A4.2, O5: Y3 MC Scaling workshops

Beneficiaries

- Aalborg University, Denmark
- Dublin City University, Ireland
- Kaunas University of Technology, Lithuania
- Linköping University, Sweden
- Tampereen Korkeakoulusäätiö sr, Finland
- Hamburg University of Technology, Germany
- Universidade de Aveiro, Portugal
- Universitat Autonoma de Barcelona, Spain
- University of Stavanger, Norway
- Universita degli Studi di Trento, Italy
- University of Twente, The Netherlands
- Institut National des Sciences Appliquées, France

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Symbols, Abbreviations, and Acronyms

AAU	Aalborg University, Denmark
ABW	Awareness Building Workshop
CBL	Challenge Based Learning
DCU	Dublin City University, Ireland
EC	European Commission
ECIU	European Consortium of Innovative Universities
ECTS	European Credit Transfer System
EDCI	European Digital Credentials Infrastructure
KTU	Kaunas University of Technology, Lithuania
LiU	Linköping University, Sweden
SWOT	Strength, Weaknesses, Opportunites, Threats
TAU	Tampereen Korkeakoulusäätiö sr, Finland
TUHH	Hamburg University of Technology, Germany
UA	Universidade de Aveiro, Portugal
UAB	Universitat Autonoma de Barcelona, Spain
UiS	University of Stavanger, Norway
UNITN	Universita degli Studi di Trento, Italy
UT	University of Twente, Netherlands
INSA	Institut National des Sciences Appliquées
SDW	Supply and Demand Workshops

1   Scaling Workshops

This report summarises the scaling workshops that were organised by the partner universities to engage various stakeholder groups in order discuss the latest information about micro-credentials and how to start scaling the micro-credentials in each partner organization. The workshops also shed light on the current challenges with micro-credentials and how to tackle those.

The key target audience consisted of strategic staff and institutional leaders, administrative and support staff, and the academic/lecturing staff.

1.1   Topics addressed during the scaling workshops

Since each university was in a different situation with the micro-credentials, during the workshop, a number of important topics were introduced, and each institution focused on discussion solutions to start scaling the micro-credentials. The topics discussed included awareness of micro-credentials, the purpose of micro-credentials, the number of micro-credentials offered and consumed and the technical readiness to issue the digital credentials. The aforementioned topics were discussed in light of the current situation and next steps and the key discussion items against each topic have been summarised below in Table 1:

Theme	Current Situation Discussion Items	Next Steps Discussion Items
Awareness of micro-credentials	Current awareness on digital credentials for learning in each institution and whether it changed during the ECIU university project.	Exploring the need and next steps of increasing awareness of micro-credentials in institutions
Purpose of the micro-credentials	Role and value of micro-credentials in future for the institution, students and continuous learners	Exploring the role and value of micro-credentials
Amount of micro-credentials offered	Current offering of micro-credentials in each institution	Exploring the need of increasing the amount of offered micro-credentials in each institution and the associated next steps
Amount of micro-credentials consumed	Current amount of micro-credentials consumed in each institution	Discussing the need to increase the amount of micro-credentials consumed in each institution and the associated next steps
Technical readiness	Current readiness to issue digital credentials	Exploring the need to improve the technical readiness to issue digital credentials and the associated next steps.

Table 1 Themes, Associated Current Situation and Next Steps

2 Key Findings and Lessons Learnt

There was considerable enthusiasm among both the university communities as well as external stakeholders about the ECIU approach. The key findings and lessons learnt from the workshops from each organisation have been summarised below.

Universitat Autonoma de Barcelona, Spain

- After a dissemination campaign and call for candidates, a set of teachers from different faculties were aware of micro-credentials, CBL. However, teachers need guidance and advice on teaching methodologies and adapting current regulations to new micro-credentials characteristics.
- Micro-credentials are a good tool to deliver a flexible learning offering and to apply innovative teaching methodologies as Challenge Based Learning. Further work is needed in how to include micro credentials in official study plans and additional awareness should be raised among employers about micro-credentials.
- Micro-credentials are offered as part of the challenges and micromodules, from ECIU offer every semester and also some others not in the ECIU offering. Every student at undergraduate or graduate level should have the opportunity to accredit some micro credential and CBL learning. The next step to increase the number of micro-credentials at UAB is to create a new elective subject in every study plan that is about micro-credentials and CBL.
- Only students enrolled in challenges or ECIU micromodules are getting micro-credentials currently. This is very low percentage in relation to total UAB students. Once the offering is increased, it is expected that more students will enroll in micro-credentials
- European Digital Credentials for Learners (EDCL) as part of the Early Adopters Program (EAP) were tested by UAB and they are ready to issue micro-credentials at individual level. However, there is a need to modify procedures and applications in the university system to allow mass production of micro credential accreditations.

