EUROPEAN UNIVERSITY ASSOCIATION

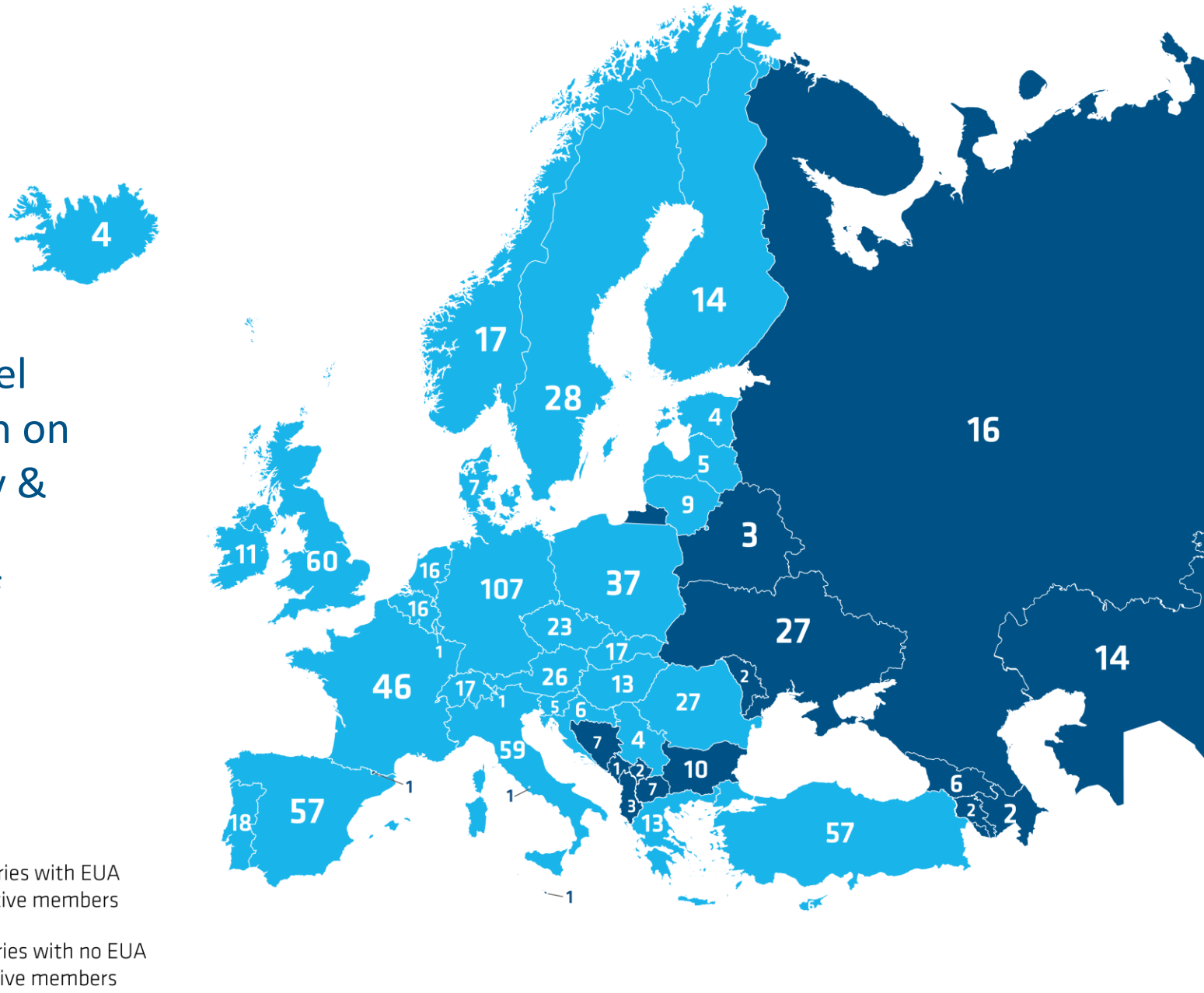
DIGITALLY-ENHANCED LEARNING AND TEACHING AT EUROPEAN HIGHER EDUCATION INSTITUTIONS

Thérèse Zhang
European University Association

ASEM SOM1
Malta, 22-23 May 2023

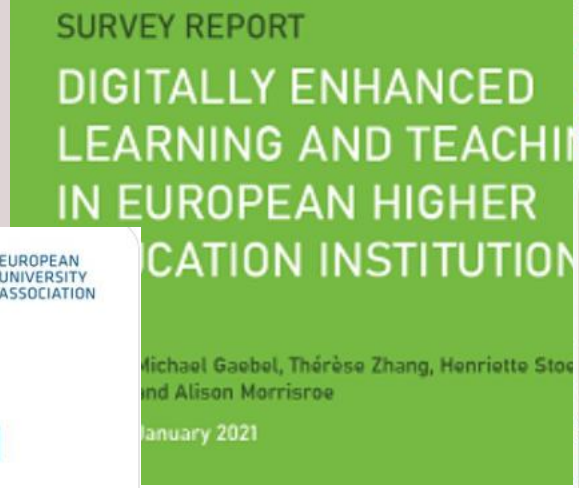
EUROPEAN UNIVERSITY ASSOCIATION

- 870+ members in 48 countries
- Voice of universities at European level
- Facilitates dialogue and collaboration on higher education and research policy & practice
- Support its members with a range of services



- **Evidence and good practice sharing**
- **Advocacy work**
- **Peer-learning and community building**

EUA's work on learning and teaching



DIGIHE

Supporting European universities in their strategic approaches to digital education

EUROPEAN UNIVERSITY ASSOCIATION

- January 2020 - April 2023
- Objectives:
  - Strengthening strategic approaches for digitally enhanced learning & teaching (DELT) at European HEIs
  - Encouraging self-reflection and capacity building

- The project provided:
  - Comparative data on the state of play of digitally enhanced learning and teaching at European HEIs;
  - A review of self-assessment instruments for improving the institutional digital ecosystem;
  - The organisation of two cycles of thematic peer groups;
  - A workshop series on self-assessment instruments and a self-paced training resource (MOOC on FutureLearn).

VYTAUTAS MAGNUS UNIVERSITY

DHBW Duale Hochschule Baden-Württemberg Karlsruhe

DCU Ollscoil Chathair Bhaile Átha Cliath Dublin City University

JYVÄSKYLÄN YLIOPISTO UNIVERSITY OF JYVÄSKYLÄ

EDEN European Distance and E-Learning Network

iua IRISH UNIVERSITIES ASSOCIATION

EURASHE European Association of Institutions in Higher Education

Co-funded by the Erasmus+ Programme of the European Union

Digital learning:

Even before the pandemic…

Increased acceptance/more strategic approaches to e-learning	**87%**
Boosted education provision through e-learning	**74%**
Blended learning used in regular teaching	**36%** fully **51%** to some extent

Trends 2018. Q25, Q29

DIGIHE

SURVEY REPORT

DIGITALLY ENHANCED LEARNING AND TEACHING IN EUROPEAN HIGHER EDUCATION INSTITUTIONS

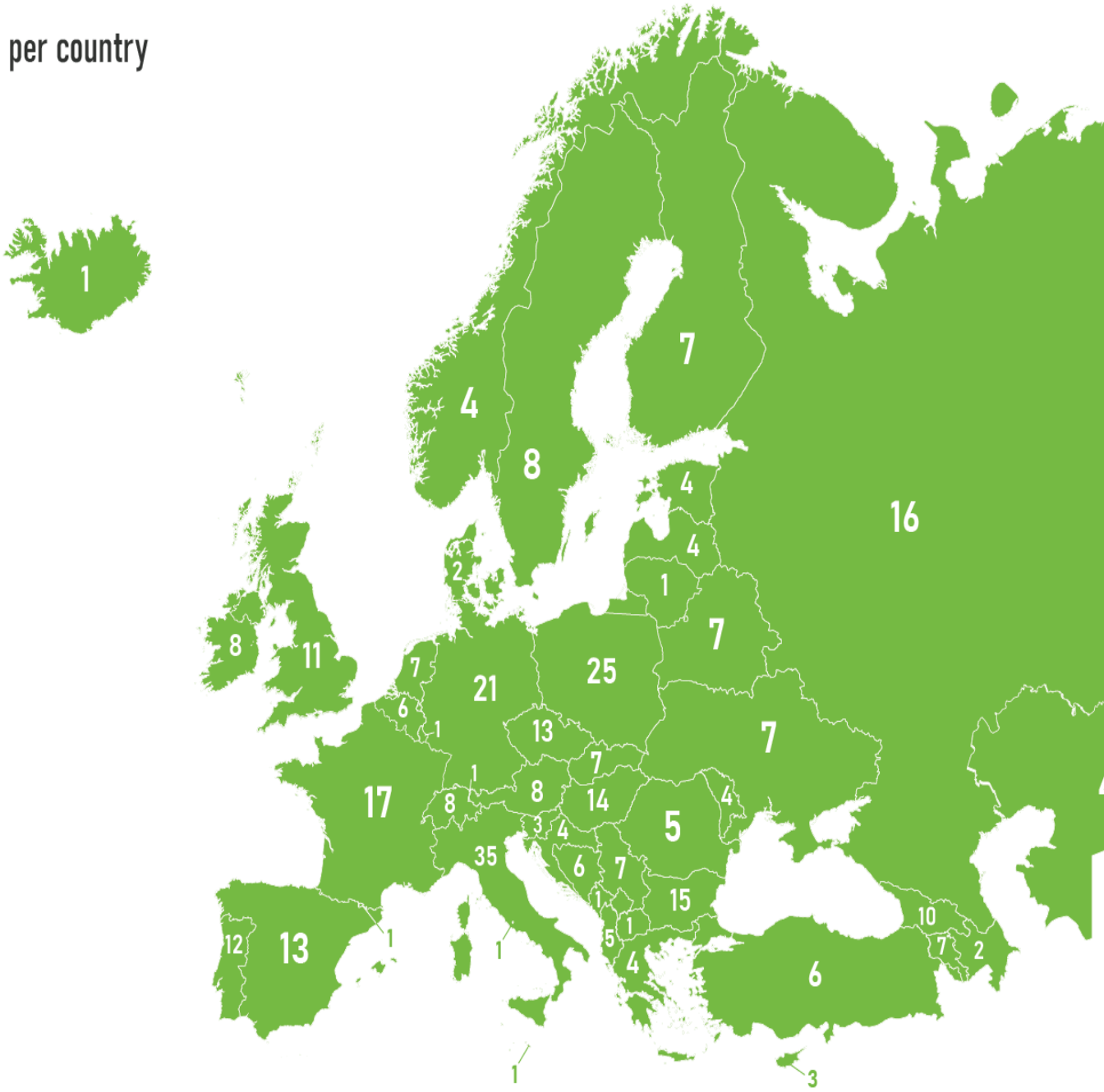
Michael Gaebel, Thérèse Zhang, Henriette Stoeber and Alison Morrisroe

January 2021

Co-funded by the Erasmus+ Programme of the European Union

- Survey to institutional leadership
- Data collection: April to June 2020
- Pre-Covid 19 situation
- 368 responses – mainly universities
- 48 European countries
- Longitudinal data – 2014 E-learning study, Trends reports (2015 and 2018)

Responses per country



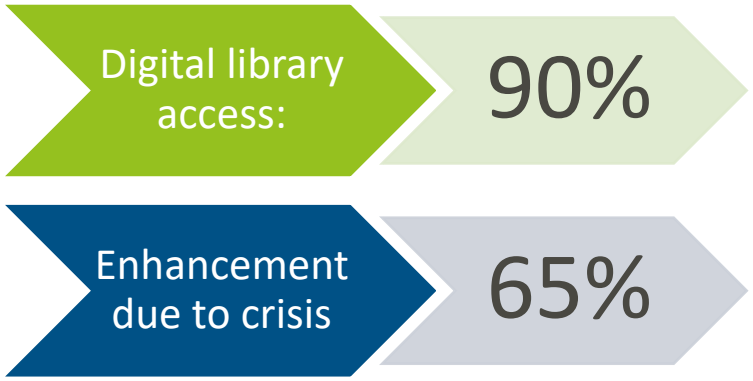
** OTHER ** = 4

Shift towards more institutionalised approaches

- 70% - Digital learning as a strategic priority
- 88% - Institutional strategies (2014: 63%)
- Support & coordination becomes centralised & shared across the institution
- Internal quality assurance – 53% (2014: 23%)
  - but 41%: “under discussion”
- Infrastructure & support – but not for all students & staff

