillsFuture.sg](https://myskillsfuture.sg)



- 1**  
  
**DISCOVER**  
yourself
- 2**  
  
**DEVELOP**  
your learning  
plan
- 3**  
  
**UPGRADE**  
and keep  
your skills  
relevant

**Figure 1 | Interoperable Learning Record Ecosystem**





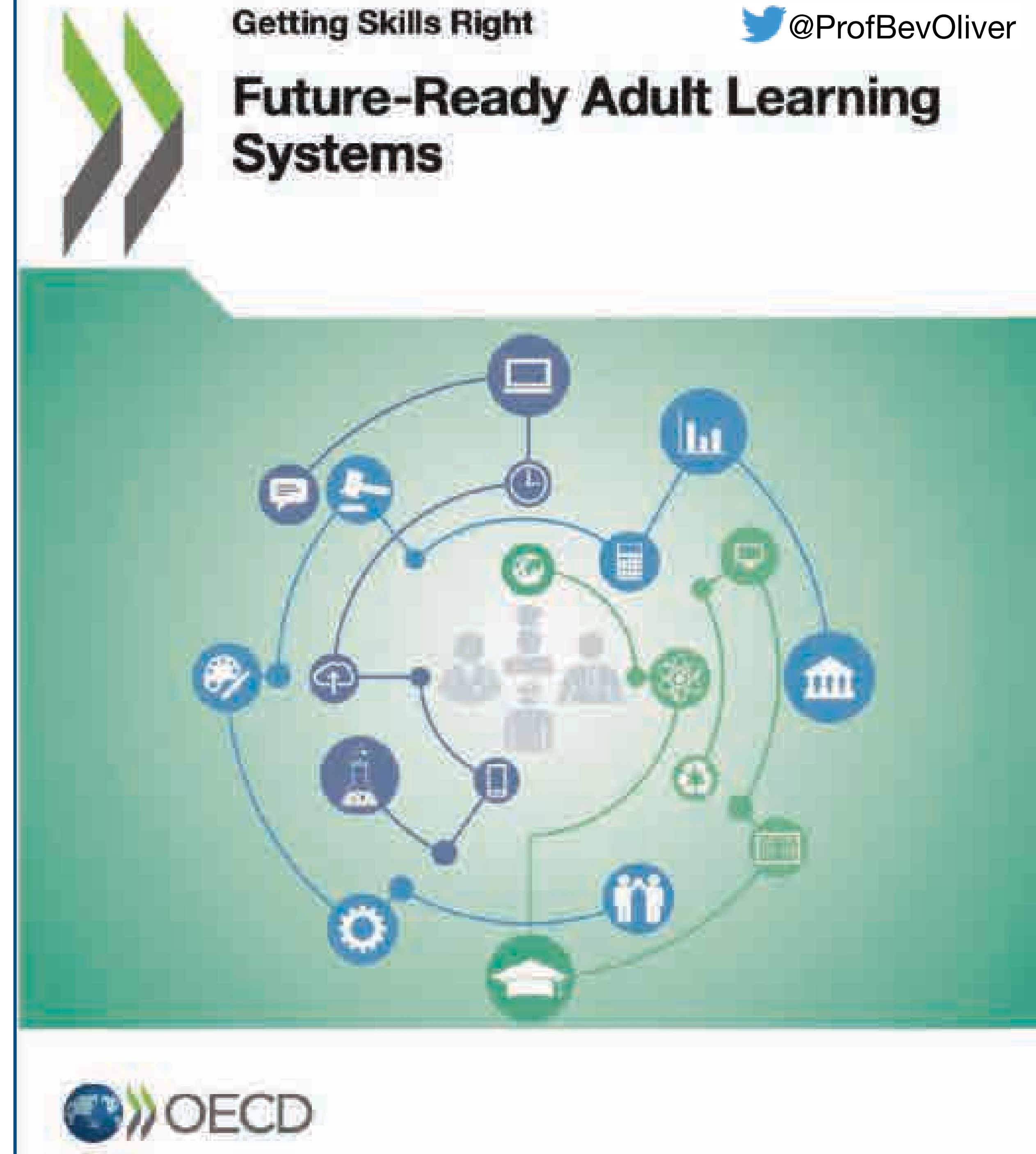
**Adult learning systems should be more inclusive**

