# How Micro-Credentials are Changing the Landscape of Skills-Based Learning

## The Australian Experience

Emeritus Professor Beverley Oliver ALTF PFHEA



#### What's been happening with micro-credentials Down Under and what can we learn from their use?

Following the release of earmarked funds in 2020, 54 Australian education providers developed more than 345 short courses to respond to the need for upskilling, reskilling and life-long learning. Australia's federal government is investing in the development of a marketplace for these credentials, seeing them as an opportunity to build international interest.

This webinar explores what happens when a country invests in micro-credentials. In particular, we consider:

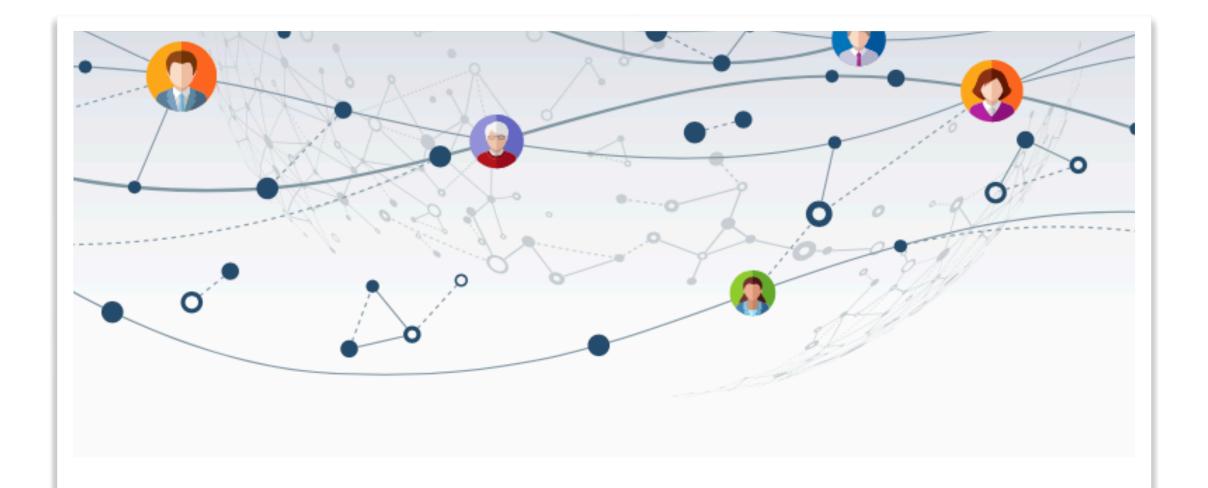
- What's driving the development of micro-credentials in Australia
- The essential policy drivers and constraints
- The kind of micro-credentials that have emerged and what they focus on
- The lessons learned so far
- Advice to anyone thinking of developing micro-credentials in the post-pandemic world.

#### Key takeaways

- Five key lessons about the successes and failures of micro-credentials in Australia
- The challenge of matching competencies to employers' needs
- Three "must-dos" to make micro-credentials a key component of the college and university strategy to "build back better" after the pandemic
- The likely next developments in micro-credentials in Australia

# About micro-credentials...globally





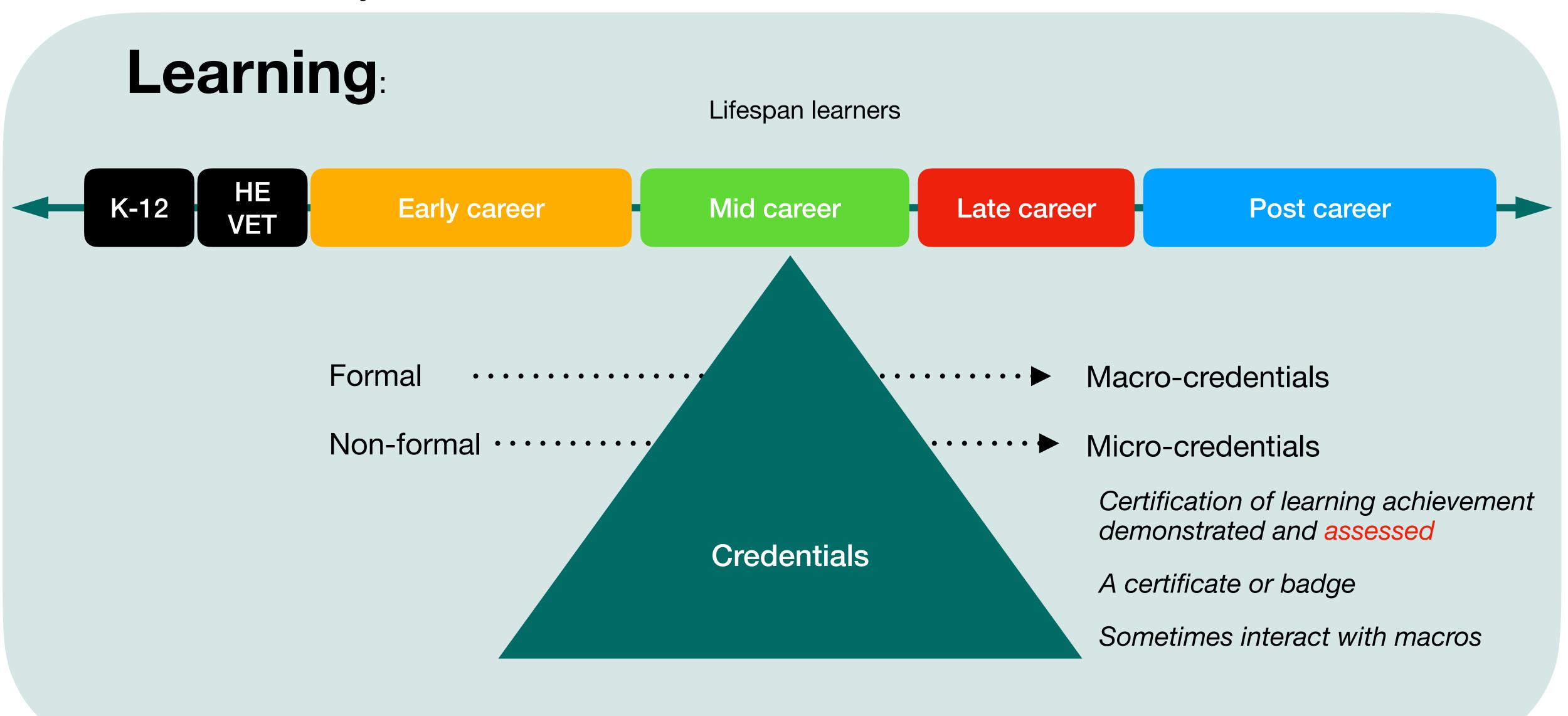
## Making micro-credentials work for learners, employers and providers

Emeritus Professor Beverley Oliver Deakin University

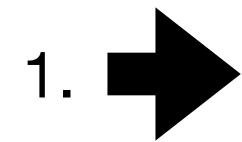
August 2019



### The credential ecosystem



## Micro-credentials: five inter-related "hot button issues" globally



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

### COMMON LANGUAGE: umbrella definitions across borders, sectors

- 2. How/if micro-credentials interact with macro-credentials standards Credit, recognition frameworks
- From "learning ~ employability" to "learning for earning"

  The *promise* of employability
- 4. Interoperability, portability, security
- 5. VALUE to learners and employers

A micro-credential cannot transform a novice into a computer scientist, engineer, educator, nurse ... but micro-credentials might provide

- encouragement to engage in learning
- entry level work for novices
- advancement or security for professionals.

Learners will opt for provider brands they trust to deliver the benefits they seek that is,

- Surviving (working well) or
- Thriving (living well).

Are traditional education providers the trusted brands in the micro-credential space?

It depends....

## Improving the micro-credential value proposition for learners

#### 1. Understand the learner's circumstances

Seeking	Credential that certifies new knowledge and skills		Credential that certifies prior knowledge and skills		
Motivation	Thriving – living well		Surviving – working well		
iviotivation	Personal development	Personal interest	Commencing	Advancing or securing	
Stage of life	Pre-career	Early career	Mid/late-career	Post-career or NILF	

- 2. Deliver the promised learner benefits, and then some ... quality, career outcome, recognisability
- 3. Control the learner investments ... fees, payment methods, time, flexible time,

### For employment-related credentials, providers must deliver VALUE to learners and employers.

Learner VALUE = Promised career benefit — Cost (fees + time)

Win learner trust by

- Delivering career benefits promised, backed by evidence (employment, satisfaction)
- Accessibility to well-priced credentials

Employer VALUE = Easy access to qualified talent (people who can do "what do what it says on the tin")

Win employer trust by assessing properly (authentic and authenticated) so graduates can do what you certify.

