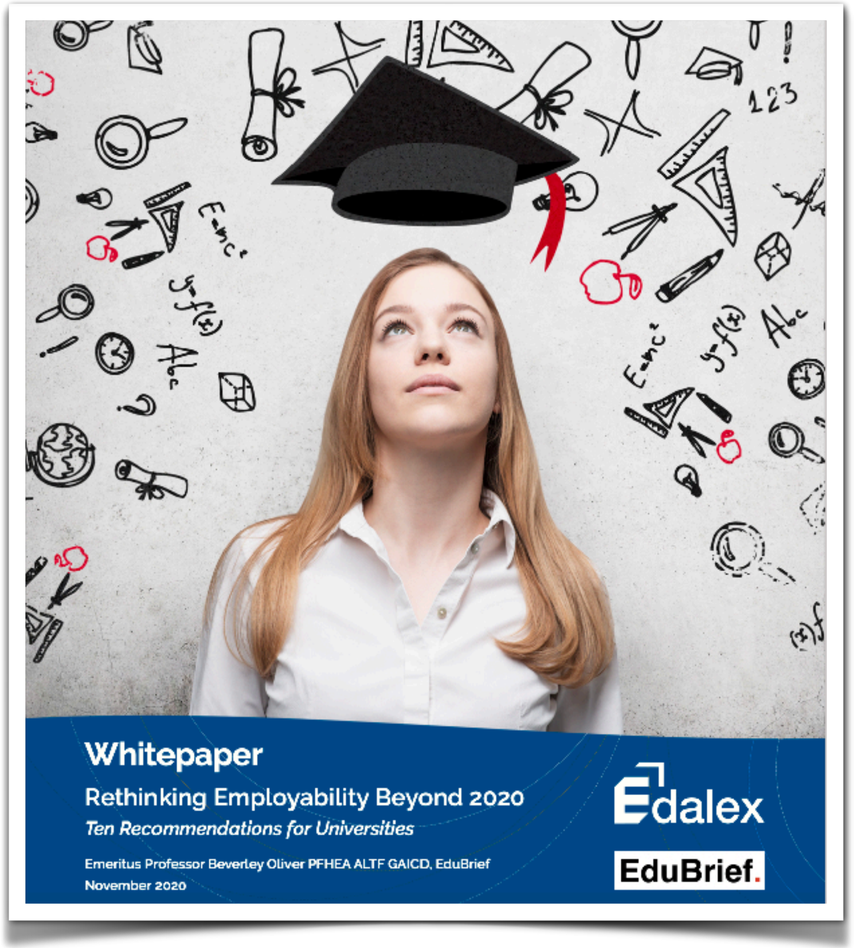
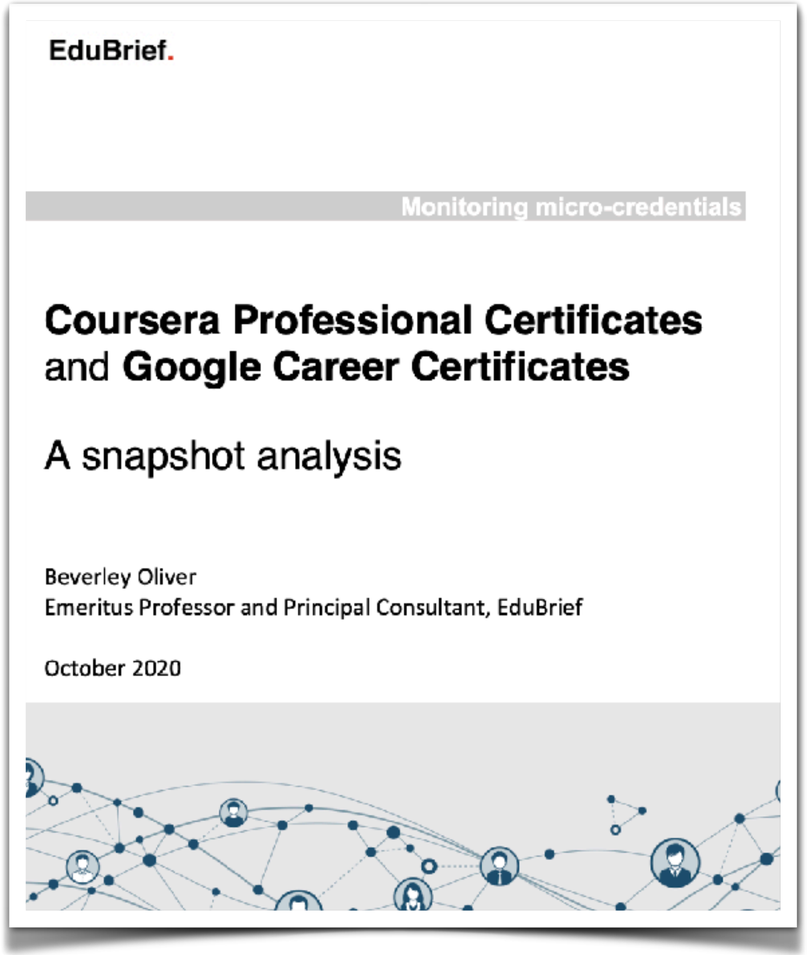
Snapshot:
Micro-credentials in Australia and beyond in 2021

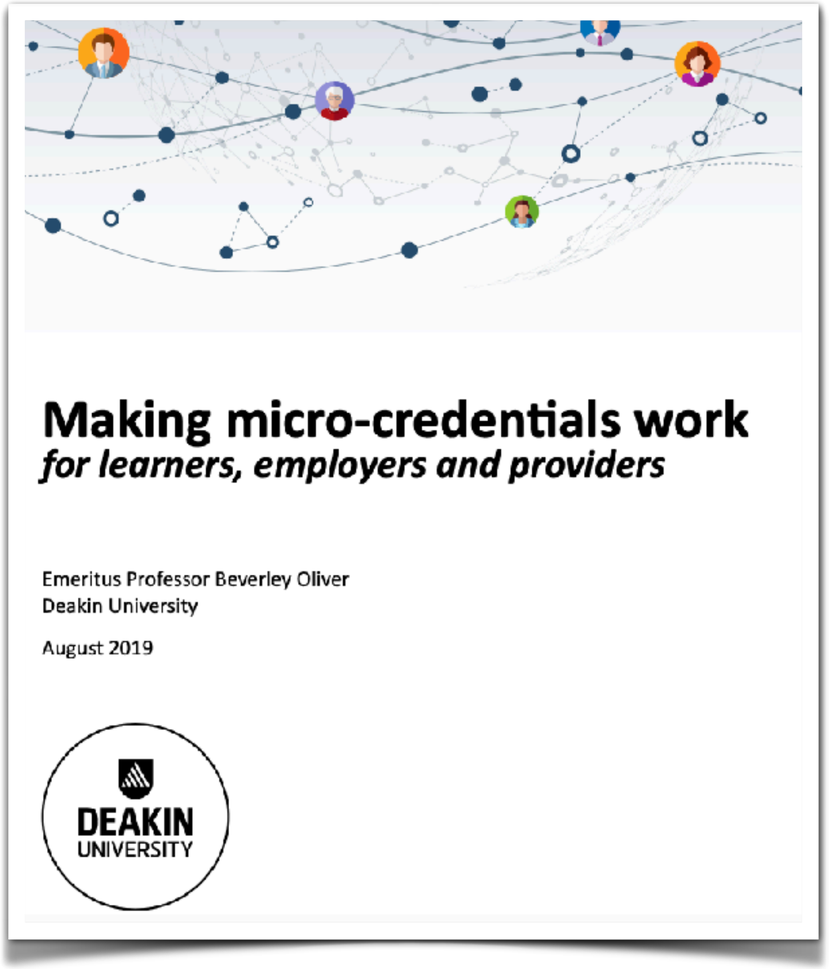
Emeritus Professor Beverley Oliver ALTF PFHEA

1. Micro-credentials in the literature
2. Micro-credentials policy - globally
3. Micro-credentials policy in Australia
4. Micro-credential innovations in Australian universities - six examples
5. Why we need to think harder
6. Five suggestions

About me: experience includes leading the implementation of three types of micro-credentials at Deakin University but I am no longer actively employed at Deakin