Universidade de Aveiro, Portugal

- During the duration of the ECIU University project an increasing number of people were familiar with micro-credentials movement. There is a need to implement the definition of an UAveiro/ECIU vision for micro-credentials and its operationalization.
- Currently, UAveiro is looking to micro-credentials as a way to reskill and upskill continuous learning and is constantly evolving the UAveiro vision for micro-credentials, including the role and value of micro-credentials.
- Supported by a national project, UAveiro is creating more than 100 micro-credentials in the next months.
- UAveiro is focusing on taking care of the e-seal processes. After which, the data model will be established to analyze how information can be transferred from the student information system for a digital credentials infrastructure like European Digital Credentials for Learning.
- Some ideas that could make a micro-credential attractive are attractive designation, short volume, competence-driven and oriented to reskilling or upskilling, flexibility (compatible with work life and personal life), Recognition for career progression, inclusion in mandatory professional training , notability of the provider and trainers and being viewed as an opportunity for networking.
- Micro-credentials can be promoted for continuous learners by interaction with representative associations of employers and workers, articulation with public authorities related with unemployment and employability, marketing channels: social networks, regional newspapers, alumni as ambassadors and by disseminating success stories.

The ECIU University

- UA Micro-credentials have the value proposition that ECTS granted can accumulate in larger credentials, quality assurance / Notability of UAveiro brand, especially in the country and access to ECIU University network.

Linköping University, Sweden

Some of the challenges identified during the workshop included development and determination of course plans for courses/activities leading to micro-credits, as well as for clusters of courses/activities leading to micro-credentials; Financial compensation for courses/activities that lead to micro-credentials; Admission, including eligibility assessment, to courses/activities that lead to micro-credentials; Validation of non-formal and informal micro-credentials and the micro-credentials in relation to LiU's quality system.

INSA Group, France

An internal workshop and discussion on the scaling of Micro-credentials at the level of the INSA Group was conducted with points of contact from each of the 7 INSA. The workshop covered the concept of micro-credentials and discussed their scaling up. This first meeting led to internal workshops with Information system departments in order to discuss the possibilities to deliver micro-credentials at the level of the Group and according to the IT systems of each INSA.

Dublin City University, Ireland

- During the workshops, the awareness and purpose of microcredentaisl were generally discussed. Some helpful lessons learnt included:
- Further collaboration and cooperation across faculty would be helpful to ensure common purpose in MC development.
- Presence of many initiatives means it is critical the ECIU develops a unique brand presence.
- Value of micro-credentials is in new forms of learning, but questions remain as to how they can be implemented. As next steps, encouraging and fostering staff debate, particularly through contextualizing the ECIU within wider MC initiatives, is important.
- There is a need for further dialogue, and terminology can be a barrier.
- Standardised processes likely require further explanation.

Tampere University, Finland

- There are many committees and groups at TAU and building awareness and commitment is not trivial. Step by step awareness on how MCs embed into study programs and where learners can embed them as a part of the studies are critical. E.g., some of TAU's Challenges and MMs are already unbundled from different study programs (e.g., NOVI, IT)
- ECIU University funded multiple MMs and ECIU challenges at TAU. Opened for ECIU University which included: BEN, Liikenteen ja logistiikan vaihtuva-aiheinen opintojakso (CBL-based); ENS, Solar-driven chemistry (completely new module.); MAB, Tilastollisten ja analytiikka-menetelmien aajatarjontainen hybridi- ja verkko-opetus; ITC, VR-aiheinen kokonaisuus.
- VERNE offering the CBL-based transport and logistics offering already Autumn. Tampere is reorganizing CBL based activities around ECIU University as previously there were many different forms where they came from.
- The number of credentials is not too critical. Getting a clear strategy is first part and embedding it to practices is crucial. TAU has channeled ECIU funding for co-creation of ECIU Micro-credentials. Both ECIU challenges and micro-modules, the connection of these modules isn't too well-developed with ECIU's principles for MMs or Challenges. This is a key action point to ensure good

alignment. Curricula integration is a key step and is now the next step with the few funded learning opportunities . it is important to explore how to get all the learners sign up also through the DXP system, as well as the students. The perception of teachers under this context should also be considered.