If you wish to have a successful and financially viable micro-credential offer, you will need to

- manage your investment in assessment and feedback and support
- provide sufficient evidence to convince the learner to undertake your credential.

### Whether you are a traditional education provider or new to education

#### Macro-credentials

A formal qualification for personal interest or to gain a base discipline

Money: as affordable as possible with recognition of prior learning pathways

Time: as brief and on demand as feasible

#### Micro-credentials

A short course or certification for personal interest or for personal health benefits

Money: free or low fee - for credit?

Time: brief and on demand

- Robust <u>evidence</u> that promised benefits are delivered
- Really authentic, identity-verified <u>assessment</u>
- Contemporary curriculum, engaging active learning
- Feedback as constructive advice on how to improve performance
- Proactive support

# Surviving Working well

**Thriving** 

Living well

A formal qualification to start, switch or advance in a career

Money: as affordable as possible with recognition of prior learning pathways
Time: as brief and on demand as feasible

A short course or certification to start, switch or advance in a career

Money: free or low fee - for credit?

Time: brief and on demand

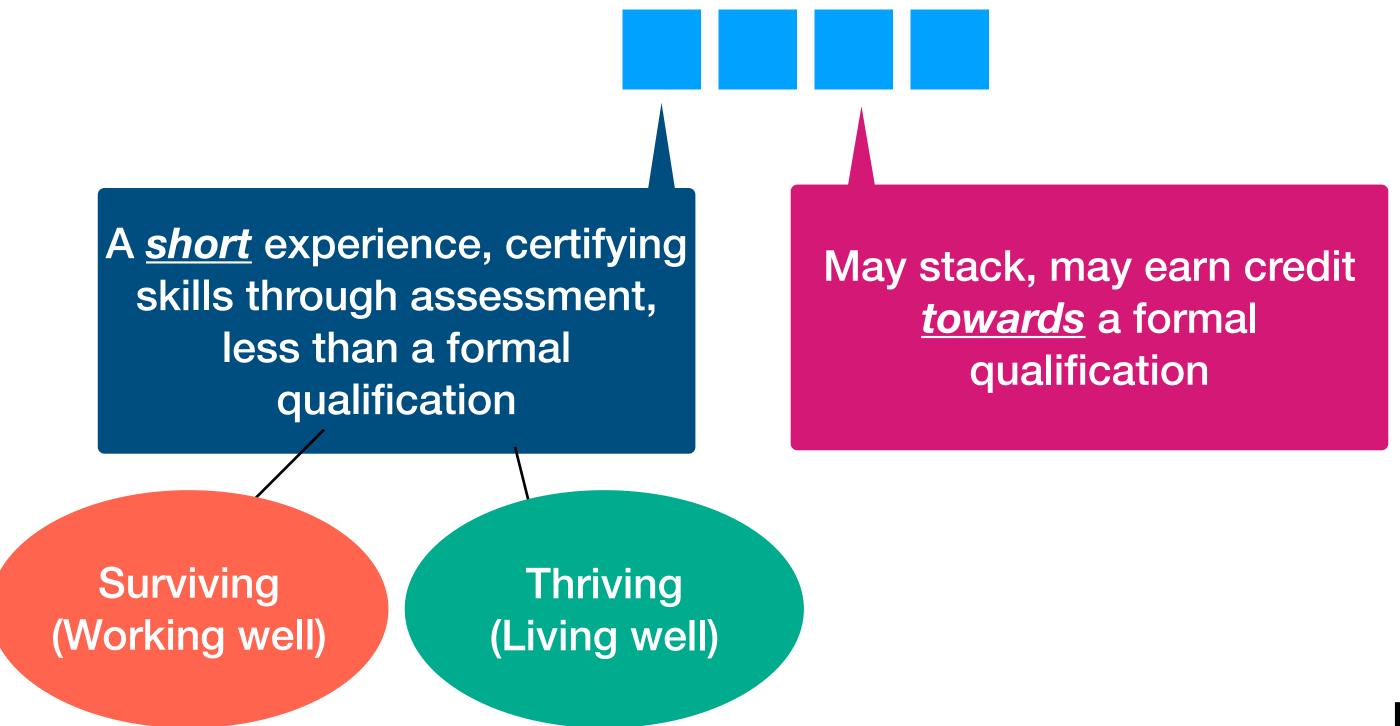
# About micro-credentials in Australia



## Australian education policy directions:

qualifications, short courses, micro-credentials

What <u>is</u> a micro-credential?



Not a formal qualification...