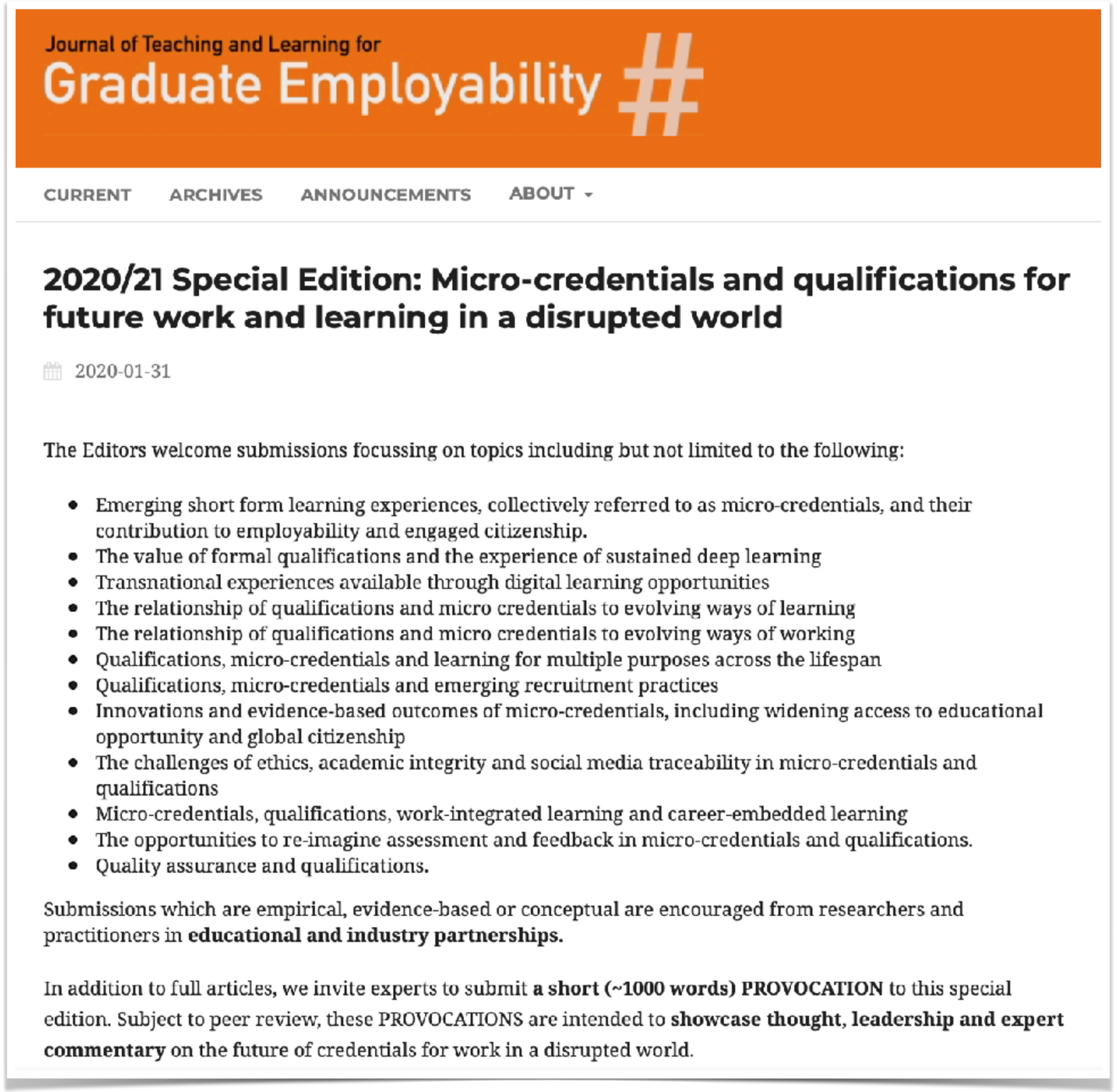




1. Micro-credentials in the literature

HINT: There isn't much yet…

Special editions in the peer-reviewed literature



Journal of Teaching and Learning for Graduate Employability #

CURRENT ARCHIVES ANNOUNCEMENTS ABOUT

2020/21 Special Edition: Micro-credentials and qualifications for future work and learning in a disrupted world

2020-01-31

The Editors welcome submissions focussing on topics including but not limited to the following:

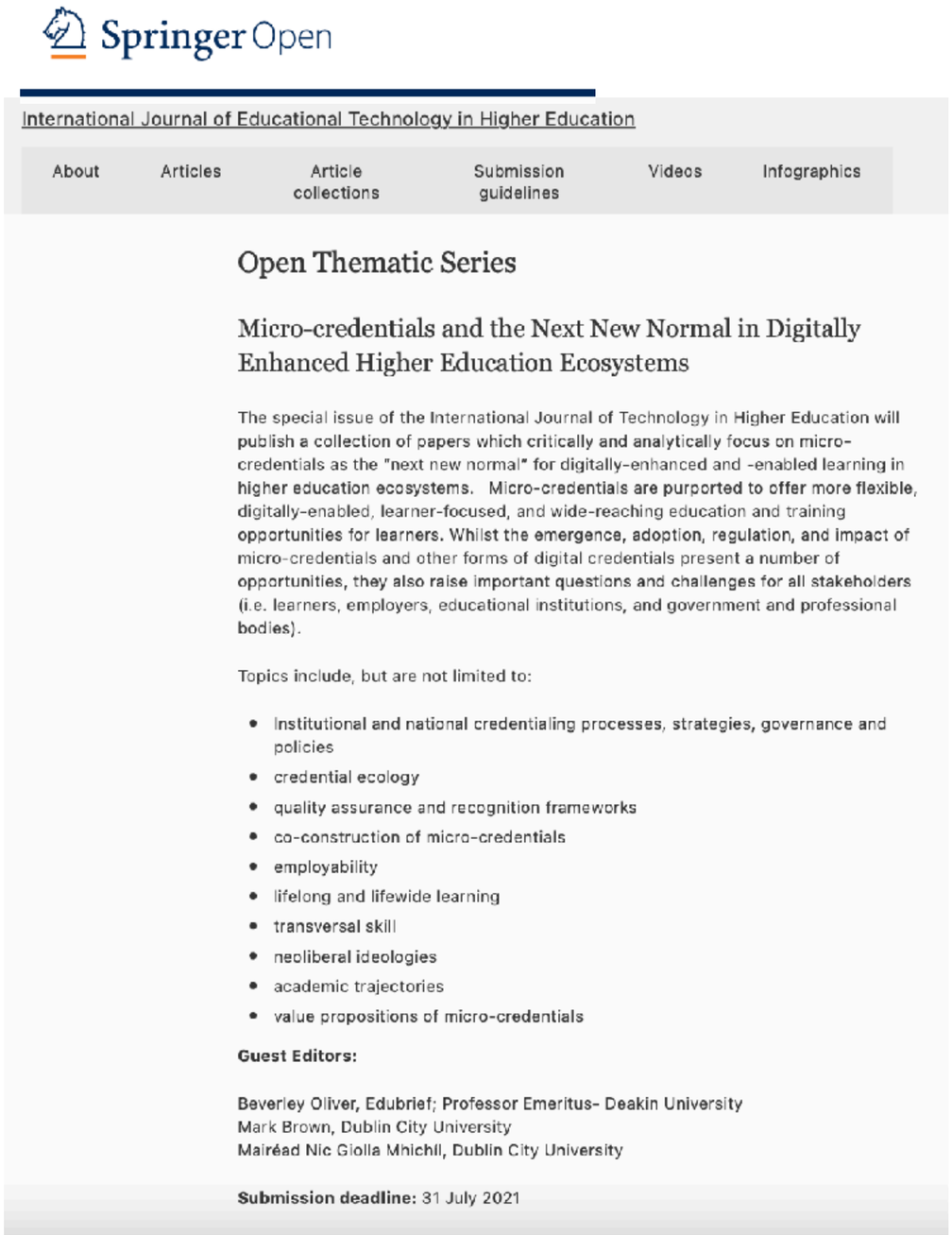
- Emerging short form learning experiences, collectively referred to as micro-credentials, and their contribution to employability and engaged citizenship.
- The value of formal qualifications and the experience of sustained deep learning
- Transnational experiences available through digital learning opportunities
- The relationship of qualifications and micro credentials to evolving ways of learning
- The relationship of qualifications and micro credentials to evolving ways of working
- Qualifications, micro-credentials and learning for multiple purposes across the lifespan
- Qualifications, micro-credentials and emerging recruitment practices
- Innovations and evidence-based outcomes of micro-credentials, including widening access to educational opportunity and global citizenship
- The challenges of ethics, academic integrity and social media traceability in micro-credentials and qualifications
- Micro-credentials, qualifications, work-integrated learning and career-embedded learning
- The opportunities to re-imagine assessment and feedback in micro-credentials and qualifications.
- Quality assurance and qualifications.

Submissions which are empirical, evidence-based or conceptual are encouraged from researchers and practitioners in **educational and industry partnerships.**

In addition to full articles, we invite experts to submit **a short (~1000 words) PROVOCATION** to this special edition. Subject to peer review, these PROVOCATIONS are intended to **showcase thought, leadership and expert commentary** on the future of credentials for work in a disrupted world.

Link

Special editions in the peer-reviewed literature



Springer Open

International Journal of Educational Technology in Higher Education

About | Articles | Article collections | Submission guidelines | Videos | Infographics

Open Thematic Series

Micro-credentials and the Next New Normal in Digitally Enhanced Higher Education Ecosystems

The special issue of the International Journal of Technology in Higher Education will publish a collection of papers which critically and analytically focus on micro-credentials as the "next new normal" for digitally-enhanced and -enabled learning in higher education ecosystems. Micro-credentials are purported to offer more flexible, digitally-enabled, learner-focused, and wide-reaching education and training opportunities for learners. Whilst the emergence, adoption, regulation, and impact of micro-credentials and other forms of digital credentials present a number of opportunities, they also raise important questions and challenges for all stakeholders (i.e. learners, employers, educational institutions, and government and professional bodies).

Topics include, but are not limited to:

- Institutional and national credentialing processes, strategies, governance and policies
- credential ecology
- quality assurance and recognition frameworks
- co-construction of micro-credentials
- employability
- lifelong and lifewide learning
- transversal skill
- neoliberal ideologies
- academic trajectories
- value propositions of micro-credentials

Guest Editors:

Beverley Oliver, Edubrief; Professor Emeritus- Deakin University
Mark Brown, Dublin City University
Mairéad Nic Giolla Mhichíl, Dublin City University

Submission deadline: 31 July 2021

Link

2. Micro-credentials policy - globally

Micro-credential challenges:

Hype cycle - inflated expectations?

Muddy thinking

Confusion with badges and online learning

Research on actual outcomes - benefits, costs, value

Viable business models - few student loans

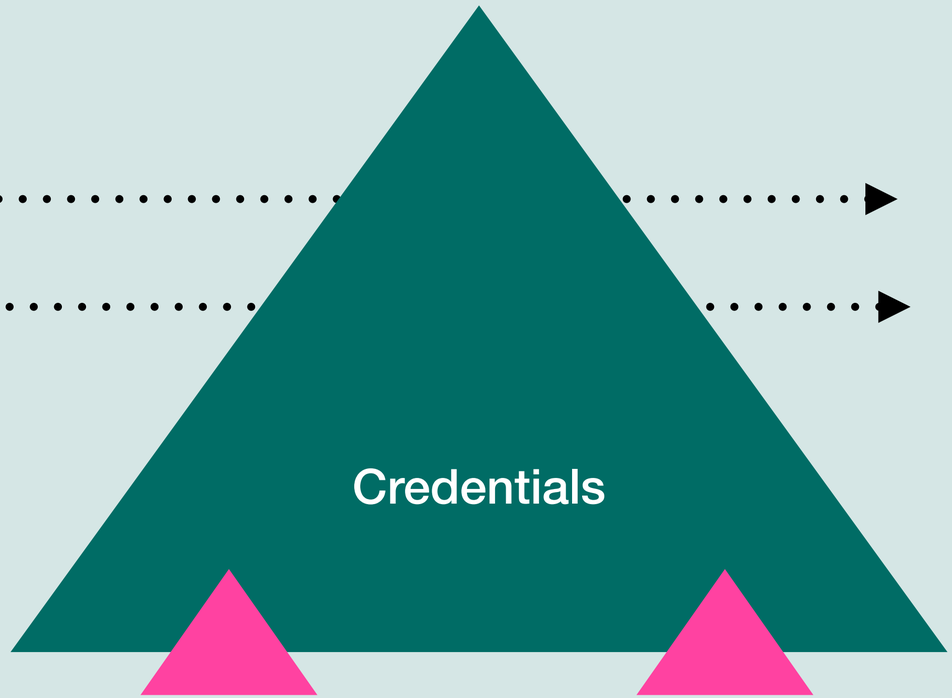
Cheaper upskilling for policy makers - long term benefits?