No strategy in place - 12%

- Northern Europe 11%
- Western Europe 10%
- Southern Europe 9%
- Eastern Europe/Central Asia 11%
- Eastern EU 15%
- Balkans 10%



Responsibility for digital learning support & coordination is	2014	2020
shared between central and faculty based units	40%	48%
Central unit	35%	45%
Faculty or department level only	12%	7%

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Impact and purpose

Top 3 impacts

- 89% • innovates teaching
- 75% • flexible provision
- 35% • data on student learning

Internationalisation	Past 5 years	Next 5 years
Transforms inter-institutional collaboration	64%	86%
Outreach to international students	57%	85%
Virtual mobility	25%	75%

80%

- It brings benefits to the student experience

73%

- Students have a positive attitude towards it

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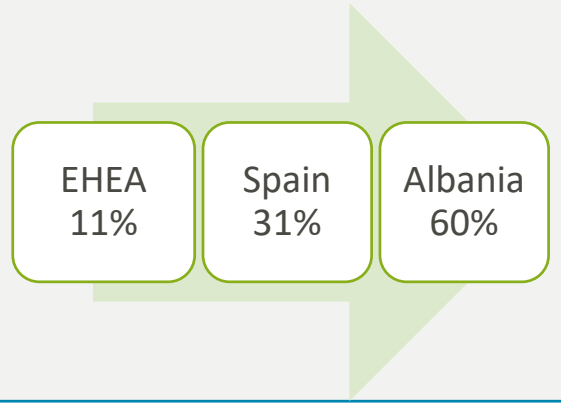
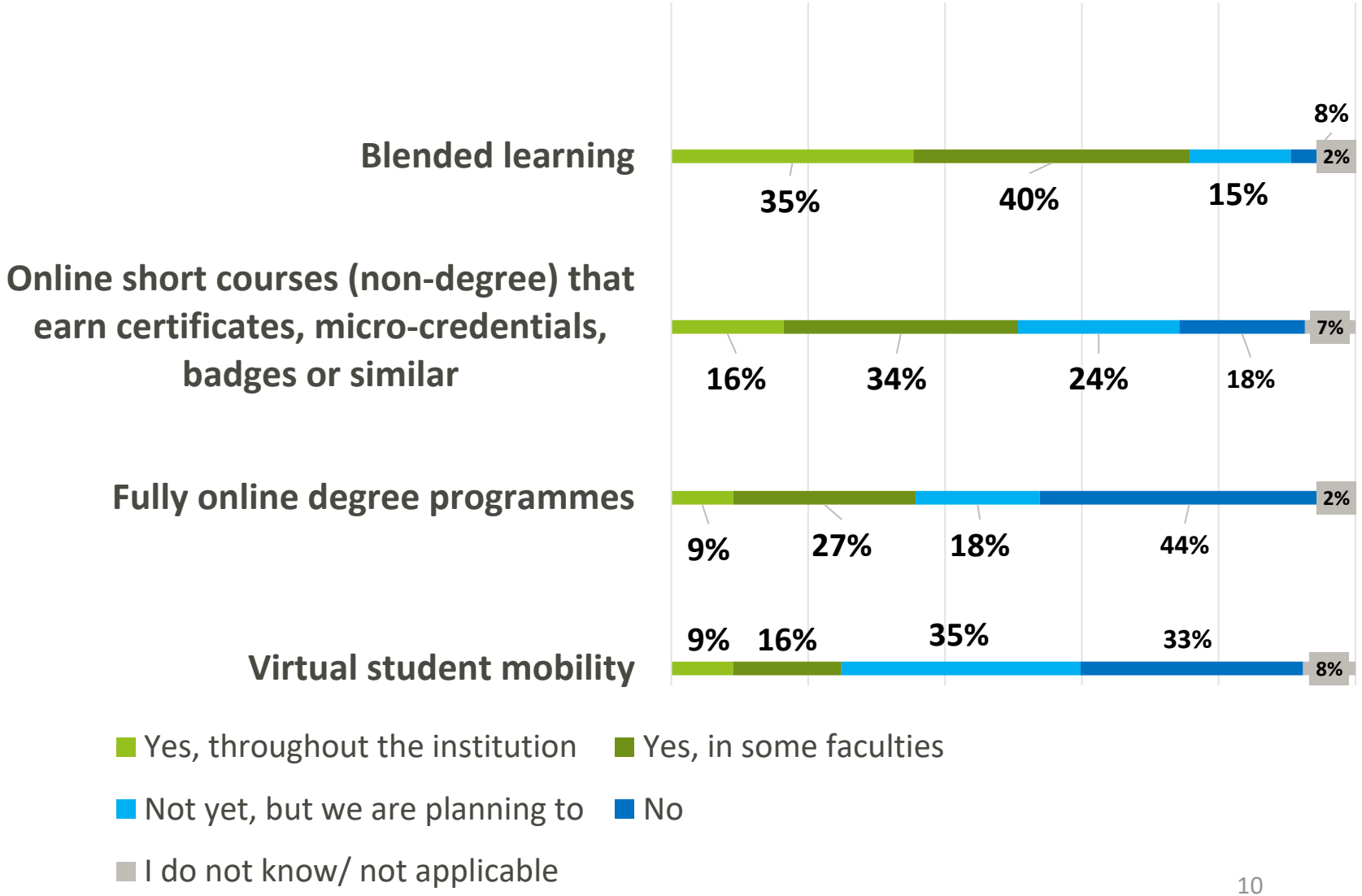
Top 3 barriers	Top 3 enablers	Top 3 Measures to move ahead
• Lack of **staff resources** (51%)	• Proactive participation of **staff and students** (74%)	• **Peer exchange** within the institution
• Lack of **external funding opportunities** (40%)	• **Professional development and training** (59%)	• **National or international training opportunities**
• Difficulty to devise a **concerted approach for the entire institution** (36%)	• **The institution's strategy** (43%)	• Collection and analysis of **institutional data**
• Lack of **staff motivation** (34%)	• Major **investments** in equipment and infrastructure (39%)	• **Exchanges & collaboration organised by the rectors' conference/ university networks**

Is external QA a barrier?



Delivery modes

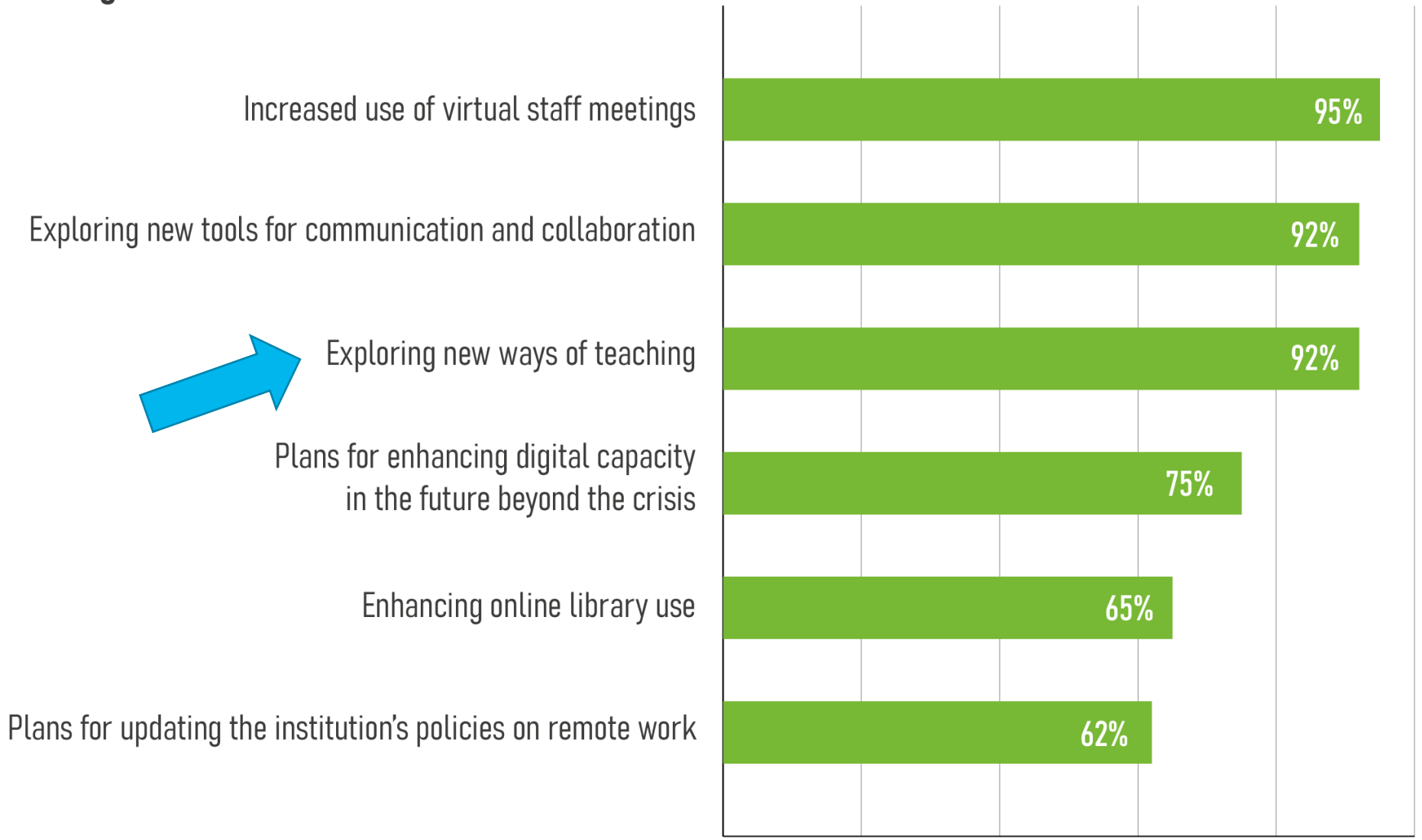
- **Blended learning** is the most popular delivery mode (75%), followed by short online courses (50%) and fully online degree programmes (36%)
- 25% of institutions engage in virtual student mobility



Uptake accelerated by the pandemic

Source: DIGI HE survey, 2020

Changes due to Covid-19



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Lifelong Learning - developments and perceptions