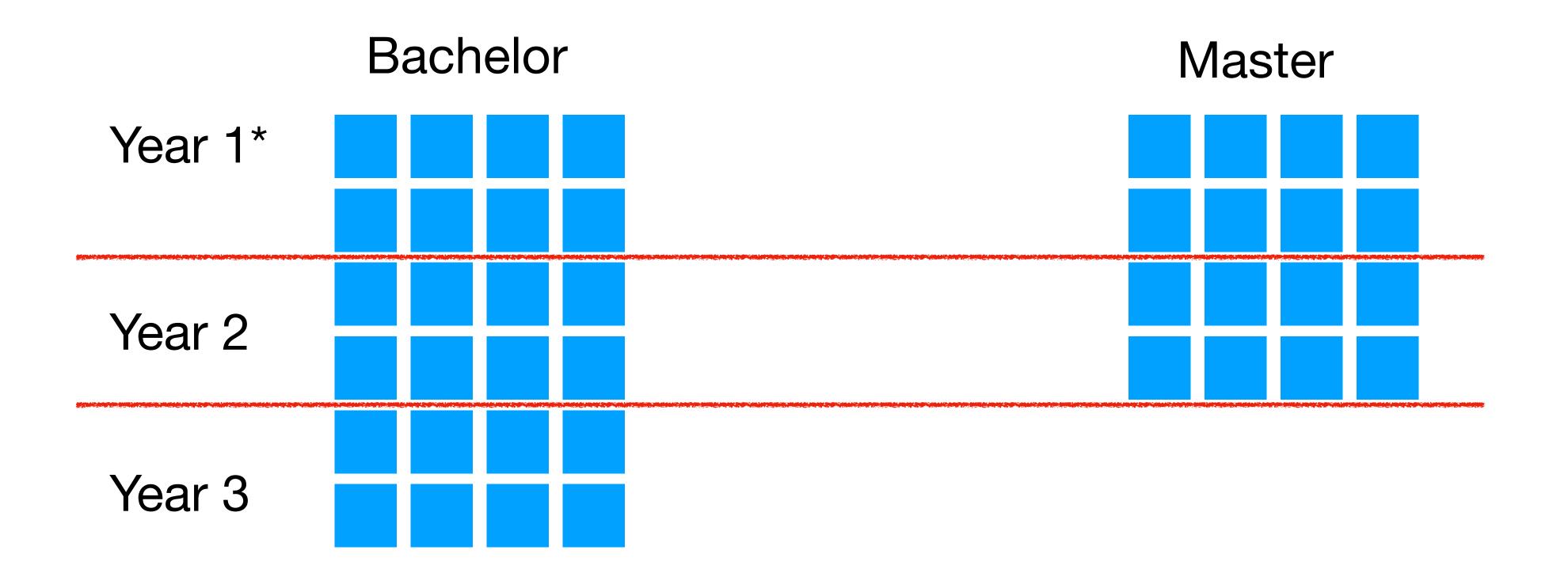
# Higher education



## Australian education policy directions

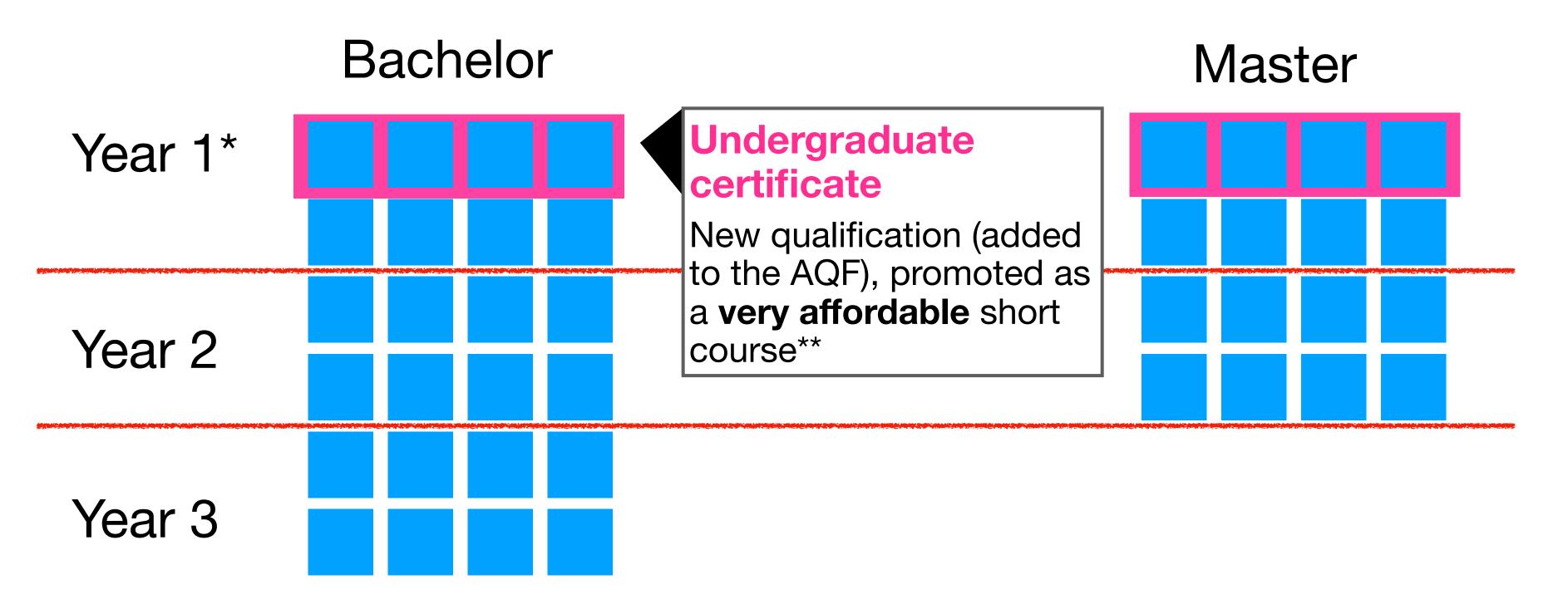
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Qualifications: where we were in 2019...



## Australian education policy directions:

Qualifications: where we are from 2020...

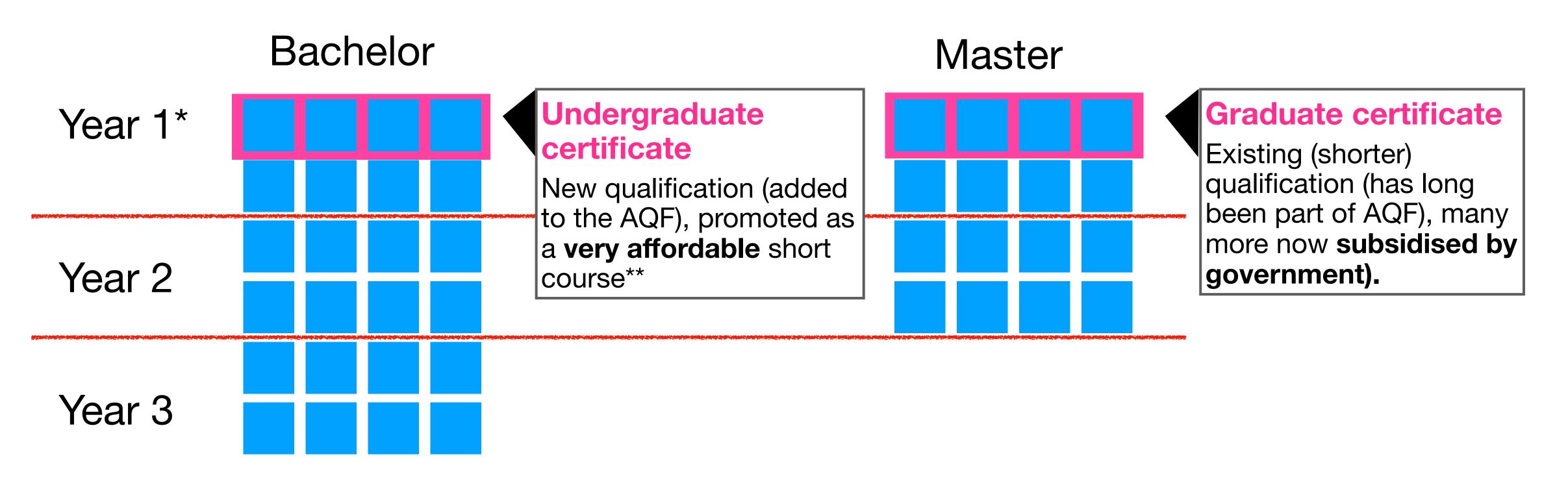


<sup>\*</sup>Typically, a full-time learner completes 8 units (modules) per academic year. Because of prior study and experience, a masters is typically 1.5 years for many learners.

<sup>\*\*</sup> The **Undergraduate Certificate** is a higher education qualification of six months duration covered by an existing higher education qualification at AQF levels 5, 6, or 7. Course content will be drawn from the existing higher education qualification, to ensure students have the option to transition to the AQF level 5, 6 or 7 qualification on completion of the Undergraduate Certificate (from AQF FAQs)

## Australian education policy directions:

Qualifications: where we are from 2020...



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# New \$4.3m education website announced by Dan Tehan duplicates existing service

Fears 'one-stop shop for microcredentials' could become 'multimillion-dollar white elephant'



▲ Education minister Dan Tehan has announced a \$4.3m government website to showcase short university courses. Photograph: Mick Tsikas/AAP

# Marketplace for online microcredentials

The Hon Dan Tehan MP
Minister for Education

Senator the Hon Michaelia Cash Minister for Employment, Skills, Small and Family Business

The Morrison Government will provide \$4.3 million to build and run a one-stop-shop for microcredentials to help students identify educational opportunities.

The marketplace builds on the success of the Government's microcredential initiative announced as part of its Higher Education Relief Package at Easter. Since the announcement, 54 providers have created 344 short online courses in areas of skills shortage.

The marketplace will provide a nationally consistent platform to compare course outcomes, duration, mode of delivery and credit point value.

## Slippage of language



Courses V

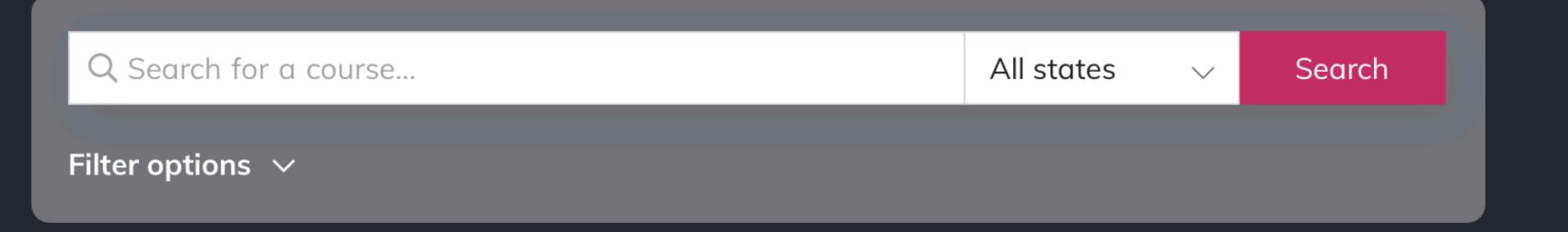
Institutions  $\vee$  Admissions Information  $\vee$ 

Resources V

Compare your shortlist

## Find the course that's right for you

Search and compare thousands of courses from different institutions across Australia







New short courses for 2021!