- The teachers of ECIU University-affiliated MMs or challenges aren't too well acquainted with digital credentialing. Therefore, a strong support is needed from WP4/WP7.5 to help them prepare these digital credentials and issue them to learners. Teachers need clear guideline what to do. 7.5 task can do much of the work and therefore guidelines on how to add competence-data is critical.
- Some expectations harbored for micro-credentials include learning from the best practices of how to implement CBL and also how to manage digital credentials; Explore the other funded ECIU modules; understanding the difference between ECIU University CBL and what is being done in TAU and how connected they need to be.
- Some problems encountered for micro-credentials include failing to co-create the CBL module (for VERNE) in a short timeframe; Interest from other partners but timeframe is challenging; Extra work identified in the board meeting for co-creation of ECIU LOs as Integration to curricula as a key intervention; better communication at TAU is needed for the learners since now it's mainly just a link to go and look for ECIU University learning opportunities. Doing the recommendations in ECIU website doesn't help because most learners get overwhelmed if there's a big variety of selection. If simple recommendations on specific topics are made internally, that will make much difference if they have some explanation on what it is and why it's helpful.

University of Twente, Netherlands

At the workshop, apart from defining the micro-credentials and its importance, other topics discussed were the key principles of quality assurance and applying for e-seal.

The strategic goal of quality assurance for micro-credentials is establishing processes for monitoring and evaluating learning offerings to guarantee continuous development and improvement of the learning offerings and a basis for recognition of learning achievements by other uni's/hbo's and stackability. For that, some steps that need to be taken, include keeping quality assurance simple; staying close to existing internal (formal) quality processes; focusing on formative part of QA instead of (only) summative QA and keeping in touch with other educational institutions to stay aligned.

Hamburg University of Technology, Germany

- The awareness on digital credentials, in particular micro-credentials, needs to be increased at TU Hamburg. Many key actors are already aware about, but as daily business schedules are already full, it is challenging to reach actual progress as many players need to be involved. Nevertheless, due to the ECIU University the discussion was initiated and will further push activities in the direction. As necessary next steps, the involved parties will clarify belongings and spread the word in several discussion forums at TU Hamburg. It is planned to get the E-Seal for EDCL actions, so that first implementation steps will be done. With good practices with the EDCL further actors and stakeholders will be addressed evaluating pros and cons of the implementation of ECDL in regard of future ECIU University actions as well as future TU Hamburg actions.
- There are no micro-credentials being offered in TU Hamburg so far. ECIU challenges and ECIU micro-modules are offered, but these offerings are not certified with micro-credentials. But with ECTS and the ECIU certificate. Therefore, it is important to Get the E-Seal related to EDCL and get the process started on single learning offerings.
- As the E-Seal related to EDCL is still missing TU Hamburg, technical readiness needs to be improved. TU Hamburg is in close contact with the data center, but it is difficult to get forward in the field of digital credentials as schedules are packed and the strong need is not explainable in relation to different topics on the agenda. Therefore, as the E-Seal related to EDCL is still missing,

the next step must be to get access to it and implement it in current systems at TU Hamburg so that there is progress in getting in touch with digital credentials and gain practical experience and thereby better arguments for further implementing digital credentials, in particular micro-credentials.

- From the examination office, great doubts and malaise was expressed during the workshop. It was claimed that they are generally an executing party, but to implement digital credentialing in the current, very much packed, schedules will be very, very challenging. Nevertheless, it was highlighted that their word must be heard as they know various processes based on their experiences by far the best.
- While reflecting on the learner's perspective, general advocacy was expressed by mainly all participants.
- Teachers were interested in regard of the lifelong learners' advantages. Micro-credentials might facilitate the opportunities to get access to further education without having to subscribe to a full study programme.