48%

digitalisation has contributed to major transformation in widening access

49%

reach out to new learner groups - one of the main motivations for offering MOOCs

growing demand for **short courses**

- 65% blended
- 53% online
- 44% on campus

65%

mature and adult students are the main target of online learning

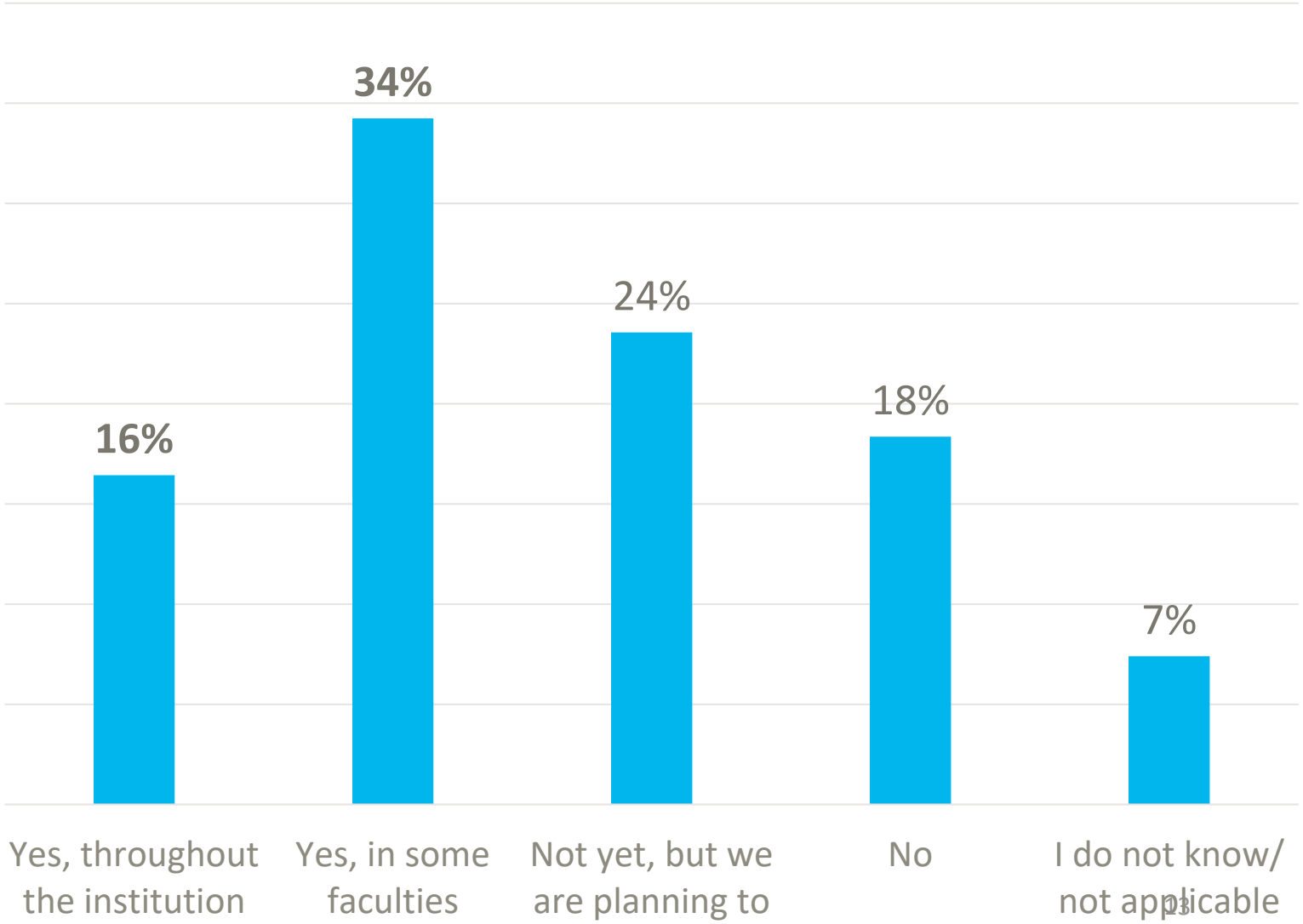
81%

widening access through digitalisation is a strategic development priority

Short online courses (non-degree) that earn certificates, micro-credentials or badges

50% offer short, non-degree online courses

- **Target: lifelong learners**
- **Most frequent online offer (more than MOOCs)**
- **Half of institutions ≤ 10 courses**



Government

- fast response to changing learning needs/skills needs
- flexible and inclusive learning paths
- high quality provision
- diversity of providers
- regulatory power
- Costs?

EU: A European approach for micro-credentials

- DG EAC & DG Employment: flexible, skills for a changing society & economy
- Work Programme 21 / European Education Area/ Digital Action Plan
- Non-legislative initiative on 'European approach for micro-credentials'

HEI

- a way to provide targeted and specialised training
- increase their visibility and reputation
- Response to students, alumni,, labour markets' demands
- experiment with new pedagogies and technologies
- **Coordinated initiatives among HEI**

What are the benefits of micro-credentials?

2020 Rome Communiqué of the Bologna Process: "explore how and to what extent these **smaller, flexible units, including those leading to microcredentials**, can be defined, developed, implemented and recognised by our institutions using EHEA tools."

Employers' perspective

- specific skills of prospective/ actual employees
- may serve as on-job training
- high quality at low cost

Learners' perspective

- Fast, focussed and flexible learning
- Upgrade, specialisation, reorientation
- Entry/ part of a degree programme

Open issues and concerns

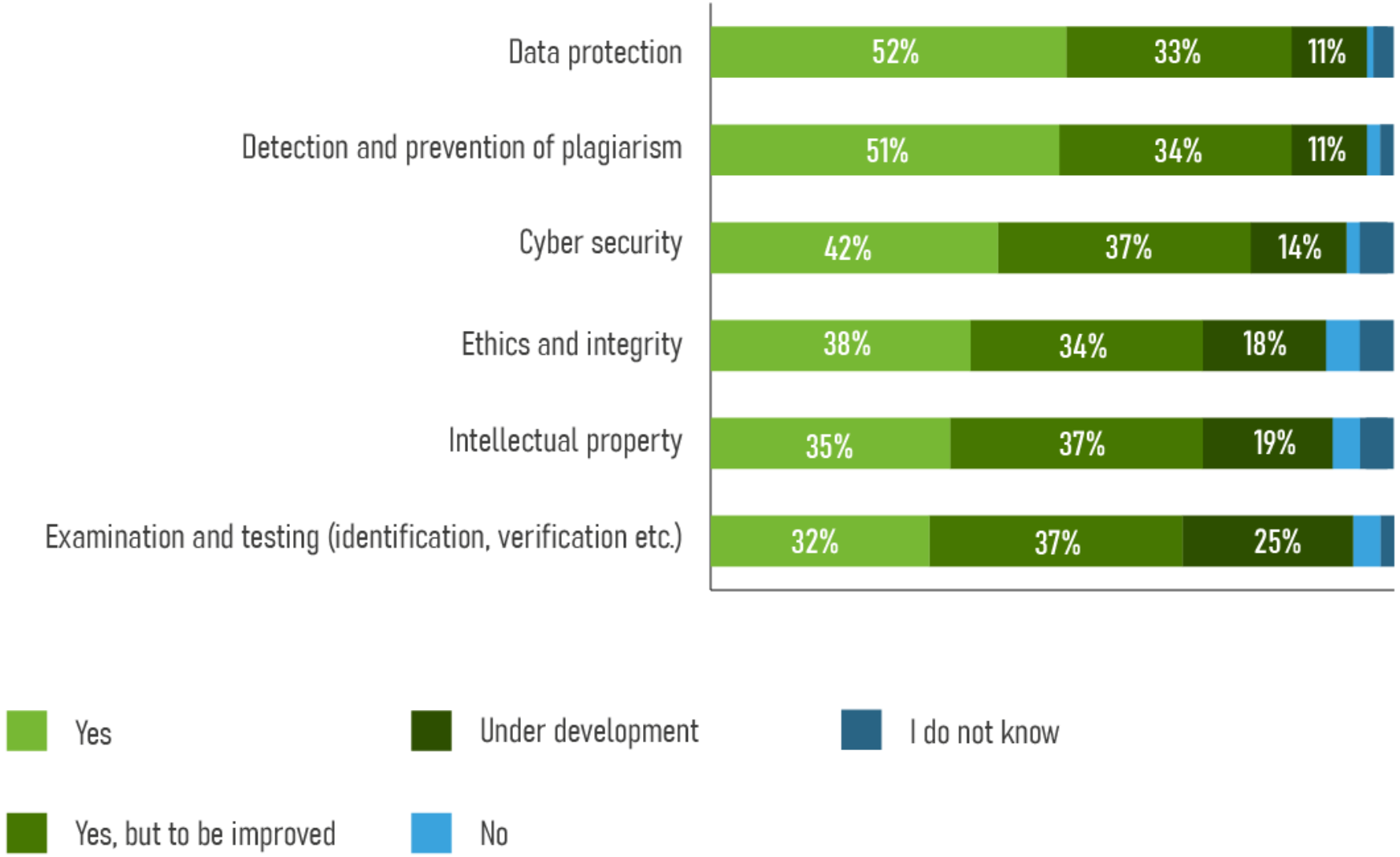
- How fit existing frameworks are
  - ✓ Quality assurance and recognition
  - ✓ e.g. a lot of policies relating to open, digital learning when the pandemic hit

- Still looking for ways to address academic integrity, ethics, security and privacy policies in new contexts
  - ✓ Data security and protection, data ownership, risks of algorithms, AI
  - ✓ Need for action at institutional, national, European level

Embedding digitally enhanced learning in policies and measures

SURVEY REPORT

Digitally enhanced learning and teaching in European higher education institutions



Q11: Is digitally enhanced learning taken into account in your policies and measures for: (please select one option for each item)

n=366

DIGI HE

Funded by the Erasmus+ Programme of the European Union

Open issues and concerns (2)

- Finding a common definition across the institution (or nationally) on key modes can be difficult: what does « blended », « hybrid », etc., mean and entail
- Digital skills and competences // overall question of training for teaching
- Staff resistance and motivation should not be underestimated: participation to decision-making, « teaching fatigue » following the pandemic:
  - Institutional approaches vs academic, teaching freedom
  - Teaching still very seen as an individual, borderline private activity

Outlook

Gradual transformation over the past years

- Higher acceptance, more mainstreamed practice, gradual exploration and capacity building
- “It is not (only) about technology; it’s about pedagogy”

2020-2021 pivotal for online and blended education

- Sustainable changes beyond emergency provision?
- From “blended” to a more comprehensive approach (hybrid, hi-flex)?
- How would this change HEIs and their cooperation with other HEIs and other parties? More shared and networked approaches? Capacities to be improved?

Outlook (2)

The lifelong learning mission

- Short, non-degree, more flexible
- Is all/any learning « lifelong »? How does digitally-enhancement learning contribute to this?
- Standard? Risk of overregulation vs open and productive approach to respond to learning needs and skills demand?

Implications for learning and teaching // for the institutional model, mission and values

- Institutional and academic sovereignty and autonomy
- Higher education as a public responsibility
- Recognition of the university as social and cultural place

Thank you for your attention

@euatweets
@therese_zhang

MICRO-CREDENTIALS FOR LIFELONG LEARNING AND INTERNATIONALISATION

Recent Developments in Europe and Germany

David Akrami Flores, Head of Section EU04

German Academic Exchange Service (DAAD)

Erasmus+
Enriching lives, opening minds.

Higher education

Co-funded by the European Union

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Nationale Agentur für Erasmus+ Hochschulzusammenarbeit | Deutscher Akademischer Austauschdienst German Academic Exchange Service

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Table of Contents

I. Background

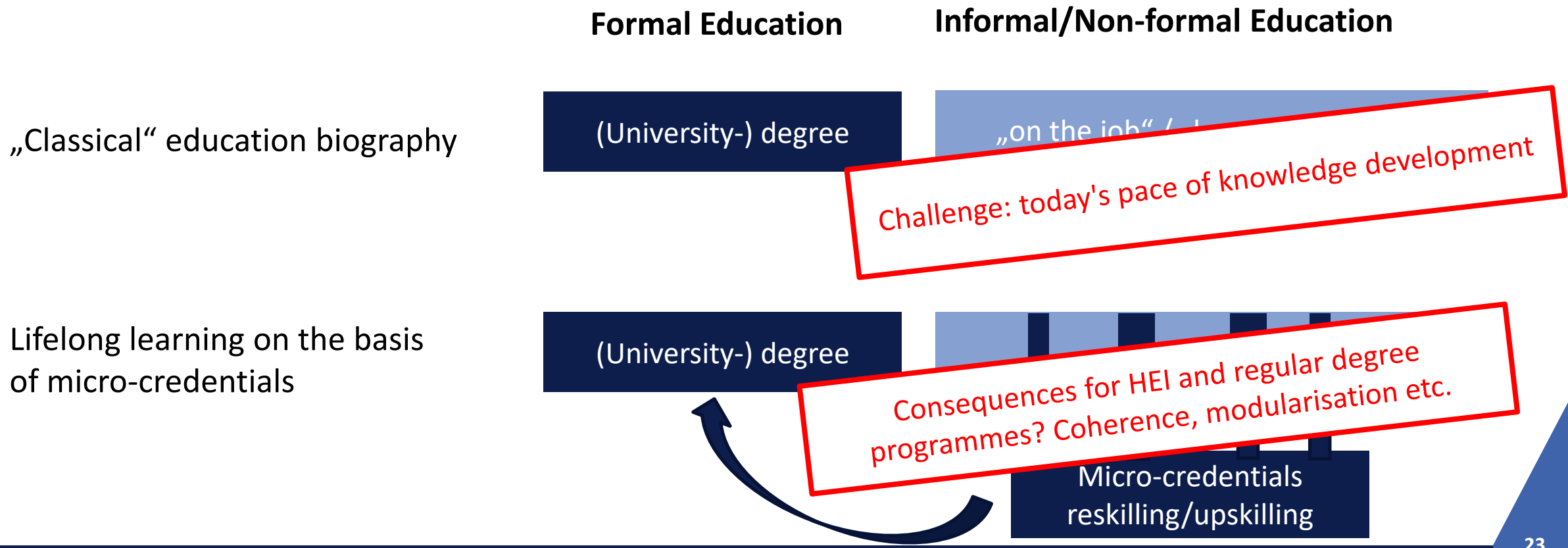
II. Survey Results: Micro-credentials at German HEI

III. Case Study: Micro-credentials in Internationalisation

Micro-credentials: Context – „Skills Gap“

European Commission: Achieving the European Education Area by 2025

“A growing number of adults, with or without a higher education degree, will need to reskill and upskill through more flexible alternatives than a full degree in order to overcome the gap between the learning outcomes of their initial formal qualifications and emerging skills needs in the labour market.”