**Greater alignment with changing skill needs is needed**

**Provision must be of high quality**

**Adequate and sustainable financing**

**Good governance**





# COMPETENCIES & CREDENTIALS

COMPETENCIES & CREDENTIALS USER GROUP

ADVANCING LEARNER ACHIEVEMENT WORLDWIDE

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[PESC APPROVED STANDARDS](#)

[EDEXCHANGE](#)

[GED CODE](#)

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an open, collaborative group of PESC Members  
that *produce, collect, process, research, report,*  
*store, consume, issue and share*  
*competency & credential data.*



**COMMON  
CREDENTIAL**  
*for*  
**CERTIFICATES  
DEGREES & DIPLOMAS**

The Competencies & Credentials User Group  
is the principal Group within PESC  
comprised of PESC Members.





[Home](#) > [Skills Match](#)

# Skills Match BETA

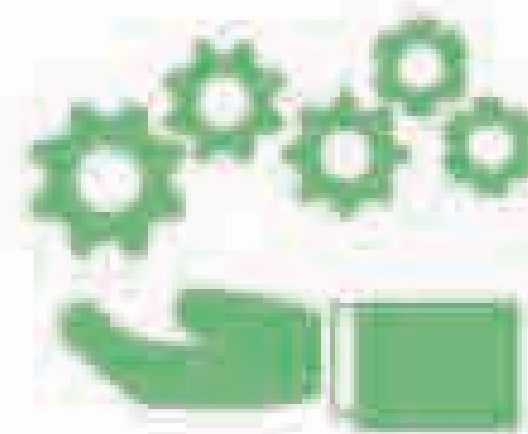
Thinking of changing jobs? Skills Match will show you jobs or careers that use your skills.

START SKILLS MATCH



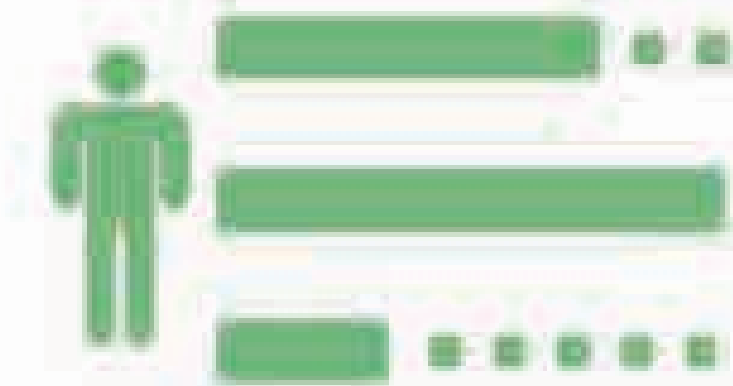
## 1. Your Jobs

Enter jobs you have worked in.  
You can include unpaid work.



## 2. Your Skills

See skills you may have from your  
jobs



## 3. New Job Ideas

Get ideas for jobs that use your  
skills.

Skills Match looks at the skills needed for the jobs you have worked in to suggest possible career moves.



# Ten things we can do



- 1. Keep up, stay informed (good luck!)**
- 2. Get involved, lobby**
- 3. Collaborate - innovate, take reasonable risks**
- 4. Strive for consensus rather than competition**
- 5. Try a critical information summary**
- 6. Deliver quality, assessment, trust, value**
- 7. Research innovations and publish the results**
- 8. Create pathways in, across and out**
- 9. Consider credit - credit that can be banked, used**
- 10. Focus on learners - less on profit and rankings**



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**FutureLearn Academic Network Nov 2019**