Show short courses

More information about short courses



Courses  $\vee$ 

Institutions 🗸

Admissions Information  $\vee$ 

Resources  $\vee$ 

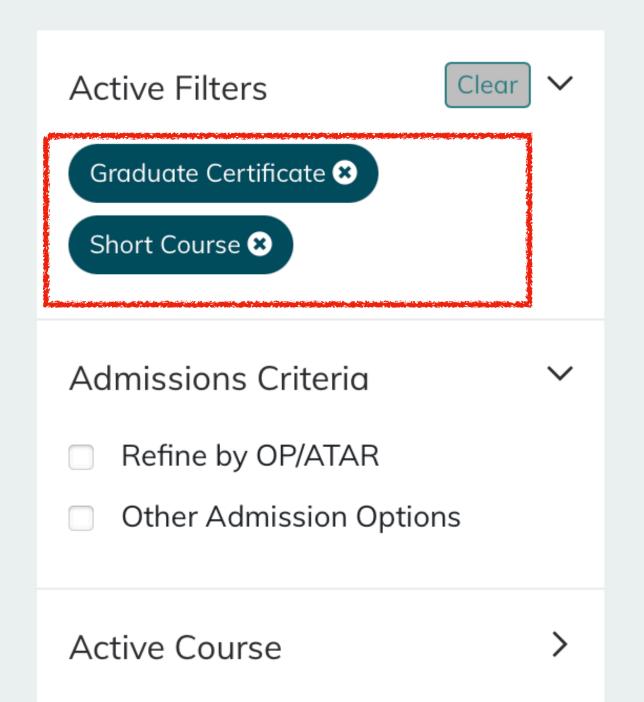
Compare your shortlist

#### Courses across Australia - find a course just for you

Search for a course...

Search

#### Refine courses by



#### Showing 1-20 of 170 courses

## Graduate Certificate Applied Mental Health Studies

Institution Code: GCAMHSFT

Online

Health Education and Training Institute Online

### ☐ Add to shortlist





#### Requirements

Sort by Alphabetical



Learn more

Short Course

Requirements

#### Duration

0.5

years

Course

#### **Graduate Certificate in Accounting**

UAC Code: 950098

On-campus

Western Sydney University Parramatta City

#### Add to shortlist



Learn more

Short Course

#### **Duration**

0.5

years

Part-time available



Courses V

Institutions ~

Admissions Information  $\vee$ 

Resources ~

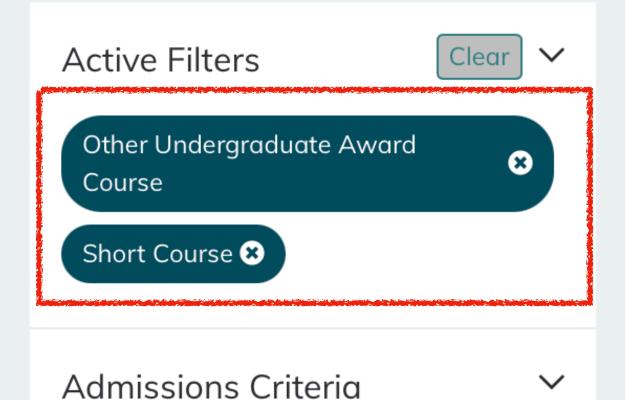
Compare your shortlist

#### Courses across Australia - find a course just for you

Search for a course...

Search

#### Refine courses by



#### Showing 1-20 of 88 courses



Institution Code: 9190110061

On-campus

Deakin College Melbourne Burwood Campus

### ☐ Add to shortlist



#### Requirements

Alphabetical

Sort by



Learn more

Short Course

**Duration** 



years

#### Information Technology

Institution Code: 9190110071

On-campus

Deakin College Melbourne Burwood Campus

#### Add to shortlist



#### Requirements



Duration

years

Refine by OP/ATAR

Other Admission Options

## Higher education

Enrolment (headcount) by Course Level by Citizenship 2019

Australian postgraduate learners

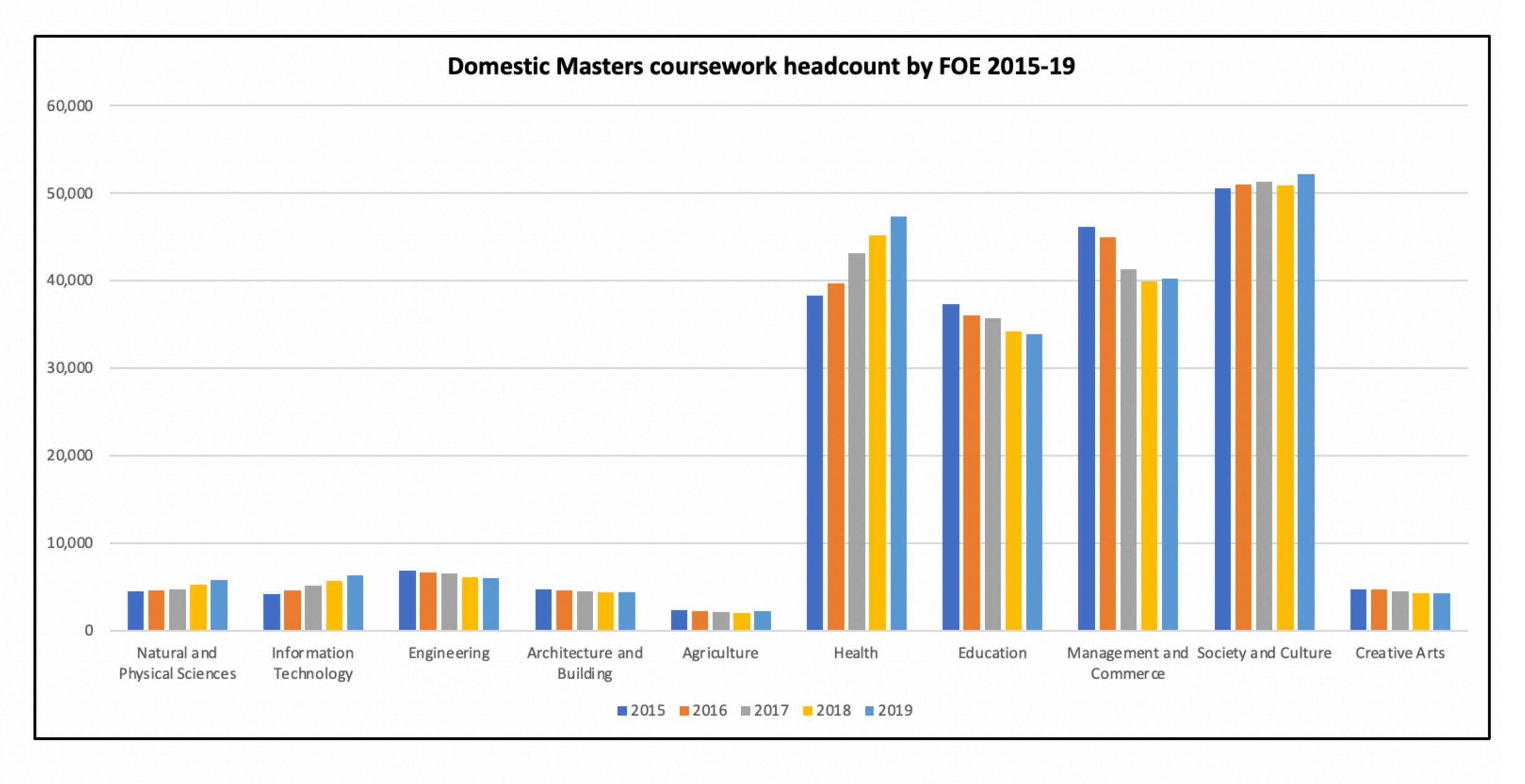
	Postgra	aduate	Undergraduate		Enabling/non-award		
	PG other	PG research	Bachelor	UG other	Enabling	Non-Award	Total
Domestic	<b>12.5</b> % 201,750	43,305	<b>47.6%</b> 767,657	38,342	28,614	6,382	1,086,050
Overseas	218,031	24,960	236,450	29,154	2,048	13,105	523,748
Total	419,781	68,265	1,004,107	67,496	30,662	19,487	1,609,798

<sup>\*</sup>Headcount = people, regardless of full-time or part-time)