Micro-credentials: Developments at European Level

European Skills Agenda, 1.7.2020

European Education Area, 30.9.2020

Digital Education Action Plan, 30.9.2020

EHEA Rome Ministerial Communiqué, 19.11.2020

- "We ask the BFUG to explore how and to what extent these **smaller, flexible units, including those leading to micro-credentials**, can be defined, developed, implemented and recognised by our institutions using EHEA tools."

EU Council Recommendation „European Approach to Micro-credentials", 16.06.2022

Micro-credentials: EU Council Recommendation Definition and Characteristics

Definition

„'Micro-credential' means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. Micro-credentials are owned by the learner, can be shared and are portable. They may be stand-alone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity."

Standard elements

- Learning outcomes
- Workload (in ECTS credits)
- Level (NQF, EQF, QF-EHEA)
- Type of assessment
- Type of quality assurance

Principles

- Quality
- Transparency
- Learning pathways
- Recognition
- Learner-centered

Micro-credential ecosystem

- Micro-credentials in formal learning environments
- Micro-credentials in non-formal and informal learning environments
- Quality and transparency
- Partership between involved actors

European Approach for Micro-credentials - Roadmap

Table of Contents

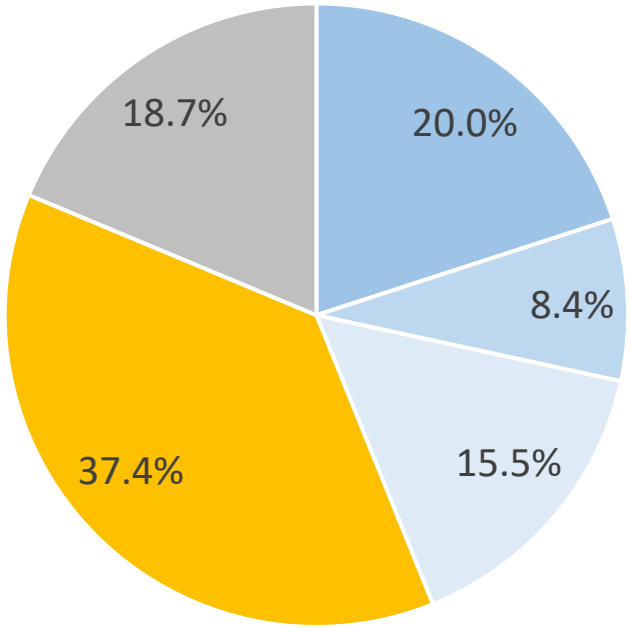
I. Background

II. Survey Results: Micro-credentials at German HEI

III. Case Study: Micro-credentials in Internationalisation

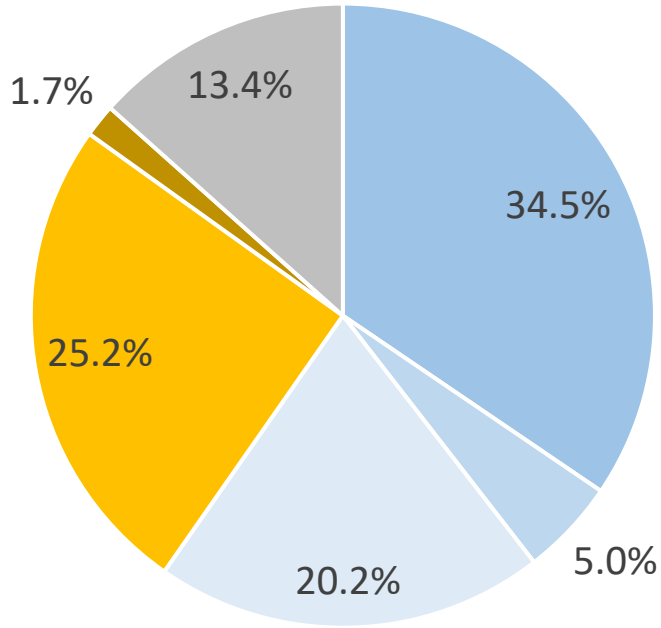
Survey – Micro-credentials at German Higher Education Institutions Comparison 2022 / 2023

Does your university offer micro-credentials?



2022

Responses: 155
Response rate 57 %



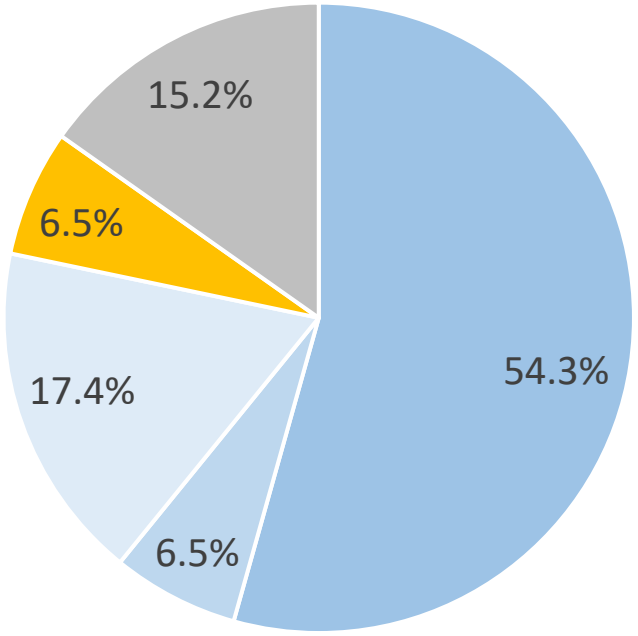
2023

Responses: 119
Response rate 44 %

- Yes
- No, but there are already plans to introduce micro-credentials
- No, but micro-credentials are a major topic of discussion
- No, micro-credentials are not a major topic of discussion at the moment
- No; without further specification
- Don’t know/no answer

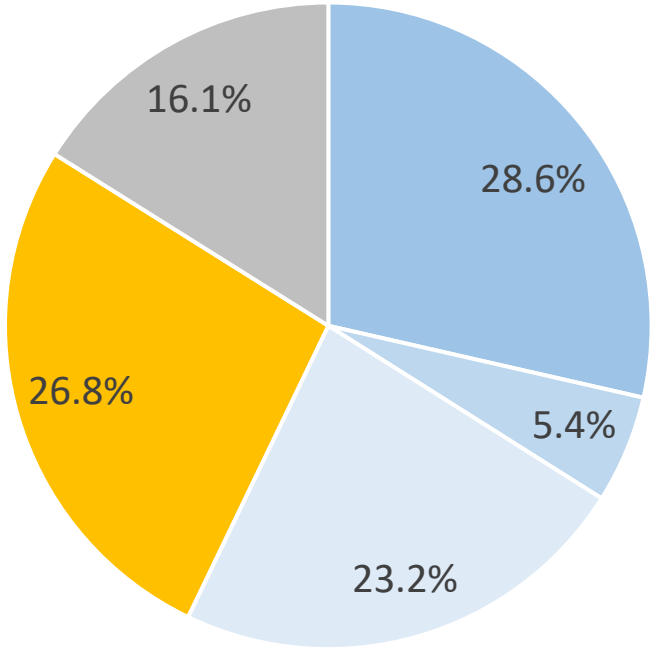
Survey – Micro-credentials at German Higher Education Institutions
Comparison: Universities / Universities of Applied Sciences (2023)

Does your university offer micro-credentials?



Universities - 2023

Responses: 46



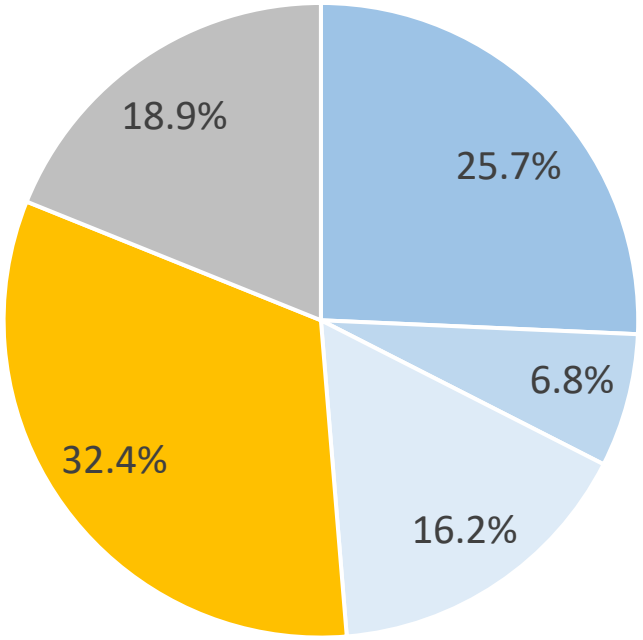
UAS - 2023

Responses: 56

- Yes
- No, but there are already plans to introduce micro-credentials
- No, but micro-credentials are a major topic of discussion
- No, micro-credentials are not a major topic of discussion at the moment
- Don’t know/no answer

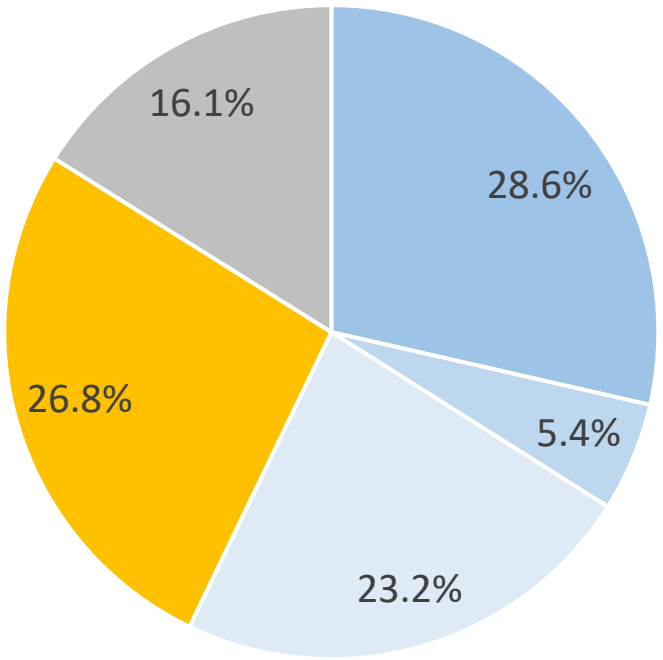
Survey – Micro-credentials at German Higher Education Institutions Comparison UAS 2022 /2023

Does your university offer micro-credentials?