The credential ecosystem

Learning:

Lifespan learners

K-12 | HE VET | Early career | Mid career | Late career | Post career



Formal ▶ Macro-credentials

Non-formal ▶ Micro-credentials

Certification of learning achievement demonstrated and assessed

A certificate or badge

Sometimes interact with macros

***Thriving**: living well*

***Surviving**: working well*

Micro-credentials: **five** inter-related “hot button issues” globally

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

   COMMON LANGUAGE: across borders, sectors within borders

2. How/if micro-credentials interact with macro-credentials - standards Credit, recognition frameworks

3. From “learning ~ employability” to “learning for earning” The *promise* of employability - and the challenge ahead

4. Interoperability, portability, security

5. VALUE, promised and delivered, to learners and employers

COMMON LANGUAGE: across borders, sectors within borders

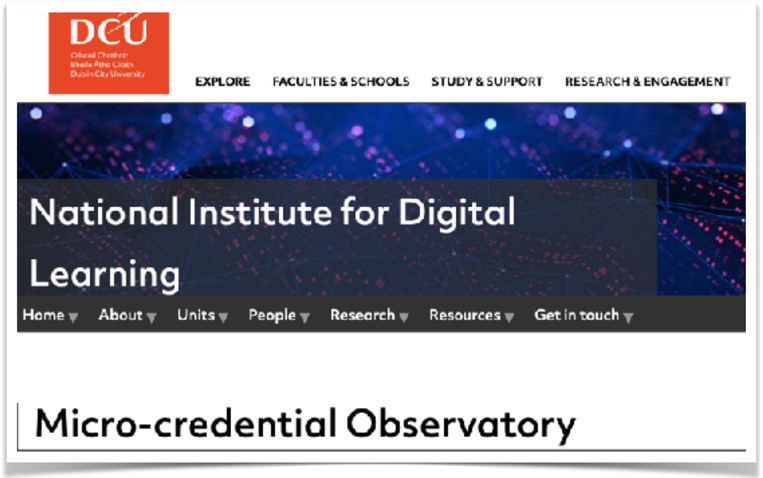
Also known as short courses, alternative credentials, MOOCs, certifications, bootcamps, intensives, MicroMasters, masterclasses, nano degrees, Specializations…and more

Region and/or body	Certification	Relation to formal qualifications	Duration	Purpose	Standards, Quality assurance	Mode	Ownership/ portability	Required information
1. Europe (MicroHE)	■	■	■	■	■	■	■	
2. Europe (European Commission)	■	■	■		■		■	■
3. Europe (European Commission Consultation)	■	■	■	■	■			■
4. OECD Working Paper	■	■	■	■	■	■		
5. New Zealand Qualifications Authority	■	■	■	■	■			■
6. Canada (eCampus Ontario)	■			■	■		■	
7. Malaysian Qualifications Agency	■	■		■				
8. UK Quality Assurance Agency	■	■			■			
9. Australian Qualifications Framework Review	■	■						
10. United States (Lumina Foundation)	■				■			

Followup references

- European Commission. (2020). *A European approach to micro-credentials – Output of the micro-credentials higher education consultation group - Final report*. Retrieved from Luxembourg. LINK
- Orr, D., Pupinis, M. & Kirdulyte, G., 2020. *Towards a European approach for micro-credentials: a study of practices and commonalities in offering micro-credentials in European higher education*, s.l.: European Commission, NESET. *LINK*
- Kato, S., Galán-Muros, V., & Weko, T. (2020). The Emergence of Alternative Credentials, *OECD Education Working Paper No. 216*. Paris, France: Organisation for Economic Co-operation and Development. LINK
- Malaysian Qualifications Agency. (2020). Guidelines to Good Practices: Micro-credentials. Malaysia: MQA. LINK
- MicroHE. (2019). Challenges and opportunities of micro-credentials in Europe In *Briefing Paper on the Award, Recognition, Portability and Accreditation of Micro-Credentials: an Investigation through Interviews with Key Stakeholders & Decision Makers* (Version 6 ed.) *LINK*

See also:



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

COMMON LANGUAGE: across borders, sectors within borders

1. **Certification**: certification or proof of defined land assessed earning outcomes (or similar), specific field
2. **Relation to formal qualifications frameworks:** can be stand alone or interoperable with qualifications, including levels
3. **Standards and quality assurance:** Must be included; verifiability and validation
4. **Purpose**: often labour market related 'relevant' skills
5. **Duration**: "shorter than an award course"
6. **Ownership/portability:** property of the learner, shareable
7. **Required information:** information that must be provided as part of the certification
8. **Mode of delivery**: all modes are feasible.

Definitions should consider including these defining characteristics in manage that communicates to their stakeholders.

VALUE, promised and delivered, to learners and employers

1. Understand the learner's motivation, education and circumstances

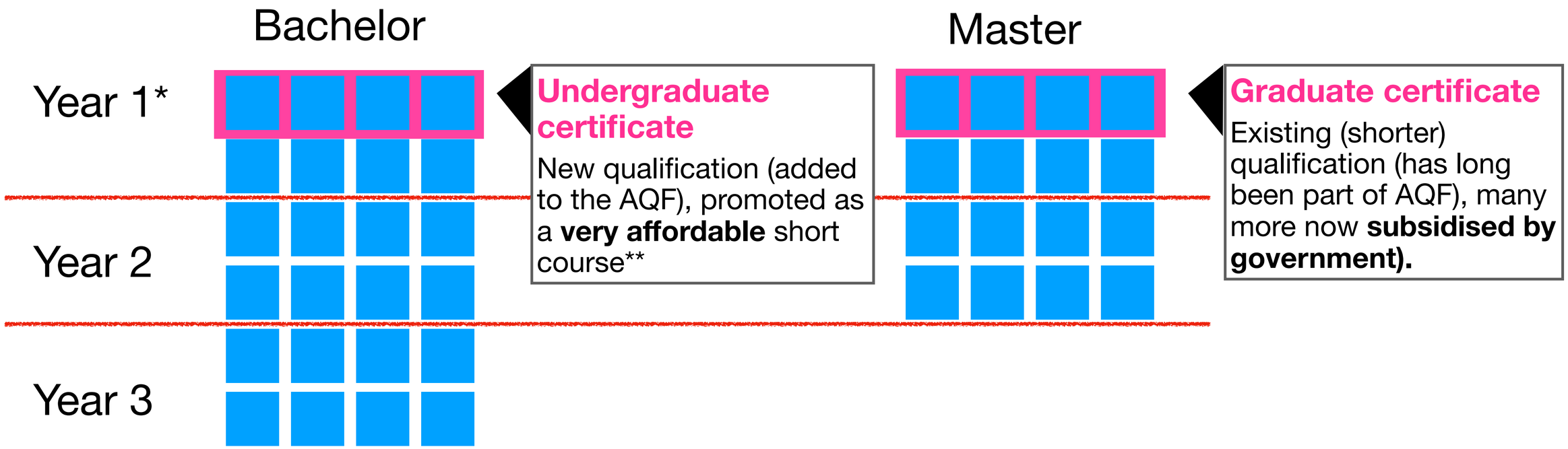
2. Deliver the promised learner benefits, and then some…

3. Control the learner investments …money and convenience

3. Micro-credentials policy in Australia

Australian education policy directions:

Qualifications: where we are from 2020…



*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.

** 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)

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 between short qualifications and short courses (micro-credentials).

WRT micro-credentials, I mean courses NOT on the AQF such as UGCs and GCs.

4. Micro-credential innovations in Australian universities

1.

Charles Sturt University

Building community

		Points	Weeks	Hours	Cost
Building community	Building community resilience	2	8	4	$600
	Community contexts	4	8	8	$1200
	Community disaster recovery	4	8	8	$1200
	Inclusive community engagement	2	8	4	$600
	Media production for community engagement	2	8	4	$600
	Models of community development	4	8	8	$1200
	Strategic event management	2	8	4	$600
Building relationships	Building personal resilience	2	8	4	$600
	Developing media relationships	2	8	4	$600
	External communication strategies	2	8	4	$600
	Negotiating and managing conflict	2	8	4	$600
	Networking and building partnerships	2	8	4	$600
Building capable leaders	Leading change	2	8	4	$600
	Designing, implementing and evaluating projects	4	8	8	$1200
	Financial literacy for decision makers	2	8	4	$600
	Governance and decision-making	2	8	4	$600

1.

Charles Sturt University

Upskill with micro-credentials

- ☑ Clear value prop
- ☑ Easy to understand
- ☑ Similar field of education
- ☑ Accessible cost

Our micro-credentials are designed to help you make a difference – to your career, to your organisation and your community.

Designed in collaboration with employers, these online micro-credentials give you the opportunity to apply new knowledge and skills directly to your workplace.