32.5% of TOTAL

PG other is postgraduate coursework; UG other is sub-Bachelor courses

## Domestic Masters by coursework headcount and load by FOE 2015-19



#### Postgraduate fees and funding

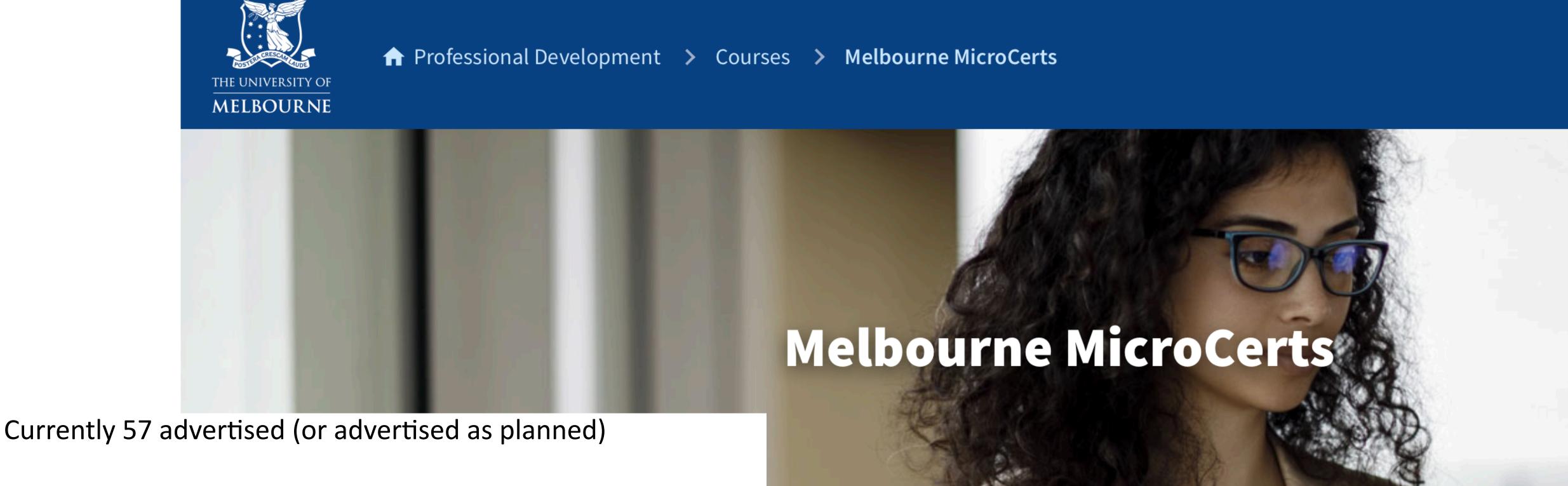
- These examples show the per annum tuition fee (2020)- most Masters are 1.5 years in total. If the student enrols in one unit each semester, the Masters could take up to twelve years to complete. It's a long haul experience.
- Government loans available but repayment threshold is low
- Online learning prevalent mature students have high expectations re quality

Juris Doctor	Annual est. fee*	Est. overall debt**		
Bond	\$59,649	\$89,473.5		
Uni Melbourne	\$41,088	\$61,632		
RMIT	\$38,400	\$57,600		
ANU	\$36,288	\$54,432		
Deakin	\$32,600	\$48,900		
Uni Canberra	\$27,900	\$41,850		
Newcastle	\$24,830	\$37,245		

MBA or similar	Annual est. fee*	Est. overall debt**
RMIT	\$38,400	\$57,600
Newcastle	\$38,195	\$57,292.5
Deakin	\$34,400	\$51,600
CSU	\$29,056	\$43,584
CDU	\$26,760	\$40,140
Federation Uni	\$26,300	\$39,450
ECU	\$24,550	\$36,825

<sup>\*</sup>This is an estimate of the annual tuition fee - other charges include text books, student amenities fee, travel and so on.

<sup>\*\*</sup> Estimated overall debt is annual tuition by 1.5 (most Masters are 1.5 years) not including indexation



Key features: The vast majority are

- Online
- Stack with similar U Melbourne micro certs
- Are either parts of **suites** (not eligible for credit) or **series** (eligible for credit: 4 micro-credentials = 1 PG unit)
- Time investment: average 42 hours (including study and assessment)
- Price: Range from AU\$990 to AU\$1490

Redefine your skills for the future

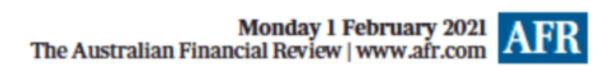
#### Deakin University Professional Practice Credentials



Certifying prior achievement of key employability skills at Masters level Earn credit towards Masters unit <a href="https://credentials.deakin.edu.au">https://credentials.deakin.edu.au</a>

# Vocational education and training





## Business bypassing accredited trainers in the rush to get skills



Governments are alive to the growing use of non-accredited training.

- During the pandemic, Industry, Science and Technology Minister Karen Andrews asked the tech sector to ... provide Australians ... with easy access to digital skills. The result was Adobe's Skill Finder platform, which offers free non-accredited, tech courses from global and Australian tech companies.
- Within the VET sector the new Digital Skills Organisation is funding TAFE Queensland and two non-accredited training providers (Goanna Education and General Assembly) to innovate in the delivery of skills and employment outcomes for data analysts.
- In December the South Australian government launched a micro-credentials pilot which aims to "strengthen connections between nationally accredited subjects and modules and non-accredited training", after the government noted that almost half of South Australian businesses used non-accredited training for their staff in 2019.

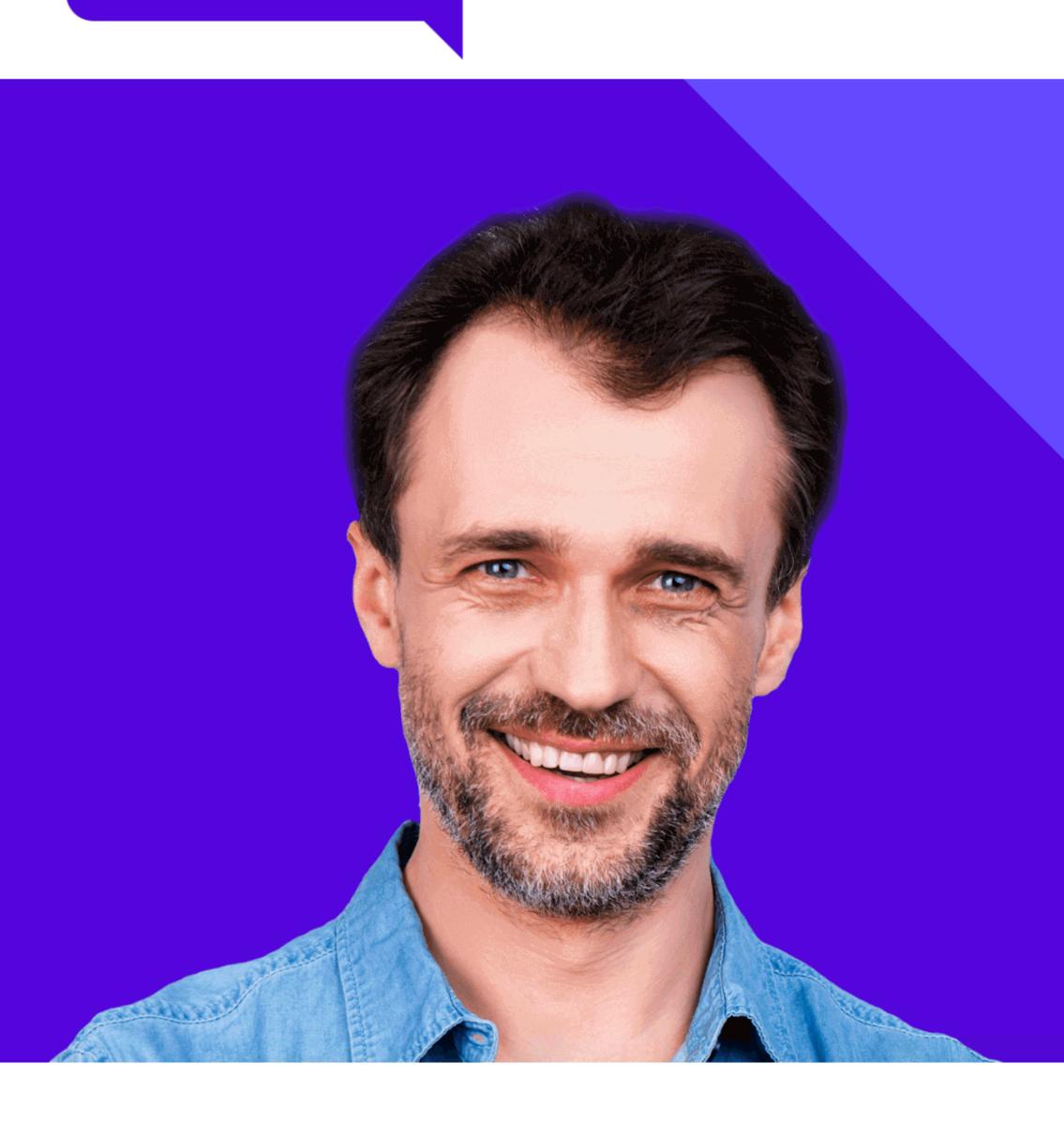
Australia's Productivity Commission recommends governments trial a lifelong learning loan scheme for mature age Australians... for short courses and micro-credentials at VET, higher education and selected non-accredited training providers.