UAS - 2022

Responses: 74



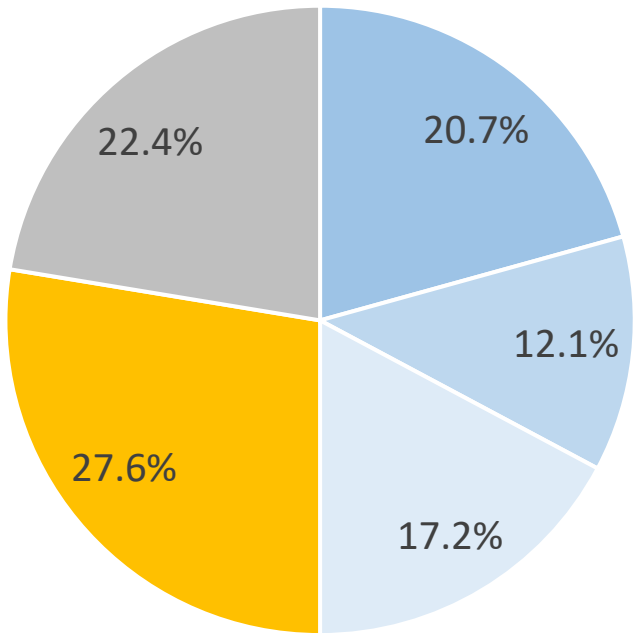
UAS - 2023

Responses: 56

- Yes
- No, but there are already plans to introduce micro-credentials
- No, but micro-credentials are a major topic of discussion
- No, micro-credentials are not a major topic of discussion at the moment
- Don’t know/no answer

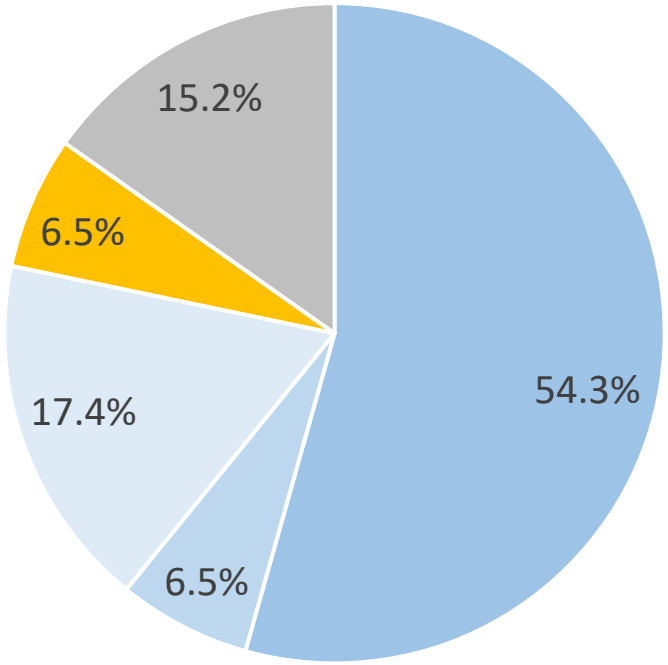
Survey – Micro-credentials at German Higher Education Institutions Comparison Universities 2022 / 2023

Does your university offer micro-credentials?



Universities - 2022

Responses: 58



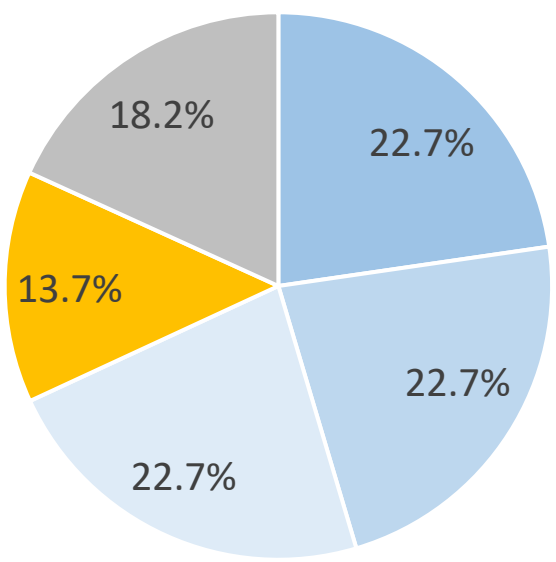
Universities - 2023

Responses: 46

- Yes
- No, but there are already plans to introduce micro-credentials
- No, but micro-credentials are a major topic of discussion
- No, micro-credentials are not a major topic of discussion at the moment
- Don’t know/no answer

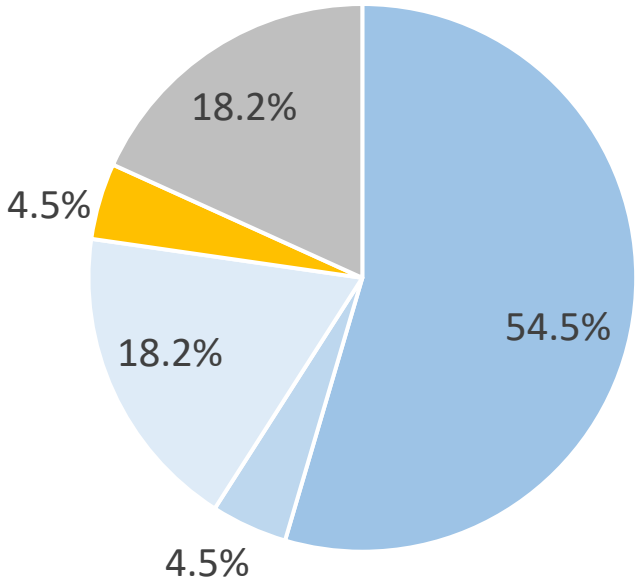
Survey – Micro-credentials at German Higher Education Institutions
Comparison: German HEI in European University Alliances 2022 / 2023

Does your university offer micro-credentials?



2022

Responses: 22



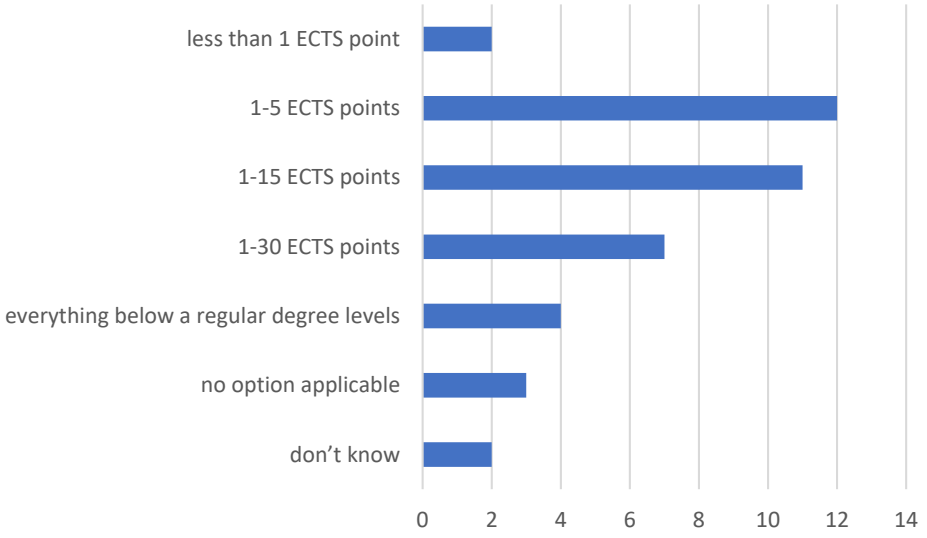
2023

Responses: 22

- Yes
- No, but there are already plans to introduce micro-credentials
- No, but micro-credentials are a major topic of discussion
- No, micro-credentials are not a major topic of discussion at the moment
- Don’t know/no answer

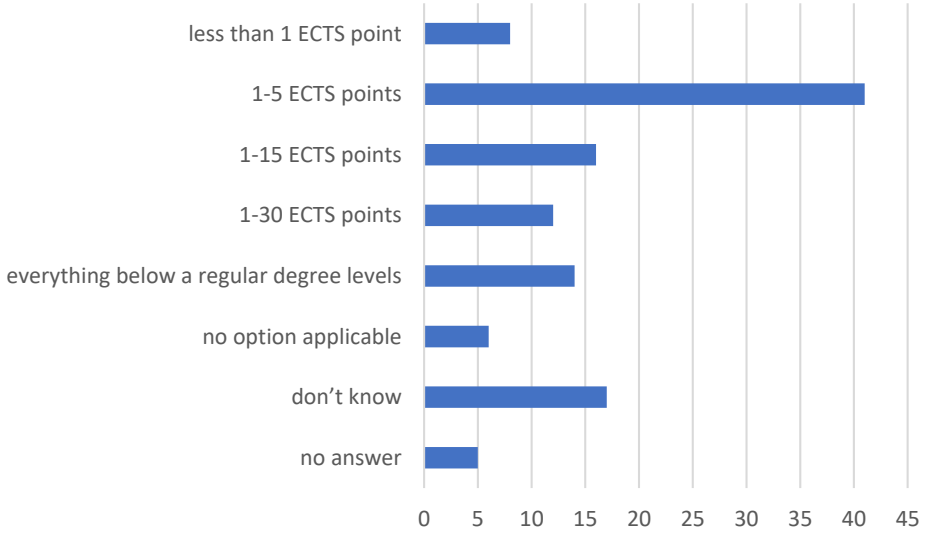
Survey – Micro-credentials at German Higher Education Institutions Workload

What is the range of your university's micro-credential offerings?



Response group: HEI which offer MC,
(no multiple answers)

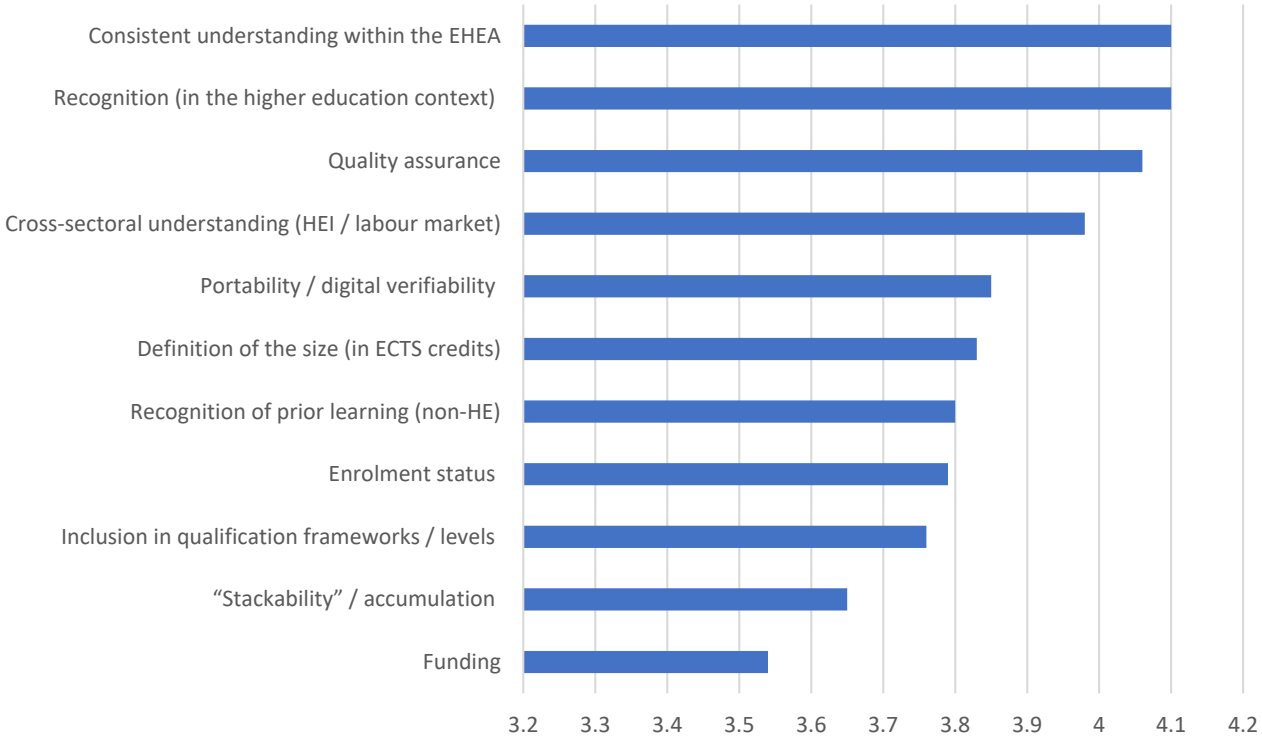
To what size should the term "micro-credentials" refer to?