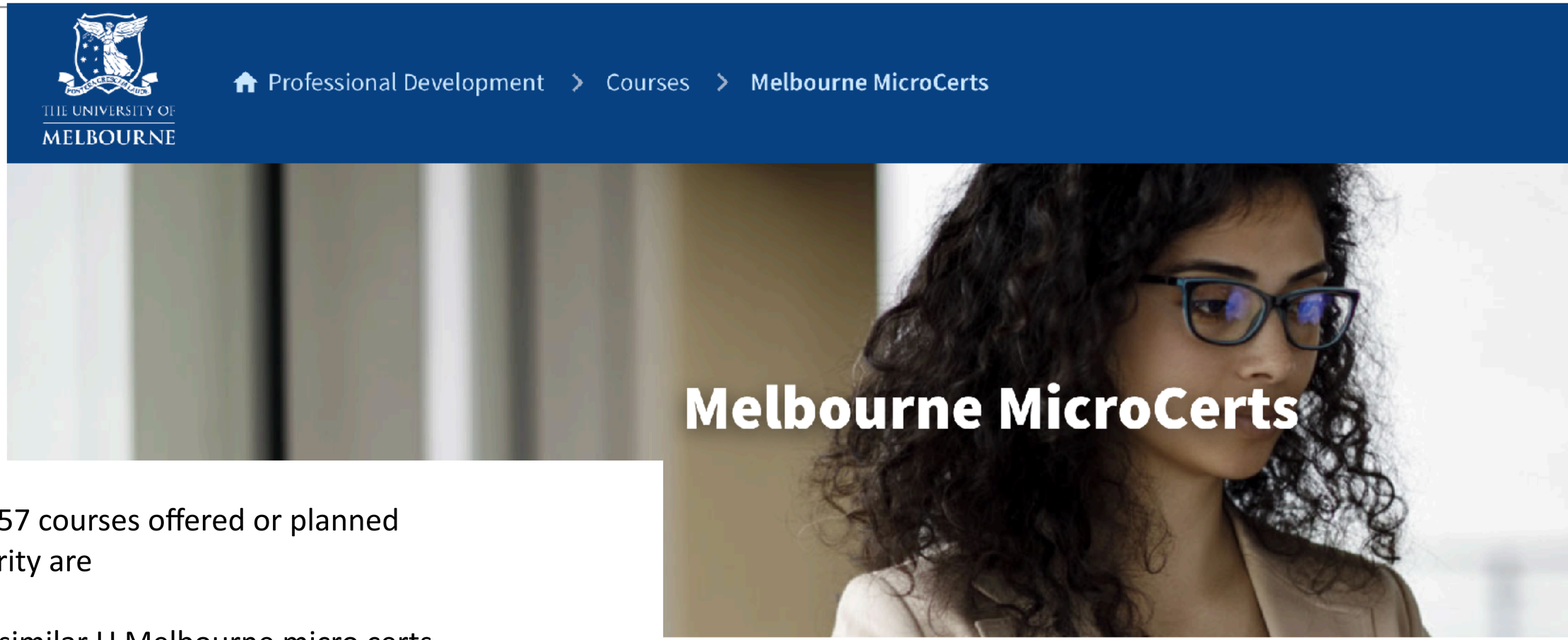
From project management, community development and finance, to media, communication and networking, choose one or two micro-credentials that will let you gain the required skill set for the job at hand – then add more to your learning journey as needed.

You can choose to study in several micro-sessions throughout the year. You'll learn along like-minded students across eight-week sessions (some subjects even have an optional on-campus or online workshop for collaborative, face-to-face learning). It means you can gain new skills in just two months. A two-point subject only takes around four hours of study a week, while a four-point subject just eight.

Complete micro-credentials totalling 32 points and you'll earn a Graduate Certificate in Community Leadership and Resilience

$9600

2.



As at late Feb 57 courses offered or planned
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
- Not necessarily more affordable than credit equivalents

Redefine your skills for the future

- ☑ A mix of credit and non-credit
- ☑ A range of disciplines

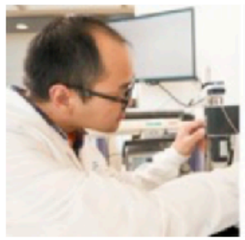
3.

THE UNIVERSITY OF WESTERN AUSTRALIA

UWA+

- ☑ A range of disciplines
- ☑ A consistent new PD currency that converts to credit

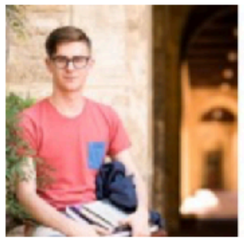
As at early 2021, 20 courses



Biodesign Medical Technology Innovation $2365

Based on the Biodesign Methodology for innovating medical technologies, this micro-credential provides students with the opportunity to identify and research real clinical unmet needs, brainstorm a medical technology solution, and learn the medical device development process.

6 PD Points, convertible to academic credit for BMED5001 Biodesign Medical Technology Innovation



Bioethics: Life and Death $1320

This micro-credential aims to give students a solid grounding in general ethical theories before considering their application to topics in bioethics. We will discuss a wide range of issues, including (but not limited to) abortion, euthanasia, the allocation of scarce medical resources, triage, paternalistic public health interventions, compulsory vaccination, and so on. Four weeks will be devoted directly to issues raised by the COVID-19 pandemic.

6 PD Points, convertible to academic credit for PHIL1001 Ethics for the Digital Age: An Introduction to Moral Philosophy

4.

Curtin Credentials

- ☑ A range of disciplines and modes
- ☑ A consistent new currency that converts to credit

14 offered or planned; a mixture of modes, costs and credit

Who are they for?

Curtin Credentials are designed for professionals and graduates who recognise that the global workplace is changing, and want to build skills to adapt to these changes.

In today's economy, employers need people with a suite of technical and transferable skills that can be used to solve a range of challenges.

Curtin Credentials give you the tools you need to succeed in your workplace and instant digital certification of your abilities.

What recognition do they provide?

At the completion of each credential, you'll earn a digital badge that you can instantly share with your networks and use to showcase your skills to current and future employers.

When you complete 100 points of any combination of credentials, you will be awarded a **Graduate Certificate in Professional Practice**. This qualification provides globally recognised evidence of your learning and can be a pathway to further postgraduate study.

5.

USQ UpSkill ensures study is practical for your career and for you

The University of Southern Queensland offers online minicourses of approximately 40 hours of learning over four weeks. You can access your minicourse anywhere, meaning you can gain credentials as you get to work each day, while sitting on your couch at home, or any time in between.

- ☑ Clear value prop
- ☑ Easy to understand
- ☑ Short semesters
- ☑ Accessible cost

Can students apply for credit?

USQ UpSkill's Credentialing Professional Outcomes option allows learners to submit a portfolio of work to be reviewed by a qualified academic. If you are assessed as already meeting the Learning Outcomes of a minicourse, your knowledge will be recognised and you will receive a digital badge for that minicourse.

Can I earn credit for completing a minicourse?

On successful completion of four USQ UpSkill minicourses from the same course suite (i.e. the first six letters and numbers of the minicourse codes are the same), eligible students can apply to the University of Southern Queensland to have this recognised as credit towards an existing USQ degree course. You may then be eligible to apply for admission into a Graduate Certificate, if other admission requirements are also met.

6.

TORRENS UNIVERSITY AUSTRALIA

- ☑ All online
- ☑ Consistent pricing: $1299

Micro-Credentials

15 available

Not enough information

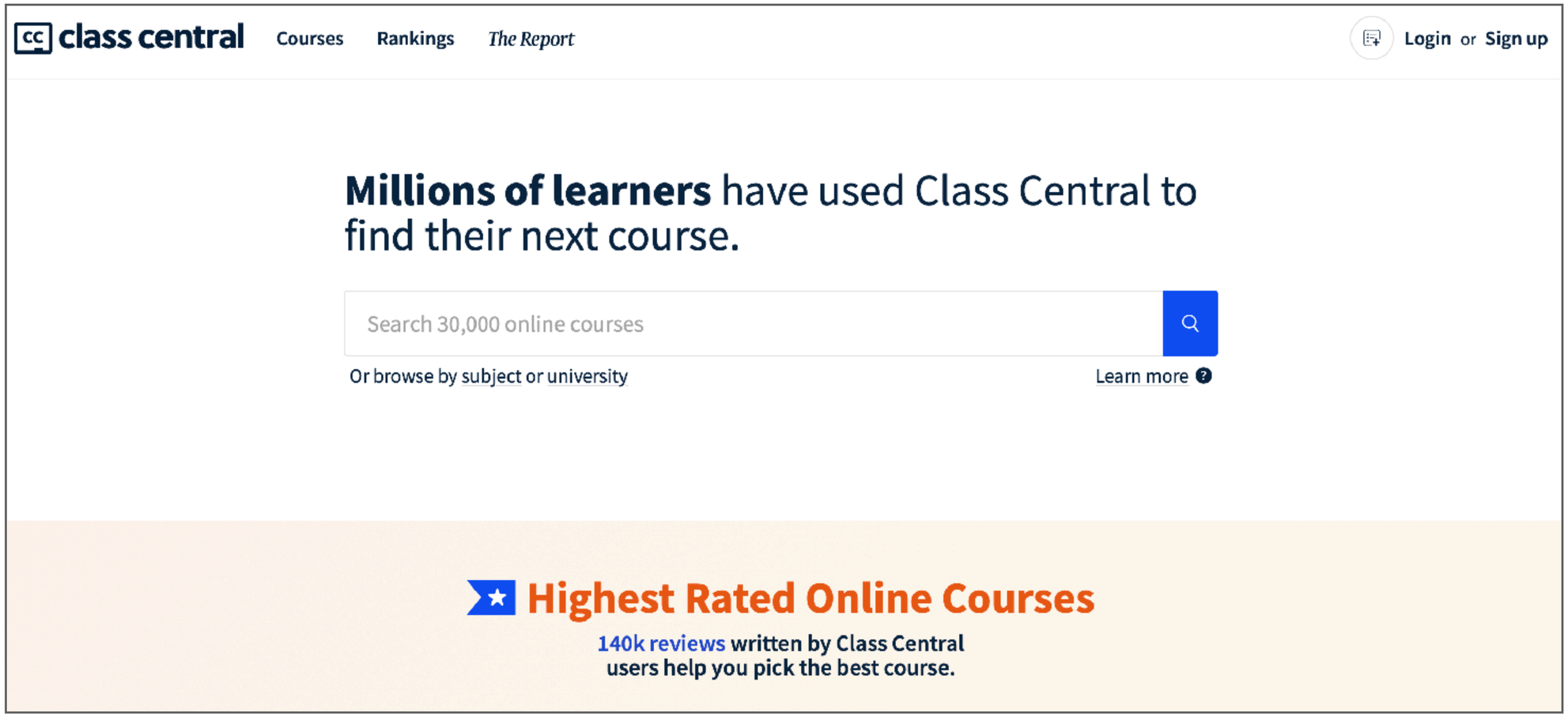
Start small, stay relevant with Micro-Credentials