Skill Finder

Categories

Contributors

About Skill Finder



## Upskill yourself

## Jesse can help you find a course

Are you looking to upskill, update, re-train or simply learn something new? You've come to the right place. Skill Finder is a marketplace that connects you to your next learning opportunity! Start exploring all of these free courses today.

## TRAINING AND SKILLS COMMISSION

Better Skills Better Work Better State





## Micro-credentials Pilot Program

**Home** ► Micro-credentials

Businesses and industries in South Australia can now apply to have shorter, bespoke courses formally recognised through a 12-month business-led micro-credentials pilot program launched in late 2020.

The pilot program outcomes will inform how South Australia shapes future Vocational Education and Training pathways to meet the emerging skills needs of industry.

#### Micro-credentials in South Australia

A micro-credential is shorter than a qualification and certifies the learning of a defined set of skills, knowledge and attributes through a bite-sized course. It provides businesses with flexibility to rapidly adjust to changes in technology and the labour market.

Endorsement of a micro-credential by the Commission is determined based on the course's alignment with the following five principles:

- 1. Industry recognised skills gap unable to be met through the current nationally accredited training systems
- 2. Certification of a person's learning outcomes, including skills and competencies that reflect elements of licensing and other regulatory requirements (local, national and international) or contemporary industry practices
- 3. Assessment of learning outcomes include core transferable skills and core job-specific skills required for job roles as identified by industry
- 4. Supports people to adapt to changing job roles and workplaces, and/or to transition to a new industry
- 5. Supports pathways between the school, vocational education and higher education sectors and can provide a pathway to accredited courses

# And also...





## **Key findings**

- 23 certificates
- 21 certificates by companies
  - who seek talent for identified vacancies
  - whose core business is not education
  - who can afford to charge less
- named for jobs not fields of education
- data on enrolments, investment, satisfaction, career benefits

#### EduBrief.

Monitoring micro-credentials

## Coursera Professional Certificates and Google Career Certificates

#### A snapshot analysis

Beverley Oliver Emeritus Professor and Principal Consultant, EduBrief

October 2020



#### Coursera

The pivot from MOOCs from universities and "learning for its own sake" to employers and "learning for earning"

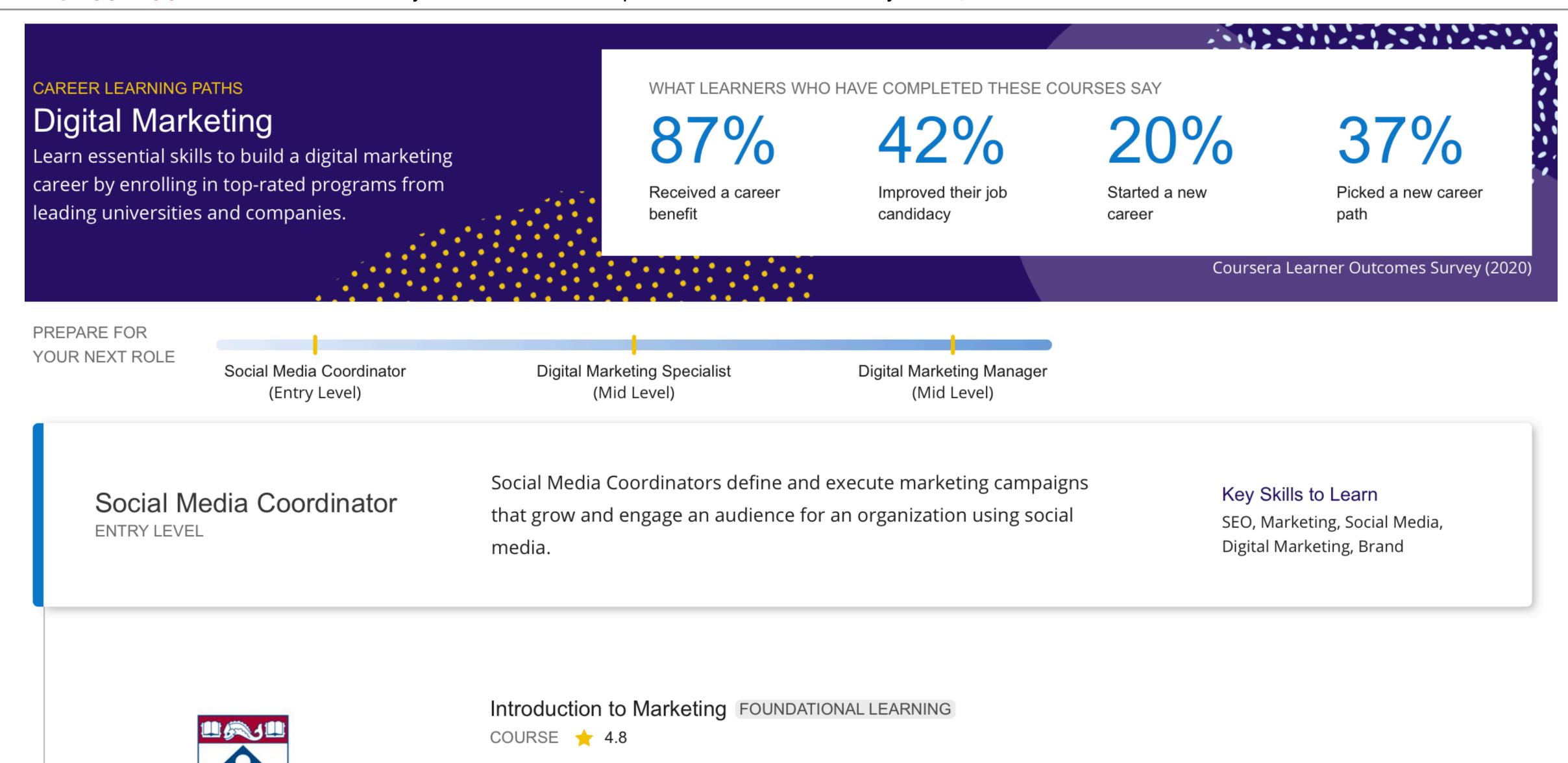
Its inexpensive short courses are focussed on leading learners directly to more and better paid work, on a subscription model, keeping the learner connected to the platform.

Career learning pathways - where do you want to go, and this learning series will help you get there.

# Introducing Career Learning Paths: Learn the skills to advance your career with confidence

August 28, 2020 ♥





This course covers three core topics in customer loyalty: branding, customer

centricity, and practical, go-to-market strategies.

### Coursera Professional Certificates as at 29 Sept 2020

The headlines	Learner inv	estment/	Learner ex	perience	Learner	benefits
Professional Certificate	Suggested hours	Likely fee <sup>1</sup>	Overall rating	Learners enrolled	New career	Pay or promotion
1. (ISC) <sup>2</sup> Systems Security Certified Practitioner	112	\$1500	4.7	4,129		
2. Arizona State University TESOL	200	\$680	4.9	12,981	53%	33%
3. Cloud Architecture with Google Cloud	30	\$102		43,998	36%	50%
4. Cloud Engineering with Google Cloud	30	\$102		41,058	36%	50%
5. Data Engineering with Google Cloud	30	\$102		35,053	45%	
6. DeepLearning.AI TensorFlow Developer	80	\$272	4.7	87,723	40%	12%
7. Facebook Social Media Marketing	240	\$408	4.8	7,701		
8. Google IT Automation with Python	150	\$408	4.7	145.045		
9. Google IT Support	120	\$408		398,400	84	1% <sup>2</sup>
10. IBM AI Engineering	192	\$272	4.4	23,201	38%	18%
11. IBM Applied Al	144	\$204	4.6	23,533	41%	14%
12. IBM Customer Engagement Specialist	20	\$138	4.8	4,584	35%	30%³
13. IBM Cybersecurity Analyst	128	\$544	4.7	17,287		
14. IBM Data Analyst	120	\$162	4.7	1,732	42%	11%
15. IBM Data Science	144	\$162	4.6	212,231	46%	19%
16. IBM Machine Learning	60	\$162	4.9			
17. IBM z/OS Mainframe Practitioner	36	\$330	4.7	3,748		
18. Salesforce Sales Development Rep	100	\$340				
19. SAS Advanced Programmer	60	\$340	5.0			
20. SAS Programmer	112	\$220	4.8	20,015	21%	50%
21. SAS Visual Business Analytics	40	\$220	4.7	8,298		
22. SRE and DevOps Engineer with Google Cloud	30	\$102	4.7	2,147	36%	23%
23. UCI Project Management	240	\$4190				
TOTAL enrolment as at 29 Sep 2020				1,092,864		
Key	<100	<au\$300< td=""><td>&gt;4.6</td><td>&gt;25k</td><td>40%+</td><td>40%+</td></au\$300<>	>4.6	>25k	40%+	40%+

Empty cells indicate no data available.