Response group: all HEI
(no multiple answers)

Survey – Micro-credentials at German Higher Education Institutions Regulation

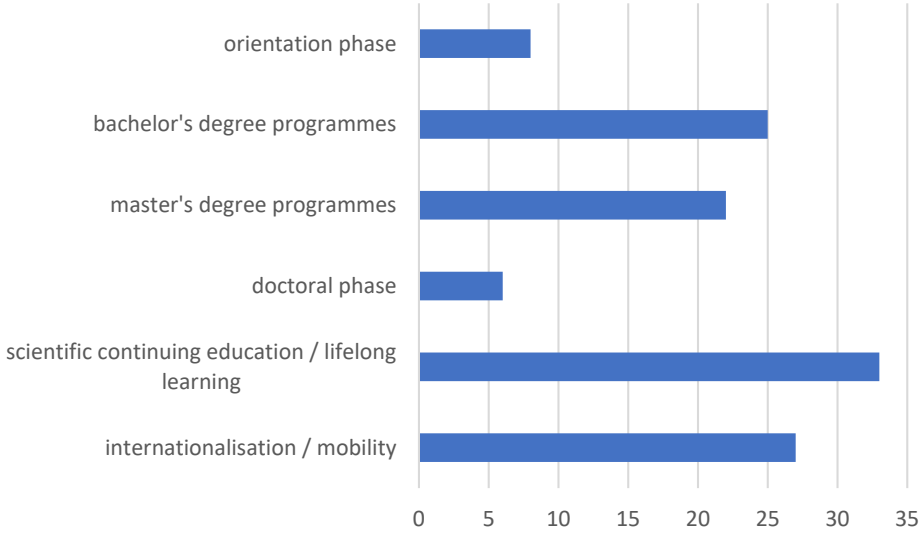
Please assess the need for regulation of micro-credentials in the areas mentioned.



Response group: all HEI
(Response scale 1-5: 1 = no need for regulation, 5 = significant need for regulation)

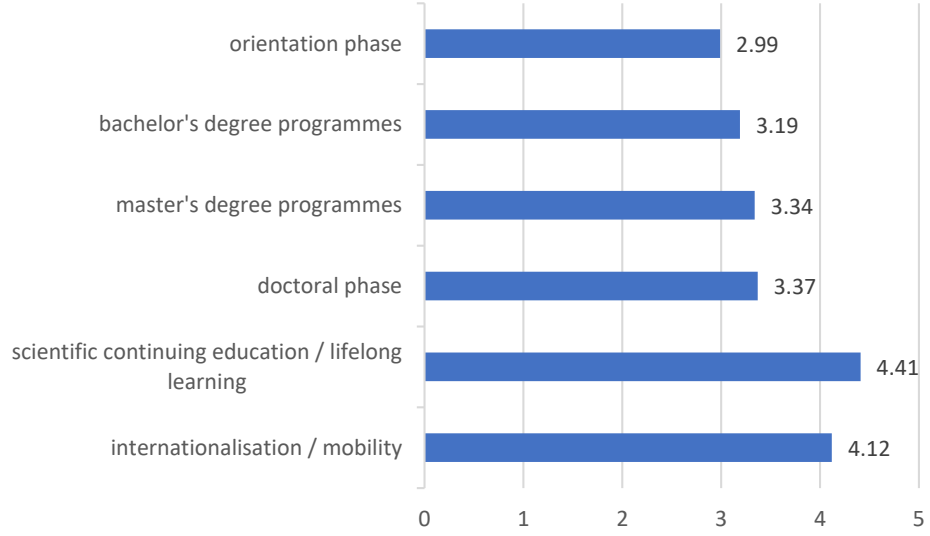
Survey – Micro-credentials at German Higher Education Institutions
Fields of application

In which context micro-credentials are offered?



Response group: HEI which offer MC
(Multiple answers were possible))

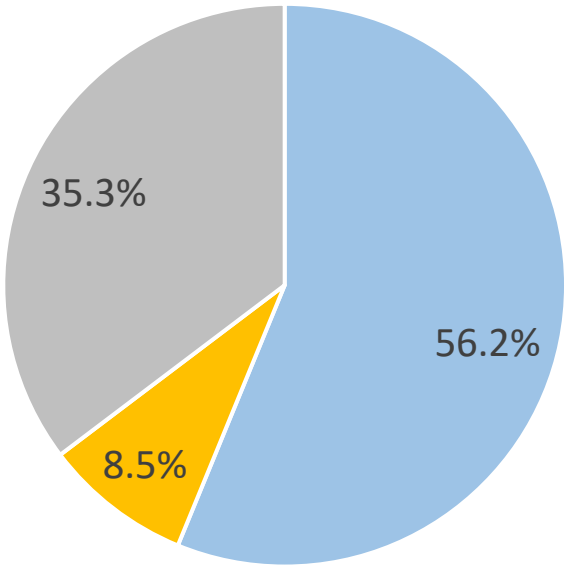
How are you evaluating the use of micro-credentials in the following areas?



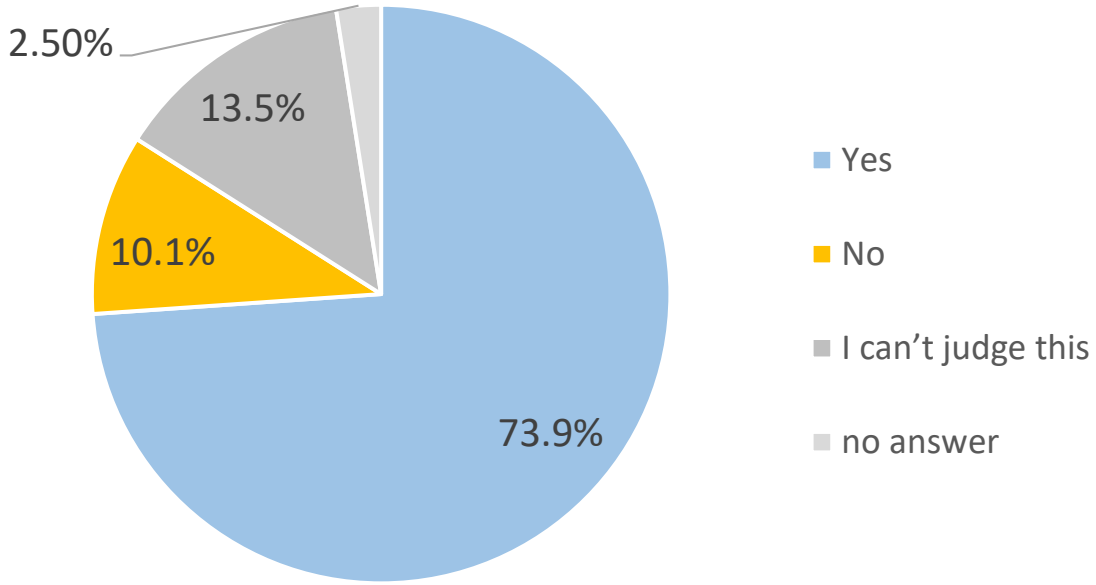
Response group: all HEI
Response scale 1-5: 1 = not useful at all 5 = very useful)

Survey – Micro-credentials at German Higher Education Institutions Internationalisation

Do you consider micro-credentials - in general - to be a useful accompanying instrument for internationalization or the promotion of mobility?



2022



2023

Table of Contents

I. Background

II. Short Survey: Micro-credentials at German Higher Education Institutions

III. **Case Study: Micro-credentials in Internationalisation**

Example: DAAD-funded Project „Digital Mobil @ HSBI“

Not all students have the chance to *travel* abroad easily to gain international experience

Solution

Combine digitalization and internationalization

All icons by freepik from www.flaticon.com

Hochschule Bielefeld
University of Applied Sciences and Arts

Example: DAAD-funded Project „Digital Mobil @ HSBI“

Outgoing offer

- More than 100 courses at 2 partner universities
- Transcript of Records
- Recognition of credits
- Refund of fees (USA)

Incoming offer

- About 10 courses per semester
- No fees
- Tutorials and personal onboarding support
- Transcript of Records

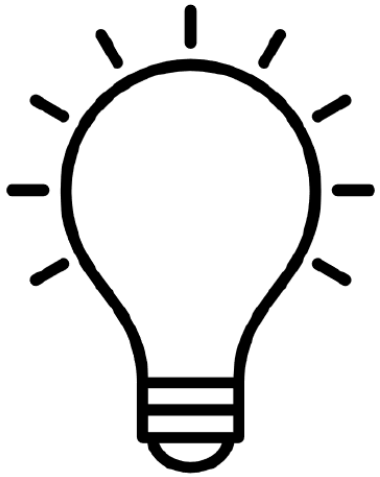
HSBI Hochschule Bielefeld University of Applied Sciences and Arts

Example: DAAD-funded Project „Digital Mobil @ HSBI“

Experiences

Especially popular in **work-integrated study programs**

>30 incoming students since August 2020



>50 outgoing students from Bielefeld UAS since August 2020

Not all students ask for a **recognition** of credit points, but all think that a **certificate** is important

High demand of **business courses**

Some partner universities were **not able** to offer courses

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HS'BI Hochschule Bielefeld University of Applied Sciences and Arts

eu.daad.de

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KMUTT4Life

The Higher Education Framework to Lead Learning for Tomorrow

Can KMUTT Lead Learning for Tomorrow ?

Assoc. Prof. Bundit Thipakorn
ASEM-SOM1; Malta
May 22, 2023

"How can we, King Mongkut's University of Technology Thonburi; KMUTT, provide self-initiated education for workforces to learn throughout their multi-stage life"