University of Stavanger, Norway

- The awareness of micro courses and micro-credentials needs to be increased at the University of Stavanger. There is a rising awareness among some teachers, but awareness and interest is all over still low. Some find it challenging to invest time in micro courses and micro-credentials as they are already too busy. Therefore, there is a need to increase the internal information work, spreading knowledge about ECIU University, micro courses and micro-credentials. Spreading the word through ordinary information channels and through workshops and mini seminars. There is also a need to set up a support service rig for teachers that wish to develop micro courses and micro-credentials for ECIU University and their learners.
- Micro-credentials will play a role in the future of European education, particularly connected to the development of challenge-based learning. MC will partly be a supplement to the ordinary degree education, partly a part of it.
- UiS has offered some micro courses, but so far, they are certified with ECTS and not micro-credentials. For challenges, CHAD was used.
- So far, the University of Stavanger hasn't fully connected to the EDCL EAP. There is no technical team in store ready to implement EDCL and digital passports. However, there is a need to connect to EDCL EAP, establish the technical/administrative competence needed and set up a MC administration and support rig.
- ECIU's role in the European educational policy development was discussed. In the communication with European policy makers, ECIU U should focus on the practical development of CBL, micro modules and micro-credentials, communicating what we are currently DOING to drive European education forwards.
- There was some interest among participating teachers to develop micro modules for ECIU Universities. Teachers and Vice Deans agreed that MC will be particularly valuable in a continuous education perspective when offered to lifelong learners in connection with challenges. Financing the development costs and teaching costs are a challenge that are better handled within the LLL business.

Universita degli Studi di Trento, Italy

- The awareness of micromodules and micro-credentials needs to be increased at the University of Trento. There is a rising awareness among some teachers, but awareness and interest is still low. There is a need to increase the internal information work, spreading knowledge about ECIU University, micromodules and micro-credentials. Implementing the system MyOpenbadge might be useful for that. Furthermore, it should be contemplated to develop the offering for lifelong

learners and how to have the latter "enrolled"/integrated in the University student system/platform.

- Micro-credentials will play a role in the future of Italian and European education. Micro-credentials will partly be a supplement/integration to the ordinary degree education, partly a part of it.
- UniTrento has offered some micromodules and challenges through School of Innovation, but so far, they are certified with transcript of records reporting ECTS and not through micro-credentials. For challenges, both attendance certificates reporting ECTS+certificates were used and supplement were issued through CHAD.
- The University of Trento is almost ready to implement the Myopenbadge platform, but the open badges are different form micro-credentials. UniTrento is working on that in order to be ready to use the Myopenbadge platform. Some open badges were issued in the past (https://dol.unitn.it/en/open-digital-badges) and developing micro-credentials will be a further step.
- ECIU's role in the national and European educational policy development was also discyssed during thw workshop. There is a need to make study plan more flexibile in order to be ready to include micromodules and challenges as a part of the curriculum.
- There was some interest among participating professors to learn more about the features of micromodules and challenges and to develop them: micromodules will be particularly valuable in a continuous education perspective when offered to students and lifelong learners (also in connection with challenges) in order to develop additional and complementing skills.
- It is important to note that open badges are different from micro-credentials, because they do not always require at the moment a final assessment. In the future, if micro-credentials will be an additional "tool" to certify skills, knowledge and competencies useful to add value to a degree program, a more formal assessment is needed. This is an issue still to be discussed.
- Online offerings of micromodules should be still a must in order to meet the needs of the students/lifelong learners (not all of them are ready to move abroad just to attend and collect few ECTS above all if they are just a extra activity). Blended activities can be an interesting option to overcome the issue. At the same time there are also some legal constraints given by the Italian national rules and laws about higher education as far as: online activities at the University are limited (max. 10% of the total ECTS needed to graduate is allowed); the number of ECTS gained through micro-credentials that can be recognized by the University.

3   Conclusion

The scaling workshops garnered a considerable amount of interest from all stakeholders and served as significant forums to have an open discussion regarding micro-credentials, CBL and the ECIU approach. The impressive range of topics discussed, and questions raised during these workshops assisted in concurrently informing the work being conducted in other work packages.

Acknowledgements