See report "Coursera Professional Certificates": edubrief.com.au/resources

<sup>&</sup>lt;sup>1</sup> If learner follows recommended time required

<sup>&</sup>lt;sup>2</sup> As reported separately by Google, see page 20 of this report

<sup>&</sup>lt;sup>3</sup> In response to whether learner achieved a "tangible career benefit from this course"



Subjects  $\lor$  Courses  $\lor$  Using FutureLearn  $\lor$ 

Micro-credentials at FutureLearn, October 2020

Provider	University alone	University with industry	Industry alone credit by University	Industry alone
CloudSwyft Global Systems, Inc. in partnership with Microsoft				4
QA accredited by AXELOS				2
FutureLearn in collaboration with AWS			Coventry	
FutureLearn in collaboration with Salesforce			Coventry	
FutureLearn in collaboration with Tableau			Coventry	
FutureLearn in collaboration with Xero & Tableau			Coventry	
Entrepreneurial Sales Institute (ESI) endorsed by Verizon Connect			Glasgow Caledonian	
The Open University endorsed by Cisco Networking Academy		1		
Queen Mary University of London co-created by Institute of Coding		1		
The Open University in collaboration with Royal Photographic Society		1		
Anglia Ruskin University endorsed by Institute of Data & Marketing		1		
The Open University endorsed by the Association for Learning Technology (ALT)		1		
The Open University endorsed by Mental Health Foundation		1		
Anglia Ruskin University endorsed by Institute of Data & Marketing		1		
University (Various)	18			
TOTAL	18 (50%)	7 (20%)	5 (14%)	6 (16%)

## Australian micro-credentials policy in summary

#### **Positives:**

- Government is proactive
- AQF review a definition, credit framework
- A new micro-credentials marketplace
- New interest in PG Certificates
- New UG Certificate now a formal qual
- Lots of innovative practice in some universities: Deakin, RMIT, USQ, Melbourne, UWA; others very interested and making plans
- A key part of VET reform
- Non-accredited providers on and offshore

## **Challenges:**

- Lacking a system for learning for earning
- Universities compete and go their own way, now short of resources and in survival mode
- Pricing of university micro-credentials an issue
- AQF review WIP
- Political considerations
- Funding
- Issues re credit policy but providers reluctant and autonomous
- We have no idea how many are learning with unregistered providers onshore, and particularly offshore - or quality or outcomes