Time for NEW labour market needs

CONTINUOUS DISRUPTIONS

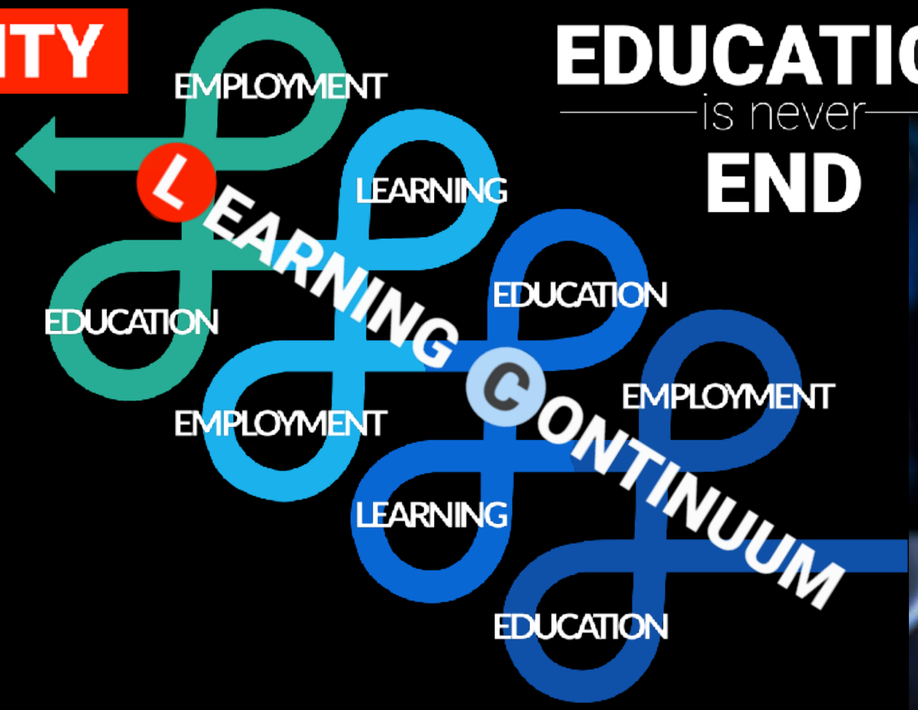
DISRUPTIVE VUCA the ERA

TRANSFORMING WORLD

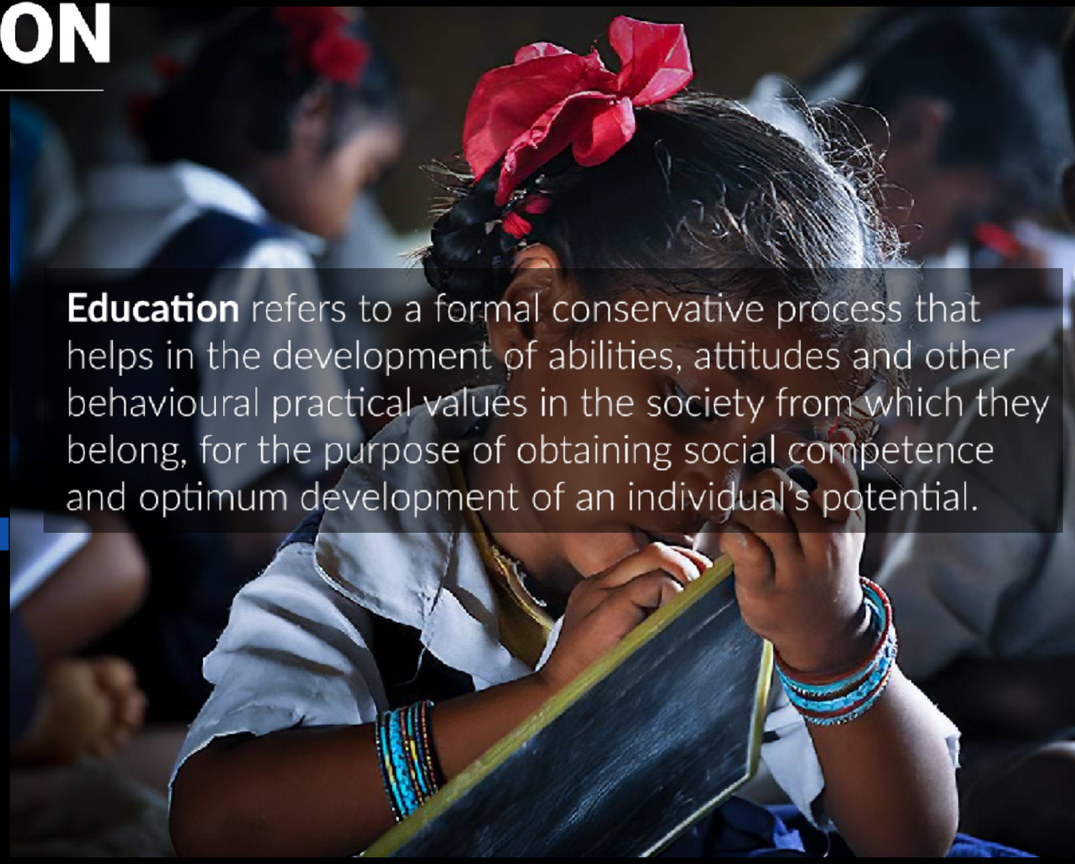
HY LEARNING

Lifelong

EMPLOY ABILITY

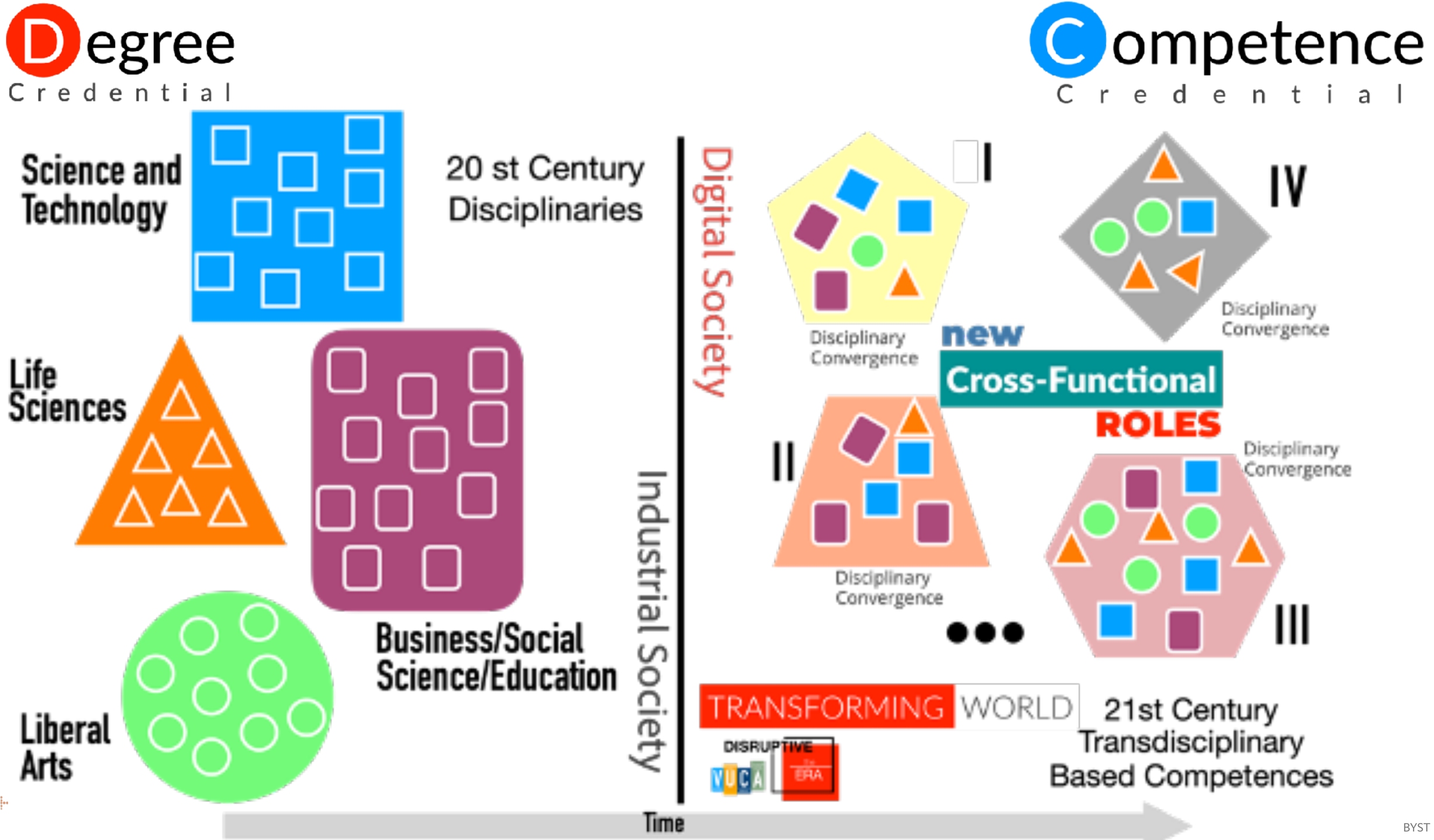


EDUCATION
is never
END



Education refers to a formal conservative process that helps in the development of abilities, attitudes and other behavioural practical values in the society from which they belong, for the purpose of obtaining social competence and optimum development of an individual's potential.

Learning is automatic, i.e. we see things, we observe them and then learn something new through our experiences in our day to day life. So, it is a continuous process and also a life long one. Learning can be intentional or unintentional, conscious or unconscious, for better or for worse.


Degree
Credential
Competence
Credential
Science and Technology
20 st Century Disciplinaries
Life Sciences
Business/Social Science/Education
Liberal Arts
Digital Society
Industrial Society
I
IV
Disciplinary Convergence
new
Cross-Functional
ROLES
II
III
Disciplinary Convergence
TRANSFORMING WORLD
DISRUPTIVE
VUCA
ERA
21st Century Transdisciplinary Based Competences
Time

-not-
DISCRETE
EDUCATION
instrumental

LEARNING CONTINUUM

TRANSFORMING WORLD
DISRUPTIVE
VUCA
the ERA

Competence
Credential

Academic
Credential

Age - Agnostic

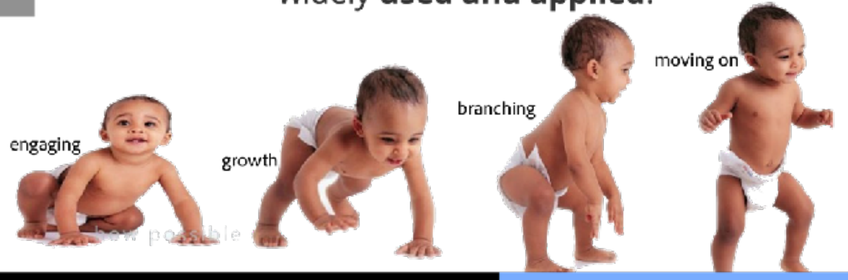
KMUTT4Life

The NEXT in higher education for LIFELONG LEARNING in the transforming world

KMUTT 4 Life Framework

Age - Agnostic

The core functions of a curriculum will likely become the **transmission and appropriation of transferable skills and competences** that can be widely **used and applied**.



Transforming **KNOWLEDGE**

CONSTRUCTING COMPETENCE

PERFORMANCE based **ACCOUNTABLITY** system

Competence Credentials

Verified Certificate **CREDIBILITY**

COMPETENCE

ACHIEVEMENT

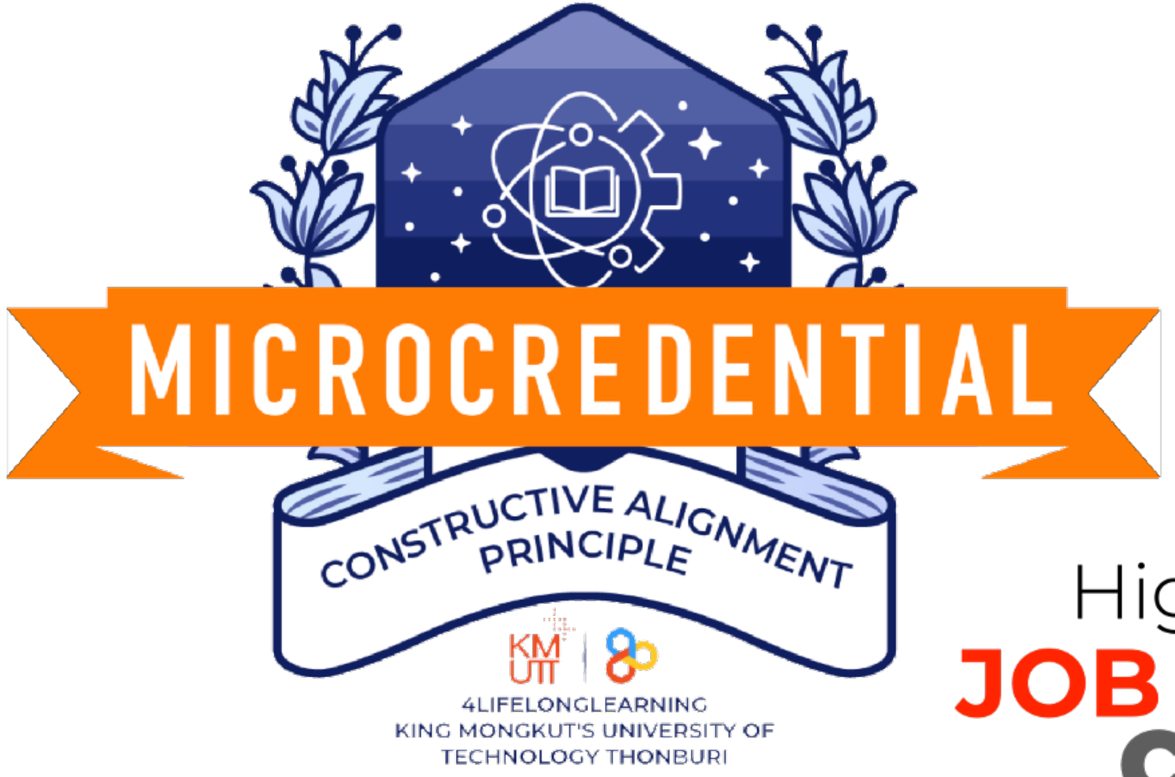
Contem-porary **CAREER**

VERSATILIST

- Multiple Deep Skills
- Wide Scope of Roles
- Broad Experience
- Recognised in Other Domains