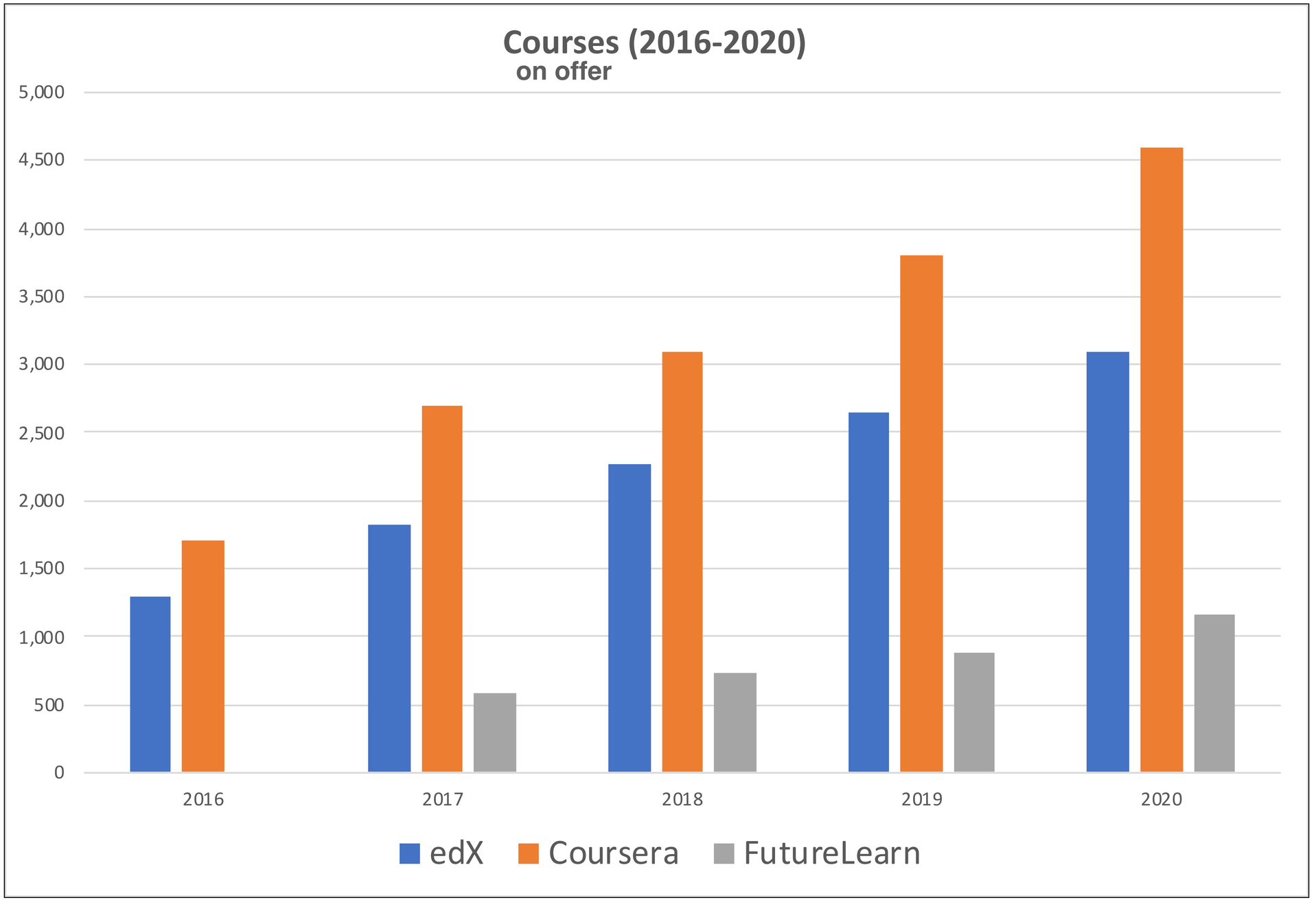
My thoughts on what I have seen to date around the HE sector

1. Innovative practice
2. Fairly consistent use of the term ‘micro-credential’ plus some branding
3. Fairly good targeting of the post Bachelor market
4. Some clear value propositions - some not so clear
5. Pricing! Does the university brand command cache?
6. Not enough information to make a decision: effort, benefits (inc credit but especially realistic data on whether this will really help me keep, find or secure paid work), value

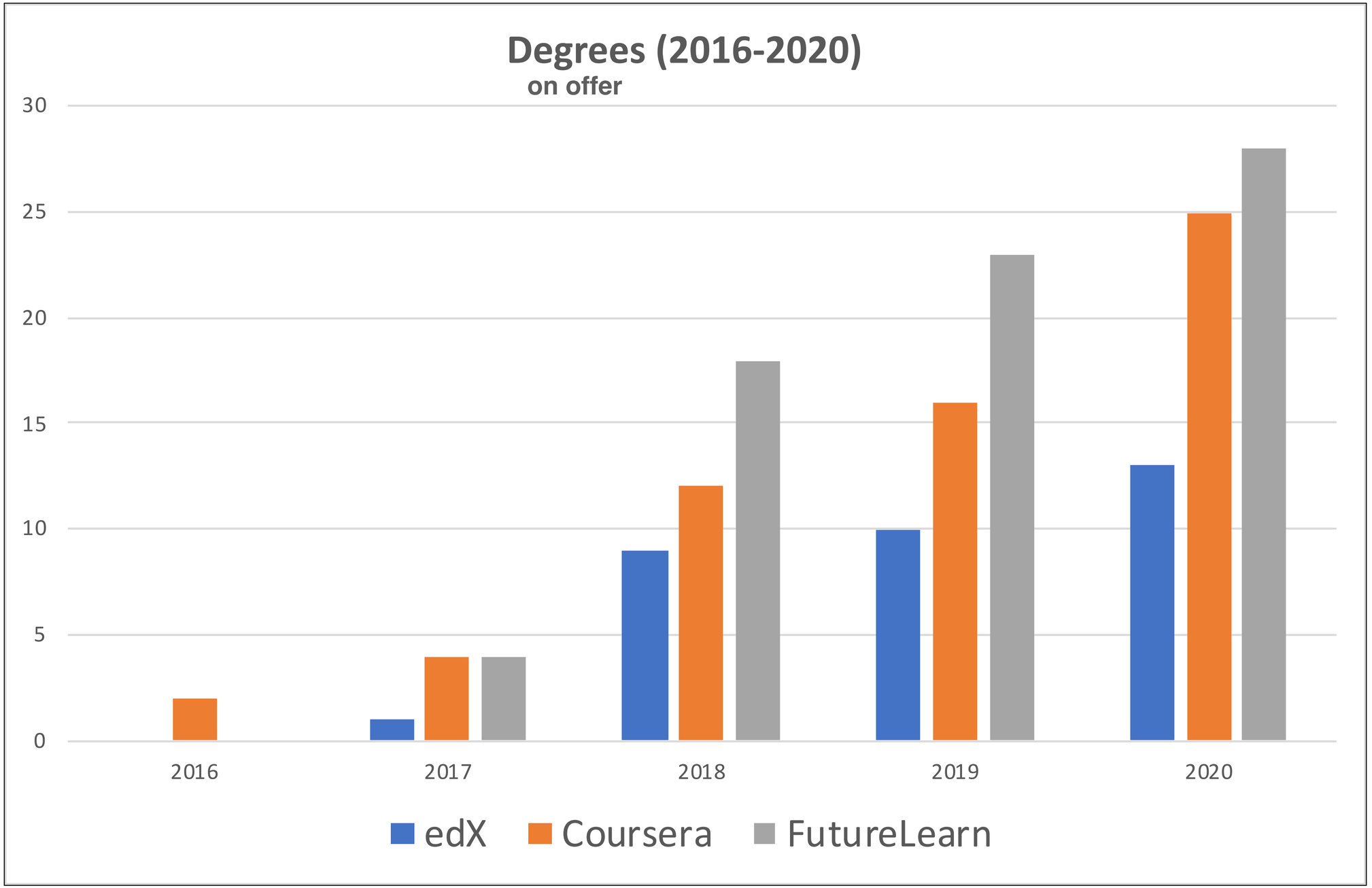
5. Why we need to think harder

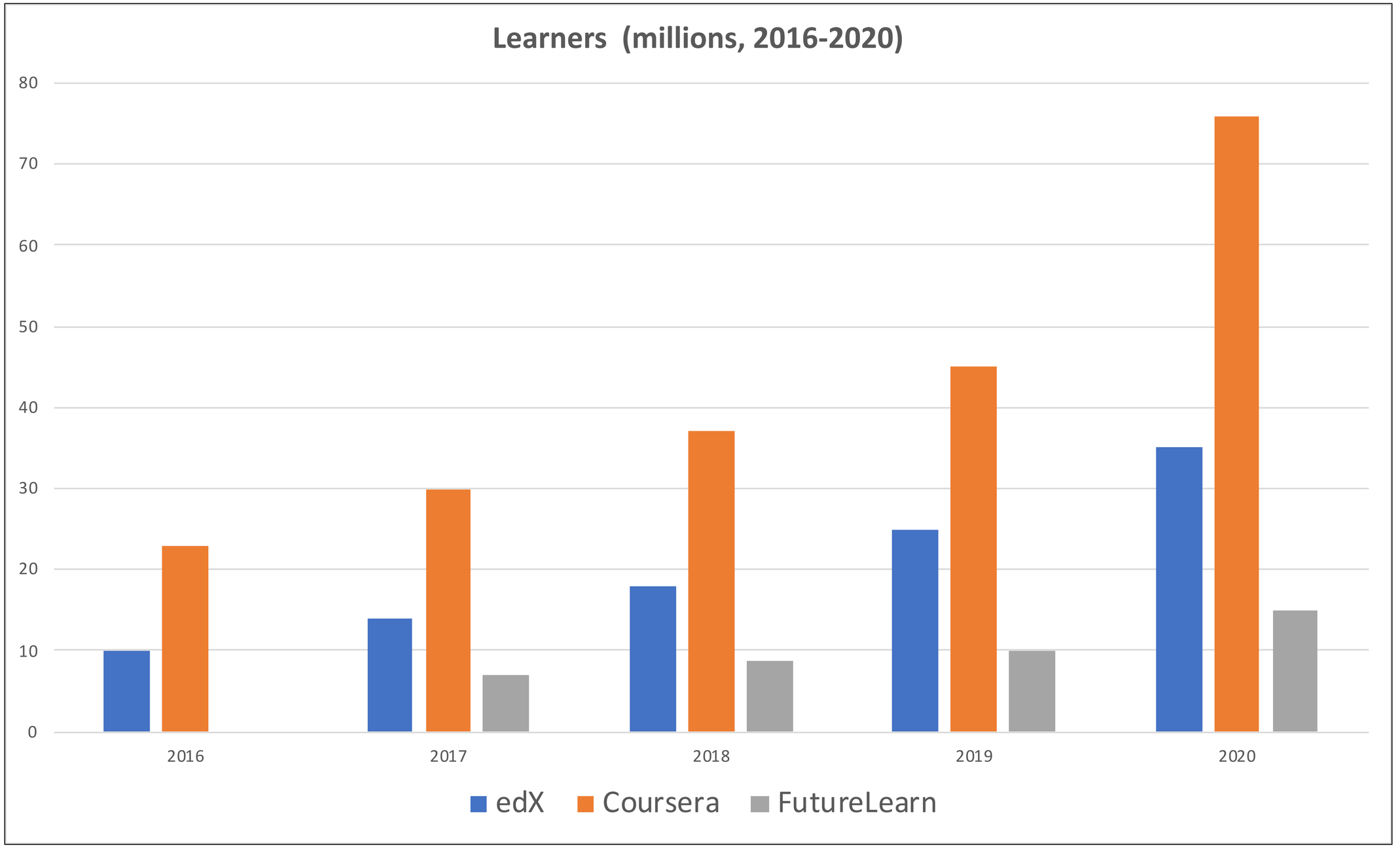
The vast majority of information shared here is summarised directly from ClassCentral's Year in Review 2020 reports. Unless indicated otherwise, all $ are in US currency.