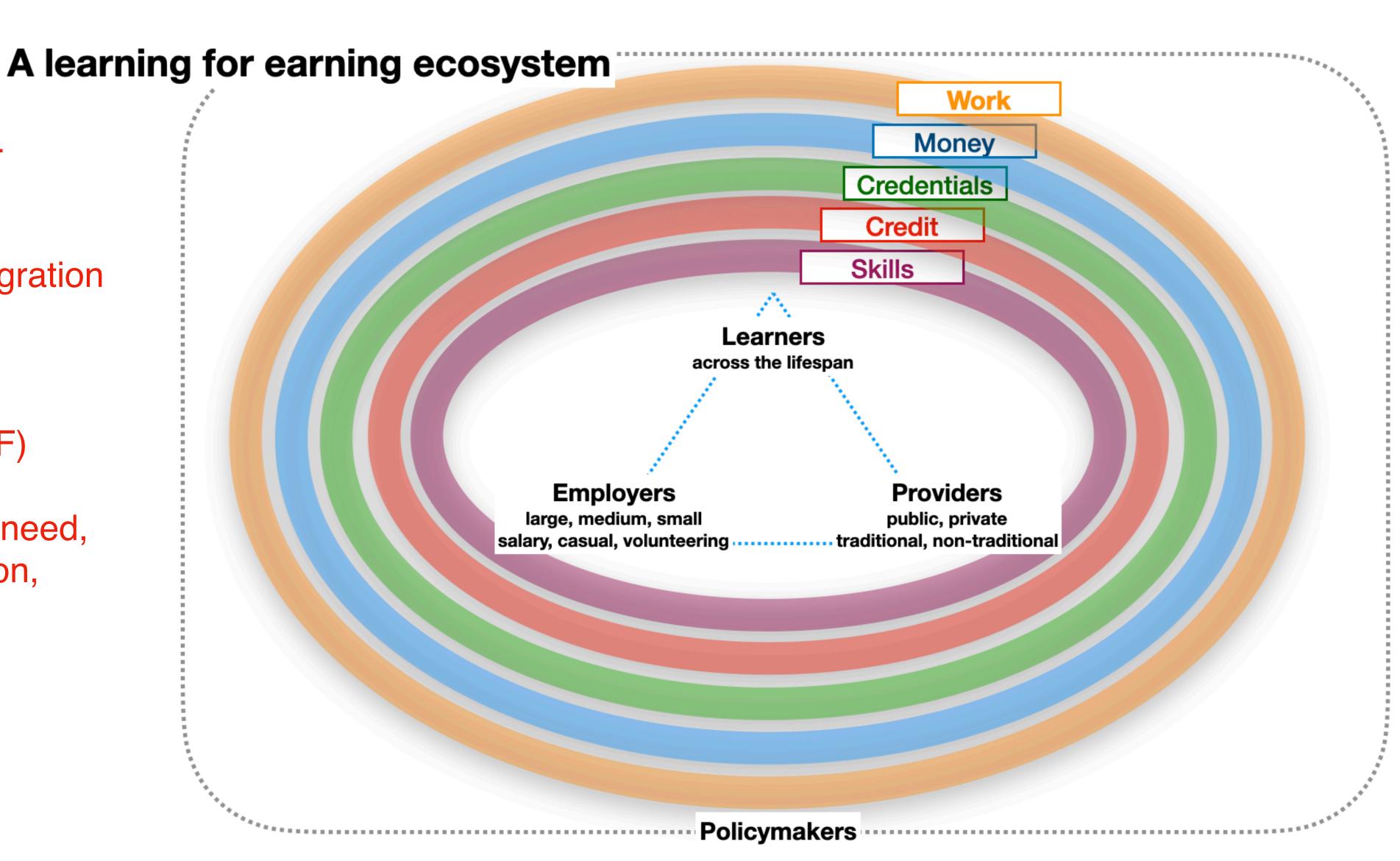
# Winding up: Five key takeaways

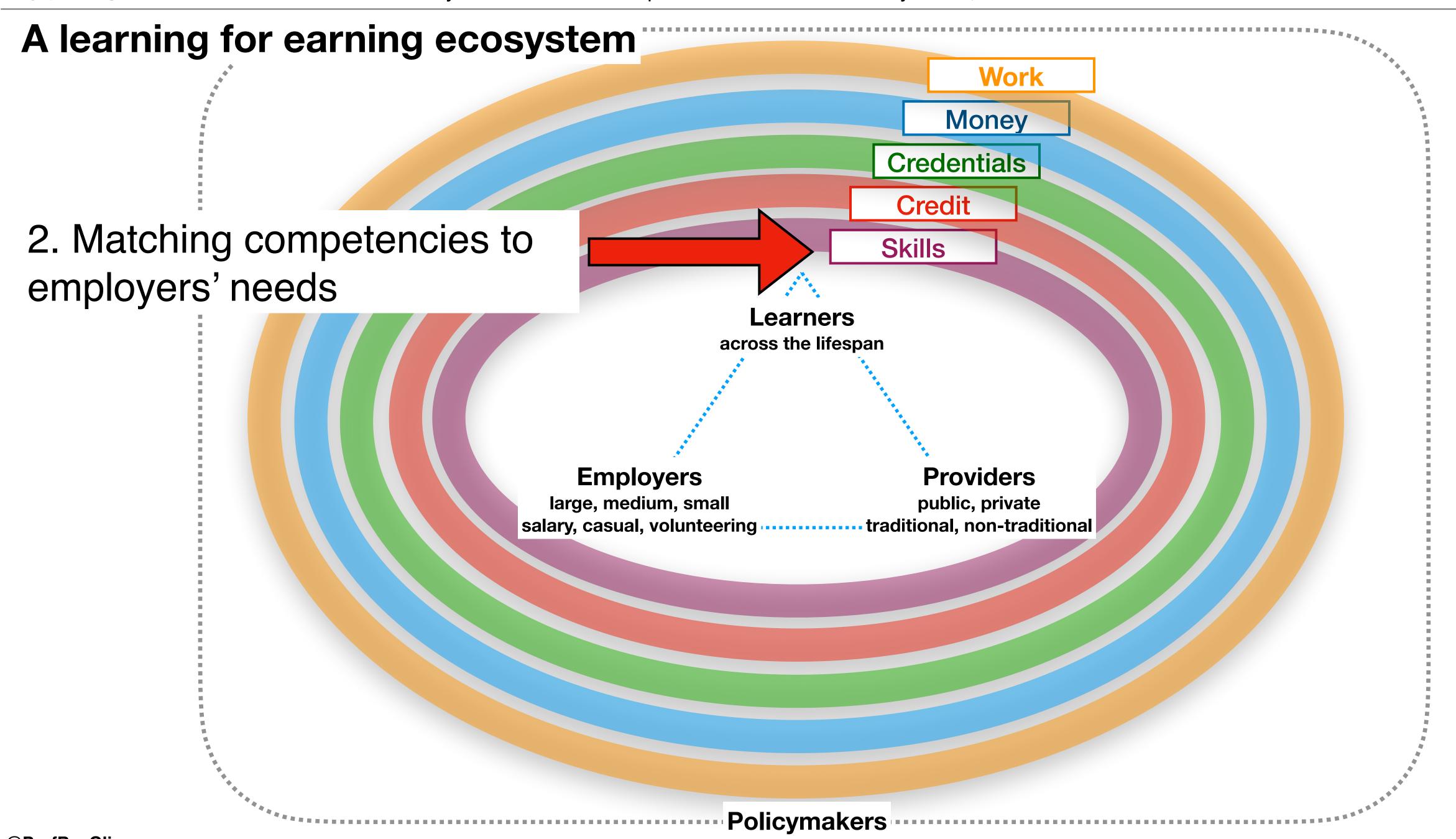


## 1. Five challenges of micro-credentials in Australia:

1. Coherence and coordination

- Cross sectoral integration (HE and VET)
- 3. Pricing; systemic frameworks (the AQF)
- 4. Data evidence of need, enrolment, completion, outcomes, value
- 5. Building systemic integration

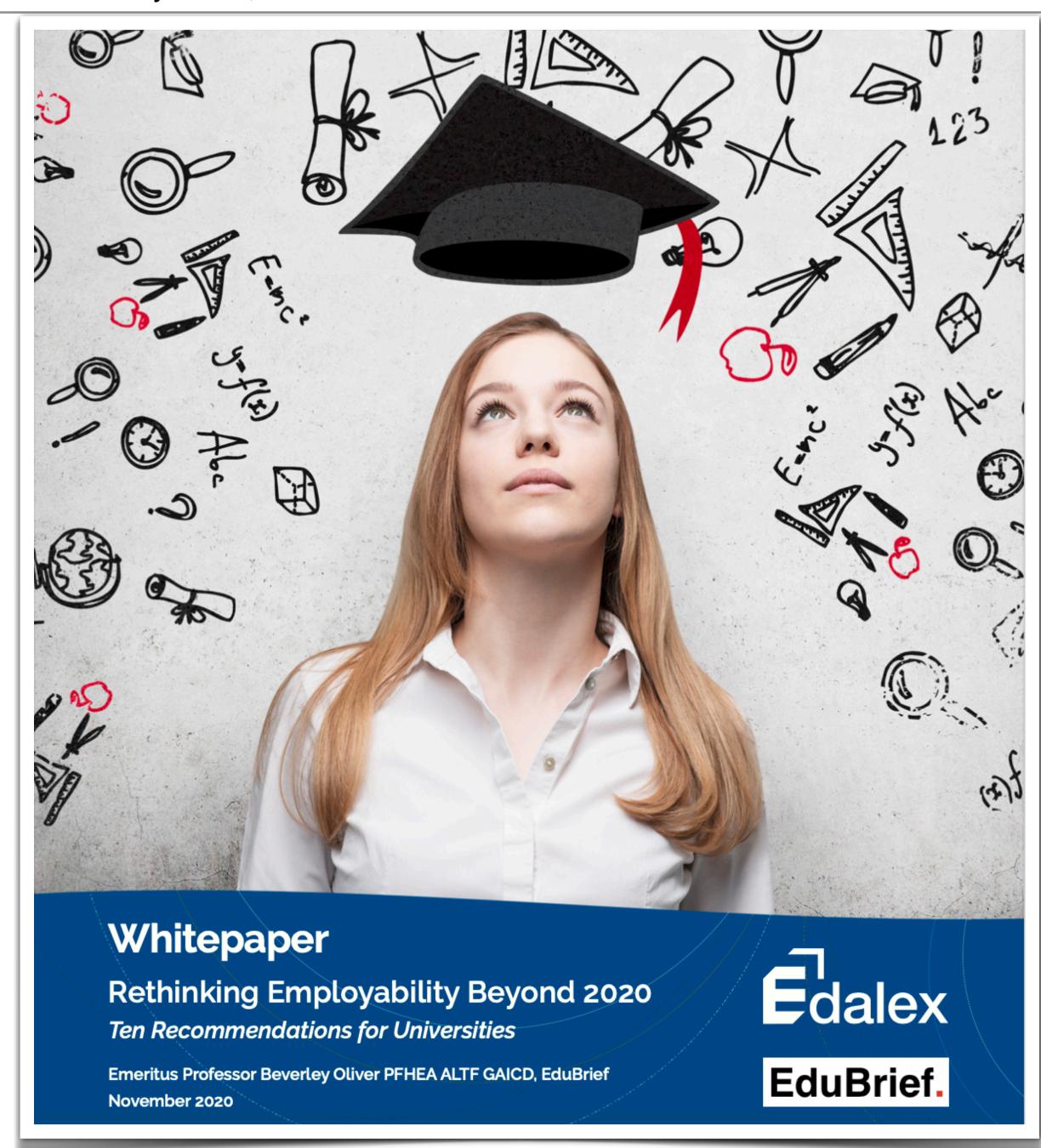






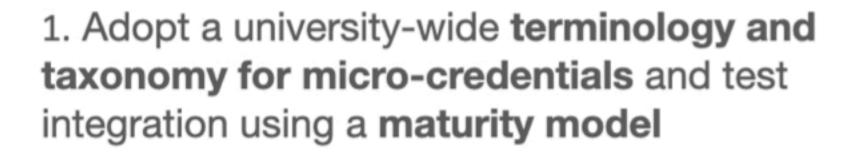
Three "must-dos" to make microcredentials a key component of the college and university strategy to "build back better" after the pandemic

- 1. Know the learner and their motivations: get serious about employability
- 2. Deliver the promised learner benefits, and more
- 3. Moderate learner investments especially price and credit





### With regard to credentials, micro and macro





2. Become more "labour market demanddriven": find where jobs will grow, and align credentials



- 3. Provide **employability pathways** between credentials; include examples and robust data
  - 4. Develop internal **employability indicators** to enhance the signalling power of credentials



5. Become employability-focused employers: micro-credentials and employability pathways for staff



#### With regard to curriculum

6. Partner with industry to co-create "credential + employment bundles" with access to jobs and placements for graduates



- 7. Make **labour market literacy** core to all curricula
  - 8. Provide learners with more granular records of achievement and incentivise lifelong curation of achievements
  - 9. Rethink **feedback as constructive advice** on improving professional performance
  - 10. Ensure learners are ready for work in a digital-first world, beyond borders and across time zones

## The likely next developments in micro-credentials in Australia everywhere

## 1. Micro-credentials will replace some macro-credentials

Yes, if similar benefits can be delivered through a micro-credential MBA and many masters degrees

No, if similar benefits cannot be delivered through a micro-credential

Professional accreditation eg B. Nursing

Unlikely to replace first post-school macro-credential rite of passage

## 2. Micro-credentials will live alongside some macro-credentials

If they maintain standards and deliver the benefits promised.

Many micro-credentials will stand alone.

## The likely next developments in micro-credentials in Australia everywhere

## 3. Micro-credential providers who deliver value to both learners and employers will prevail.

- Non-traditional providers (employers) will continue to grow. Quality will be an issue.
- Companies may seek university validation to heighten their brand power.
- Degrees will be less sought after. Universities will contract.
- More international students will study online macro and micro.
- Online learning will be the norm for postgraduate; blended for parts of undergraduate and VET.
- Learners will become less interested in credit or recognition towards postgraduate degrees.

4. Credential provision will continue to become big business with extensive public private partnerships. Aspects of learning and assessment and support that can be automated will be.

# How Micro-Credentials are Changing the Landscape of Skills-Based Learning

## The Australian Experience

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