Competence Credentials

Verified Certificate
CREDIBILITY

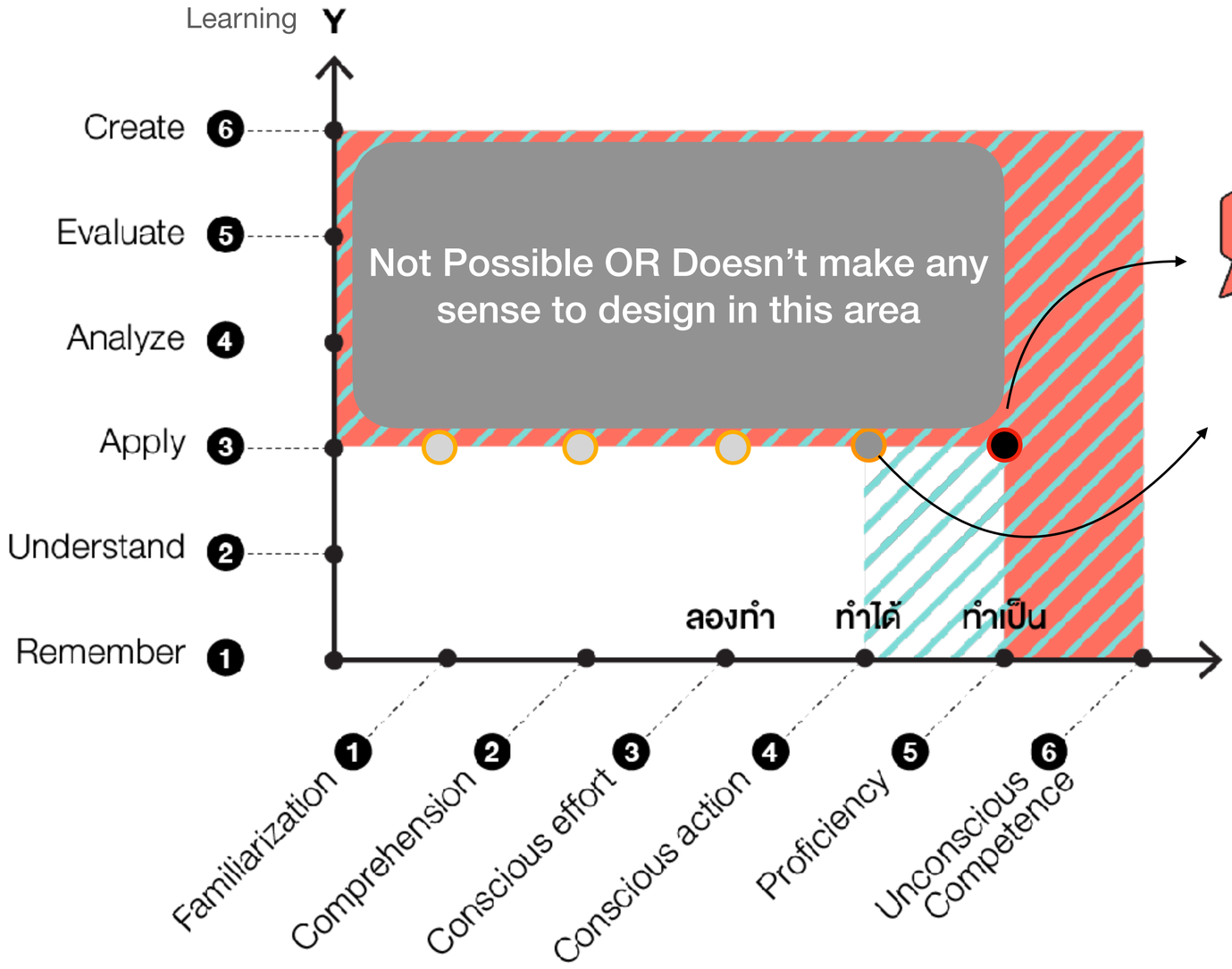


High Competence

JOB READINESS

CREDIBILITY

2 Types of MC



Non-Credit-Bearing MC

Credit-Bearing OBEM®

Digital Badge — KMUTT Digital Badge

Certificate of Learning Outcome — Certificate of Learning Outcome

- Can be used as OBEM goals - no LO certifications provided
- Minimum OBEM goal for granting LO Certifications
- Minimum goal level for MC, Can be OBEM goal (If a designer design a combo of MC and OBEM at this level, the learner will receive both Digital Badge and LO Certification)

ETS

Disruptive

LEARNING throughout the LIFE SPAN

CONTINUUM

KMUTT4Life

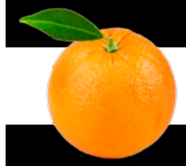
Human Resource Development System for RESEARCH and INNOVATION

Experts and Knowledge Creators

4LifelongLearning
Micro-Credential

4th Industrial Revolution
Human and AI

Degree Credential



Credential Type

Competence Credential
Verified Certificate
CREDIBILITY

NEW NORMAL KMUTT system

NEW NORMAL TRAINING system

learning MODULE BE

Transformative Era
Change is Constant

Sustaining

KMUTT

BYST

4LifelongLearning

High-Quality and Stackable Credentials

LIFE TIME

"BESPOKE" CURRICULUM

Designed for Lifelong Learner

On-the-Job Learning is part of curriculum...

KMUTT

BYST

- Competent To Do Something
- Modularity in Design
- Stackable

Verified Certificate
CREDIBILITY

BE COMPETENT TO
WORK

engaging

growth

branching

BE PROFESSIONAL

moving on

CONSTRUCTING COMPETENCE

REinventing Curriculum

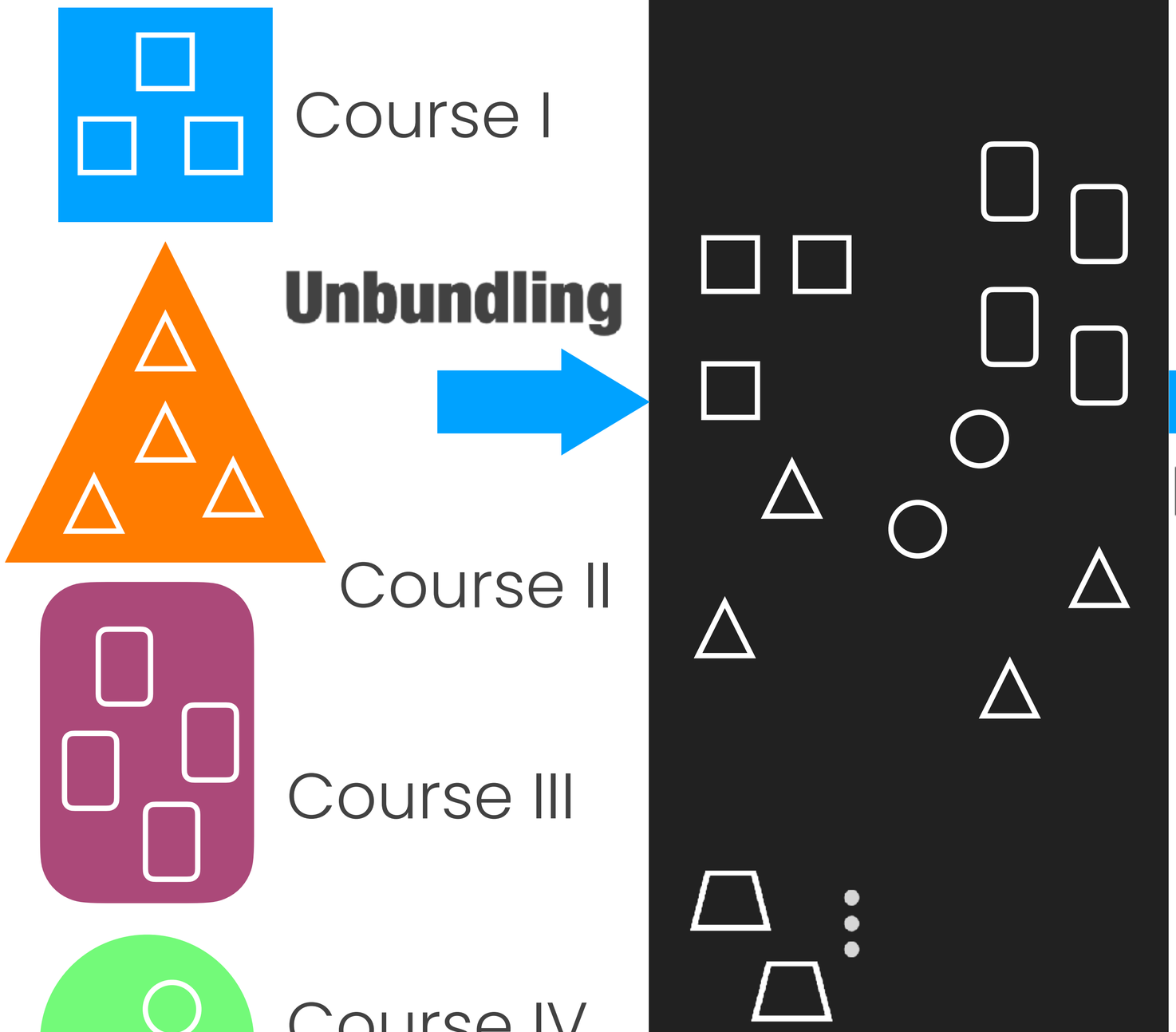
Course I

Course II

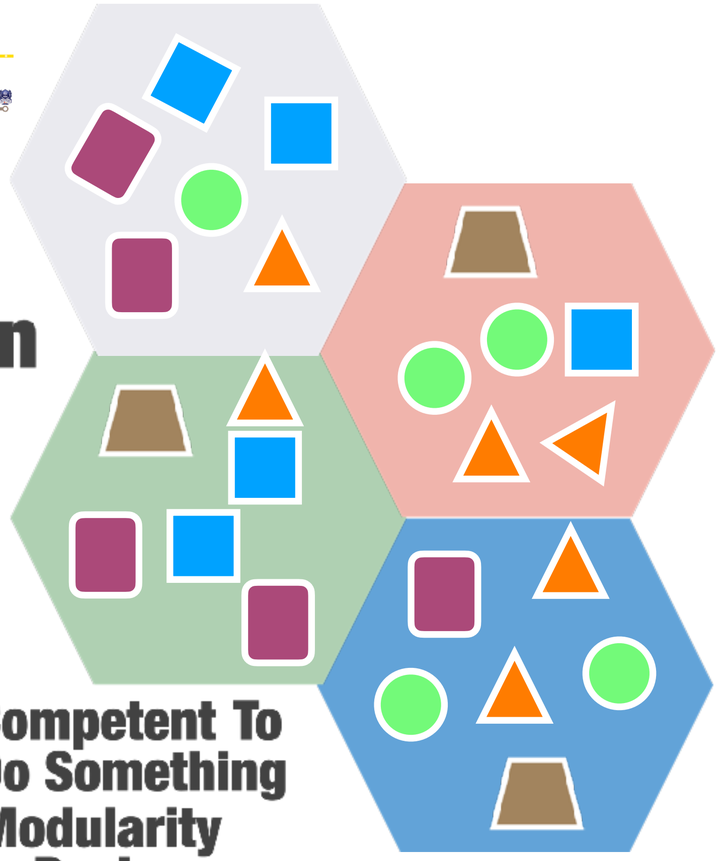
Course III

Course IV

Unbundling



Integration



- **Competent To Do Something**
- **Modularity in Design**
- **Stackable**

Verified Certificate
CREDIBILITY

CONSTRUCTING KNOWLEDGE

CONSTRUCTING COMPETENCE

KMUTT

BYST