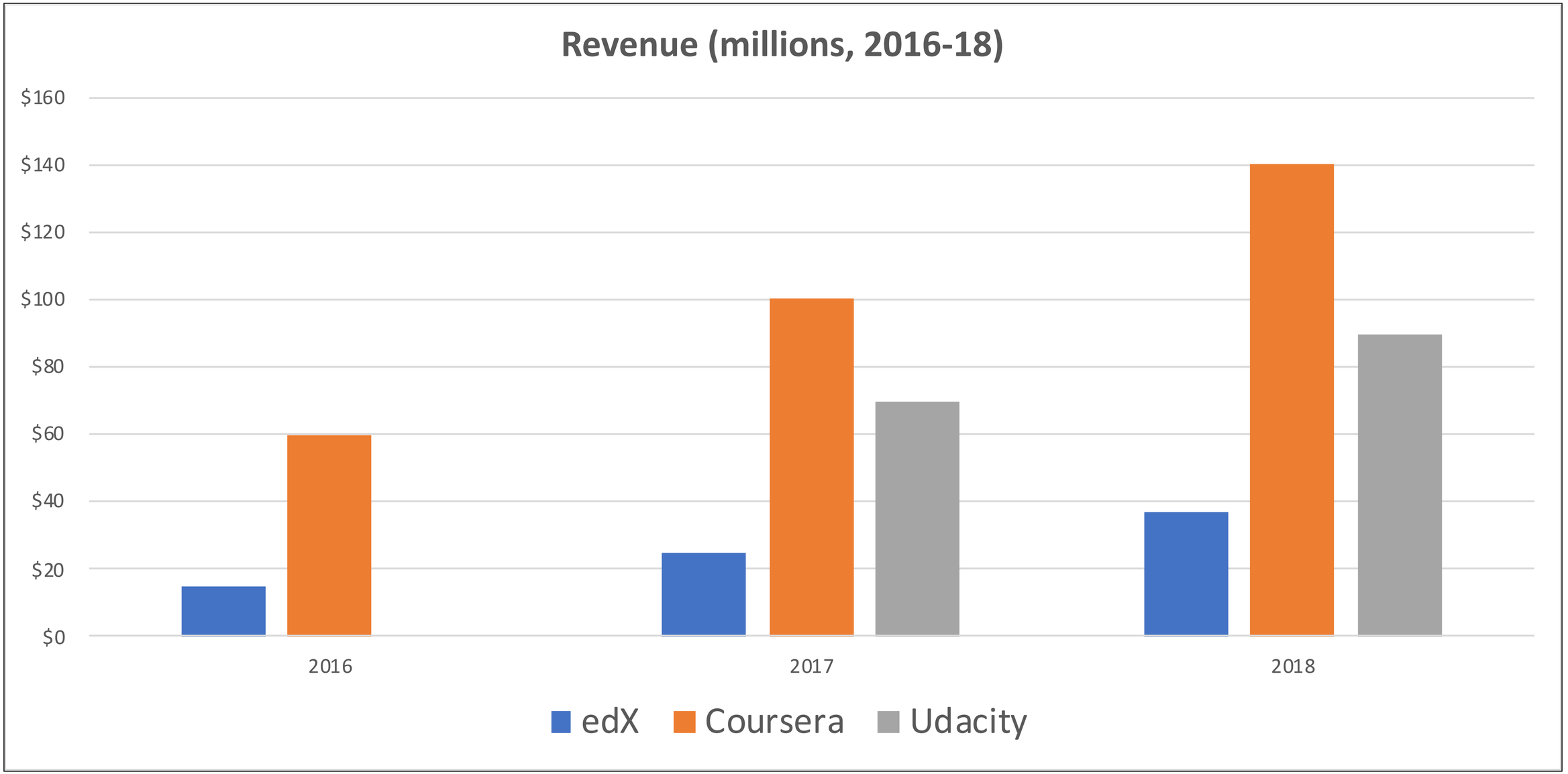


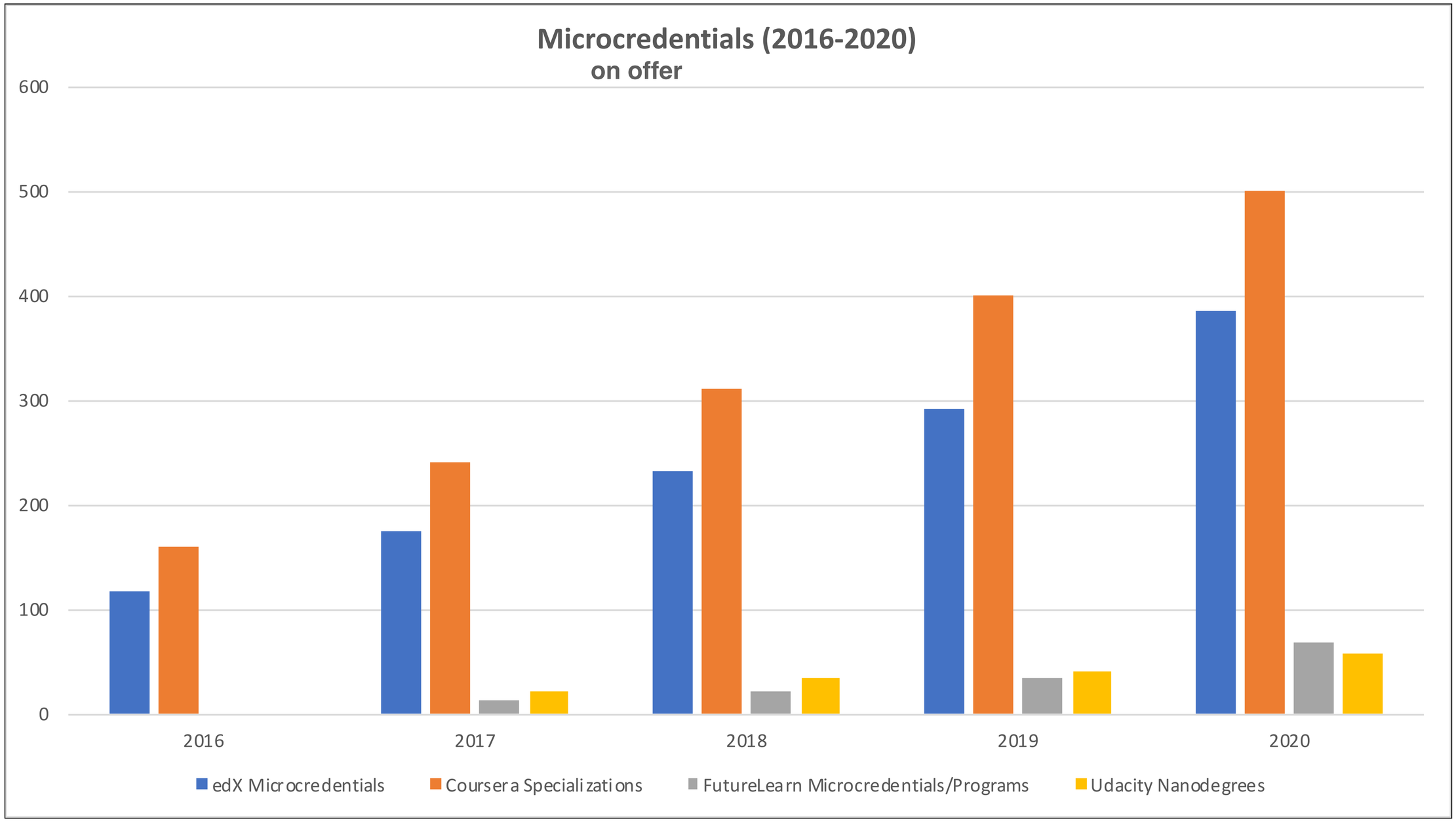


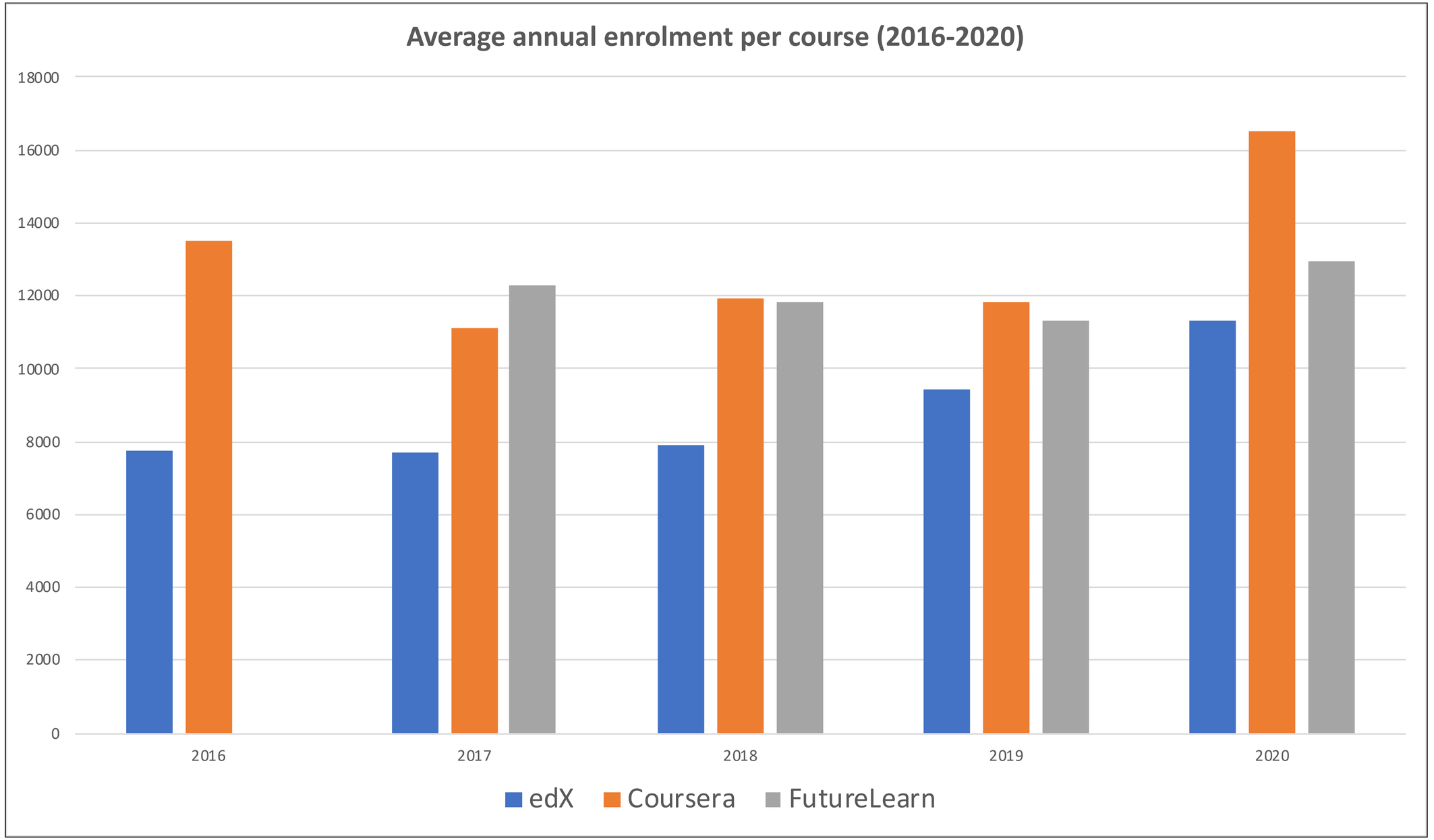
Data extracted from the Class Central Year in Review reports


Degrees (2016-2020)
on offer
30
25
20
15
10
5
0
2016
2017
2018
2019
2020
edX
Coursera
FutureLearn


Learners (millions, 2016-2020)
80
70
60
50
40
30
20
10
0
2016
2017
2018
2019
2020
edX
Coursera
FutureLearn


Revenue (millions, 2016-18)
$160
$140
$120
$100
$80
$60
$40
$20
$0
2016
2017
2018
edX
Coursera
Udacity

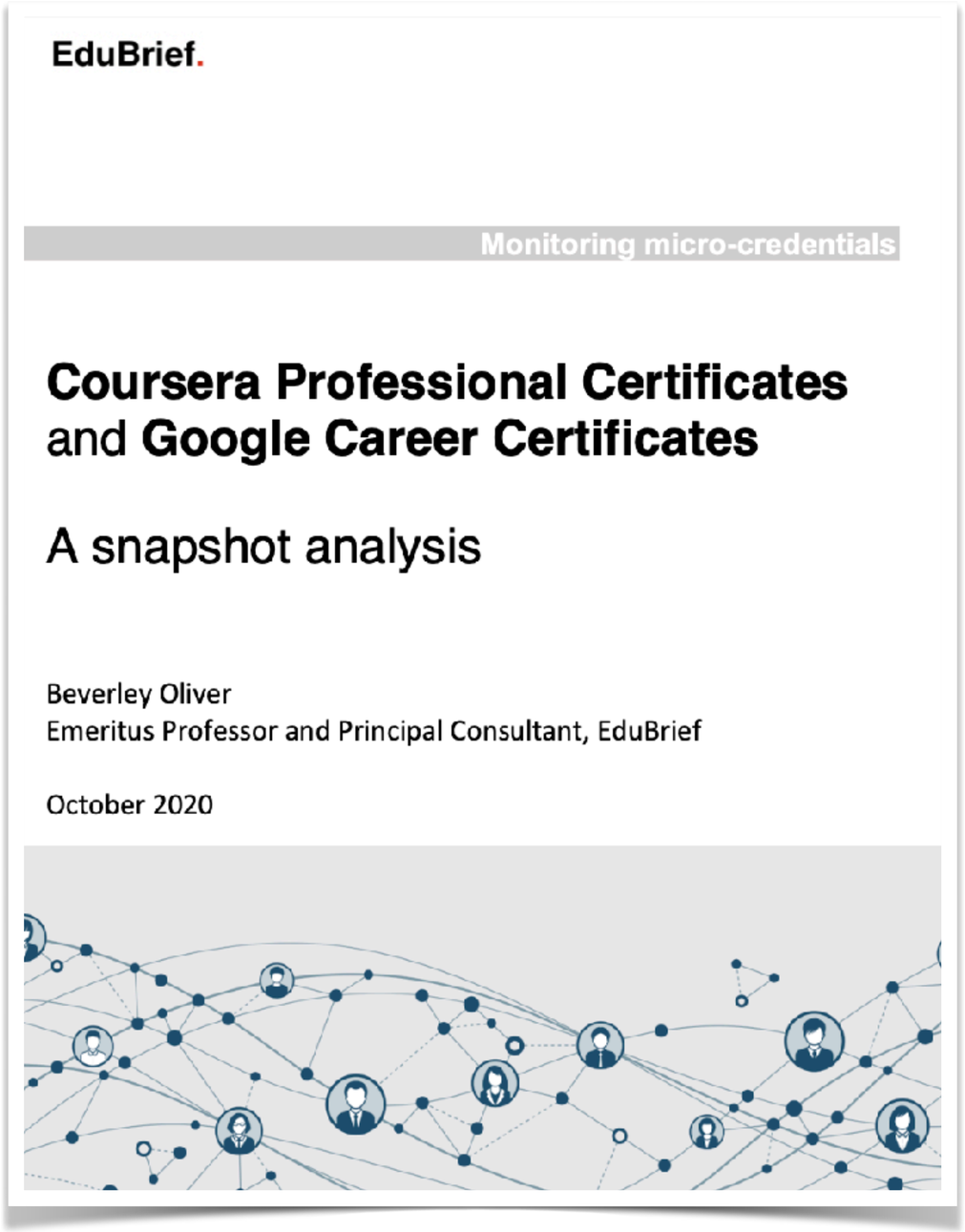

Microcredentials (2016-2020)
on offer
600
500
400
300
200
100
0
2016
2017
2018
2019
2020
edX Microcredentials
Coursera Specializations
FutureLearn Microcredentials/Programs
Udacity Nanodegrees



Calculated by dividing the total annual number of learners for each platform by the total number of their courses offered.

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



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.

Coursera Professional Certificates as at 29 Sept 2020

The headlines	Learner investment		Learner experience		Learner benefits	
Professional Certificate	Suggested hours	Likely fee[1]	Overall rating	Learners enrolled	New career	Pay or promotion
1. (ISC)[2] 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%[2]	
10. IBM AI Engineering	192	$272	4.4	23,201	38%	18%
11. IBM Applied AI	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**	**>4.6**	**>25k**	**40%+**	**40%+**

Empty cells indicate no data available.

[1] If learner follows recommended time required

[2] As reported separately by Google, see page 20 of this report

[3] In response to whether learner achieved a "tangible career benefit from this course"

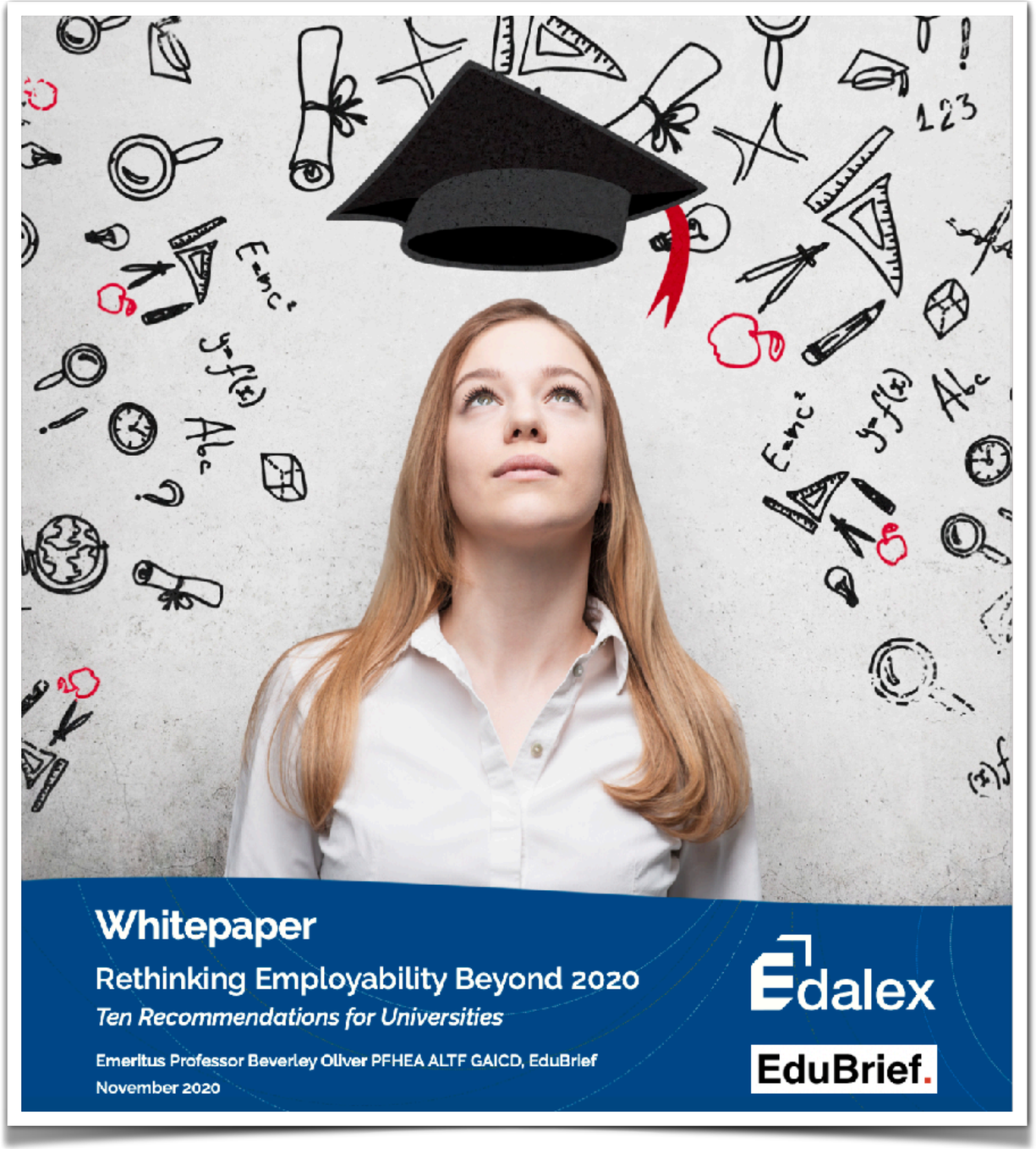
See report "Coursera Professional Certificates": edubrief.com.au/resources

Future Learn

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%)**

Think differently and disruptively about employability



With regard to credentials, micro and macro

1. Adopt a university-wide **terminology and taxonomy for micro-credentials** and test integration using a **maturity model**

2. Become more "**labour market demand-driven**": 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

My predictions: The likely next developments…

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

- Non-traditional providers (employers and corporates) 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 offshore learners will study online with a distant provider - macro and micro.
- Online learning is the norm for postgraduate; blended for parts of undergraduate and VET. It's the only way to keep the business running when the next pandemic comes.
- Learners will become less interested in credit or recognition towards postgraduate degrees.

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.

By 2025, depending on how we proceed, **micro-credentials** will be seen as a fad that disappointed us, or a key step towards reimagining lifelong learning for thriving and surviving.

There's a place for micro-credentials (including universities) that deliver value to learners

To enhance value:

- deliver the benefits (in spades) that matter to learners, and
- moderate the investments required (time, flexibility and money)

6. Five suggestions

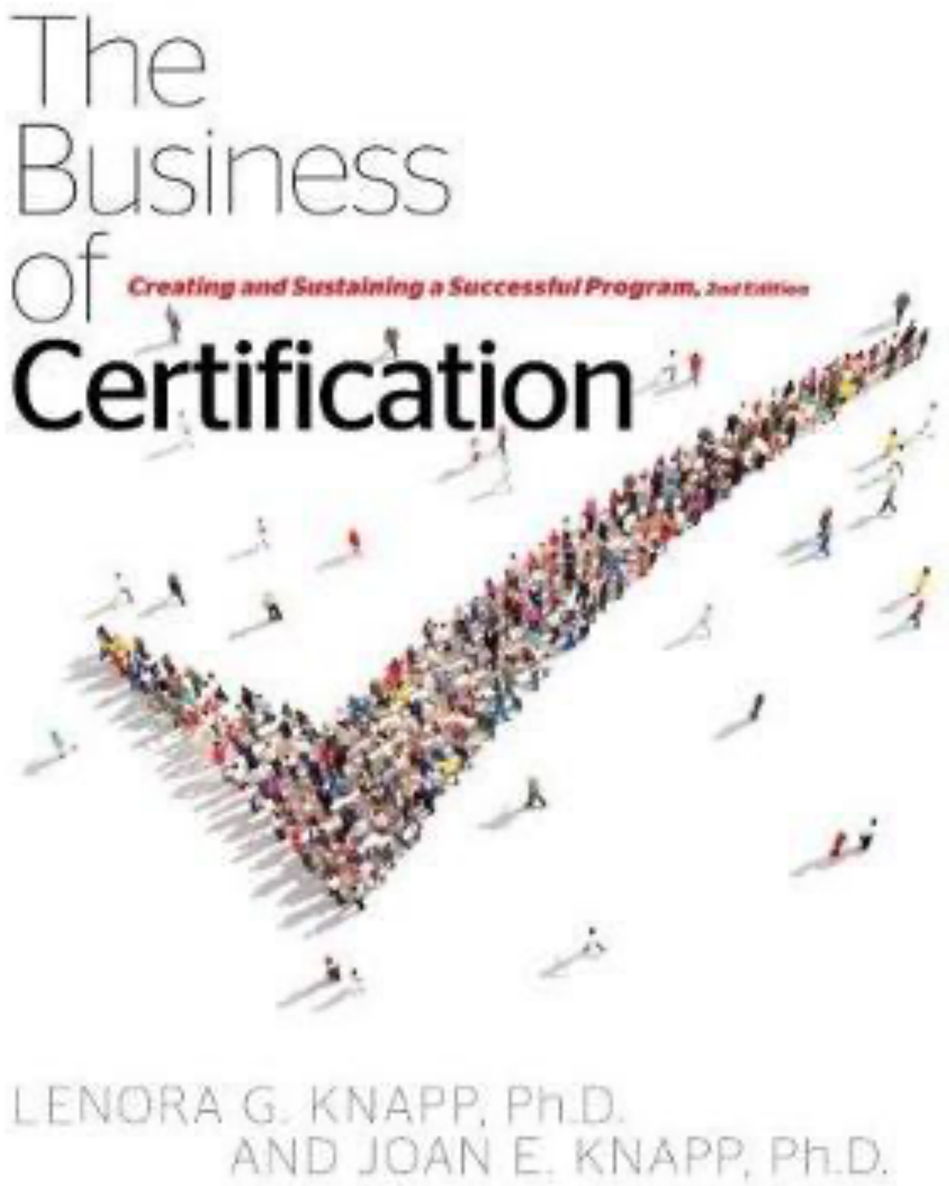
1. Rather than thinking about chunking existing learning into smaller bits, I would start here:

LINK

2. I would co-create and deliver with the employing industry

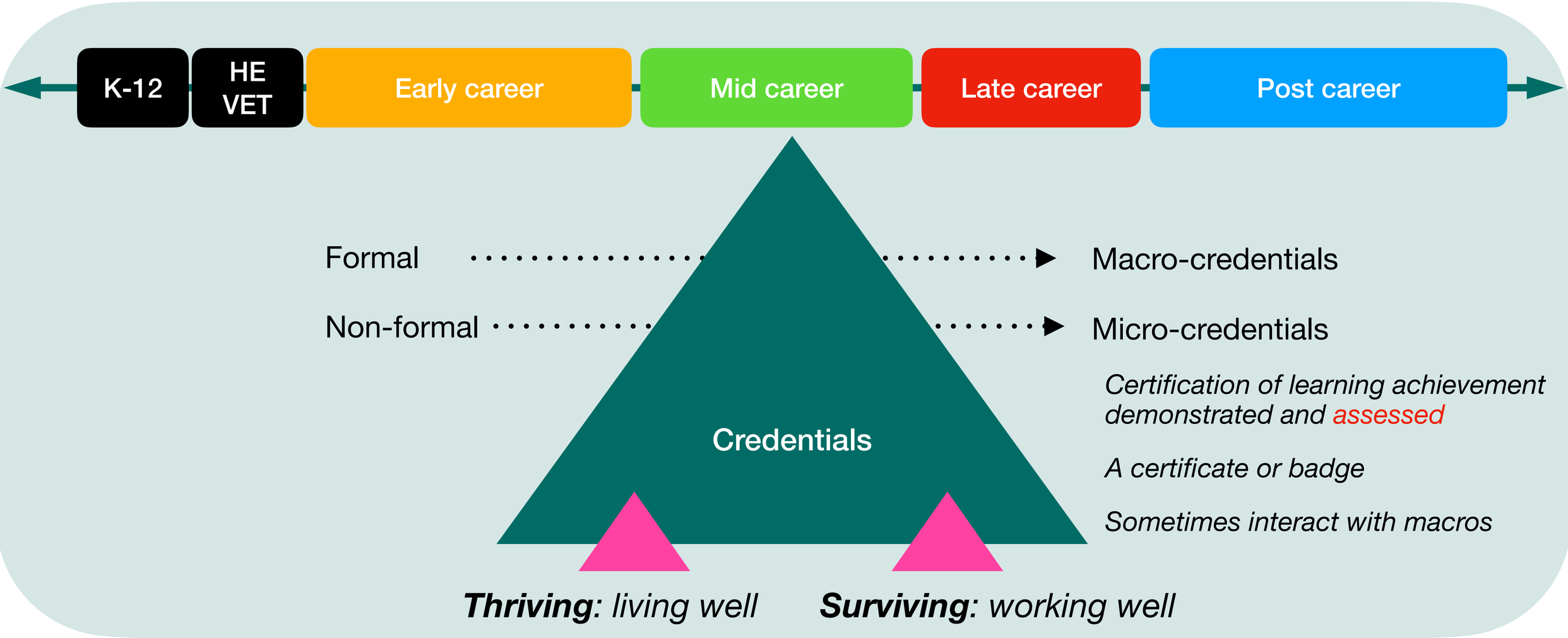
3. I would find a way to measure and report KEY benefits to future learners

4. I would buy and use this book



LINK

5. Think hard about the role your university can play in encouraging better ongoing learning **across the lifespan** — for everyone, and for the betterment of society



Snapshot:
Micro-credentials in Australia and beyond in 2021

Emeritus Professor Beverley Oliver ALTF PFHEA