

SPHERE Seminar Report

“Exploring micro-credentials: Why, how and which way forward”

26-27 November 2020

delivered online via Zoom

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Introduction

The topic

The focus of the SPHERE seminar was on **micro-credentials** - in particular, their definition, their relation to the Bologna tools, and their appropriate place in the portfolio of higher education provision. Held on 26-27 November 2020 during the second wave of the COVID-19 pandemic, it was organised by the SPHERE consortium as an online event¹ with the approval and support of the Education, Audiovisual and Culture Executive Agency (EACEA).

The seminar set out to introduce the topic and, with informed input by policy makers, academic leaders, practitioners and students, to bring participants to the same level of understanding of the educational potential of micro-credentials, as well as their relevance to the skills needs of the labour market.

The main issues covered by the seminar were:

- Flexible learning pathways and the lifelong learning dimension
- Employability, labour market needs and the employers' perspective
- Institutional strategy and the changing role of higher education
- University-business collaboration
- Student perspectives
- European Union policy
- Specific issues: quality assurance, recognition, funding, marketing
- Case studies from institutions and systems

This report summarises the results of a pre-survey on the topic conducted prior to the seminar, as well as the presentations and discussions at the event. It provides conclusions for the full range of stakeholders to consider.

The learning outcomes

The seminar was conceived and structured in such a way as to allow participants to

- become acquainted with different definitions and models of micro-credentials;
- understand how micro-credentials are used in practice, how they are recognised, how they may be bundled into full degrees etc.;
- understand the potential benefits of micro-credentials for employers and students;

¹ The SPHERE organising team consisted of: Elizabeth Colucci, Michael Gaebel, Nicole Font-Guedes, Howard Davies and Hanne Smidt.

- understand the perspectives of learners, employers, institutional providers and teachers, so as to anticipate questions and obstacles in delivering micro-credentials and assuring their recognition and quality;
- using European developments as examples, join the policy debate on flexible learning in higher education through different delivery formats and different learning objectives;
- develop an understanding of how micro-credentials might be used in their own institution or system, and of what would be the opportunities and challenges.

Attendance

NEO were asked to nominate a **core group of participants** who 1) filled in the pre-survey, 2) prepared a short document regarding the state of micro-credentials in different institutions in their respective country and also with regards to national legislation), 3) reviewed the reading materials and references made available, as well as pre-recorded case studies, and 4) participated in three discussion groups.

With regards to the core participants, the seminar was attended by 64 Partner Country colleagues. This included 47 HEREs and 17 NEOs from 22 countries. The HEREs had very different profiles, including Ministry representatives, vice-rectors, heads of quality assurance departments and international relations offices, etc.

As the first SPHERE online event, parts of the seminar were opened to all HERE, and 69 additional participants registered separately to view the public sessions. The number attending the public sessions was higher on day one of the programme.

Summary of pre-survey results

As is its custom and practice prior to a seminar, SPHERE undertook an online survey of the core participants' knowledge of, and attitudes towards, micro-credentials. This was partly to tailor the programme as appropriately as possible, partly to help individual participants measure their degree of familiarity with the topic against that of the group as a whole, and partly as background information for the invited speakers.

The [results](#) have been posted on the event website. In summary, the 48 responses showed that:

- in two-thirds of the countries canvassed, the term 'micro-credential' is not current;
- they exist, however, if not in name, in two thirds of the countries canvassed;
- in the main, they are delivered by higher education institutions in blended mode and taken up primarily for purposes of up-skilling and enhancement of employability;
- there is widespread interest (75%) in the further development of short courses built on a micro-credential format
- respondents regard the major obstacles to be: lack of appropriate legal and regulatory framework; absence of systematic recognition; lack of flexibility in the HEI structures.

In terms of the contributions received by participants as part of the preparatory work, short reports were submitted by Azerbaijan (University of Languages), Bosnia and Herzegovina, Georgia, Jordan, Kyrgyzstan, Lebanon, Moldova, Russia (Kazan National Research Technological University).

These confirmed that in many systems, though the term micro-credential is not used, various short certificate educational programmes are offered by HEIs, professional organisations, NGOs and private providers. In some systems (Russia and Central Asia), mention was made of the long standing practice of providing certificated short courses for the professional development of academic staff. In other systems, reference was made to upskilling in specific vocational fields (Jordan and Bosnia and Herzegovina). Other systems associated micro-credentials with their current processes for developing and recognising life-long learning (Moldova). The fact that micro-credentials were not systematised under a legal framework was a concern for most countries, a view also expressed in the pre-survey.

Highlights from the seminar discussions

The changing concept of higher education

After the welcome remarks, the SPHERE Team gave a presentation on the rationale of the seminar, the pre-survey results (see above), and the programme.

Liz Marr (Director of Teaching at the Open University, UK, and President of the European Association of Distance Teaching Universities) then made the [keynote presentation](#), succinctly mapping the field and giving examples of micro-credential delivery by the Open University and by Cisco.

She acknowledged that growth in the area had been driven by labour market needs. At the same time, she said, the complexity of the current context provided an opportunity to examine how higher education could find a wider role. Itemising the main lines of the context (pandemic, climate change, digitisation, the shifting geo-strategic landscape, mass migrations of refugees, the imminence of a renewed push in space travel), she stressed the paramount importance of the lifelong learning framework into which micro-credentials must be brought.

Liz Marr then took Jacques Delors' four pillars of lifelong learning (knowing, doing, living together, and being) to locate the heart of the debate: micro-credentials are versatile; in turn, they build competences and render the learner more versatile:

- they are stackable and create the necessary conditions for flexible learning paths
- they can count for continuing professional development and the recognition of prior learning
- as marketed products, they may or may not be credit-bearing; the range is wide enough for producers and learners to make their own choices

- they can be generated bottom-up in a relatively short space of time
- higher education institutions and business/industry providers can recognise each other's micro-credentials, as their policies require – on the basis of trust and without regulatory or legislative measures
- micro-credentials can function at any level (Bachelor, Master, etc)
- they effectively widen access to higher education, unlike MOOCs which tend to be post-qualification and for learners who already have substantial experience of the labour market
- accredited and often fee-based, they represent a growth sector which will spur higher education to greater agility and a wider range of institutional competences

The keynote was chaired and supported by **Michael Gaebel and Hanne Smidt**, of the SPHERE Team. Their [presentation](#) outlined the profile of micro-credentials in Europe – what percentage of the overall offer they represent in different geo-political regions, the level of provision per institution, and the purposes they serve. Micro-credentials are evolving, notably in the context of their relationship with research, knowledge transfer, lifelong learning, and above all, driven by the interconnected interests of learners, employers, policy makers and higher education institutions.

The ensuing discussion revealed the central preoccupations which would recur throughout the seminar. What was the specificity of micro-credentials when compared, for example, to MOOCs? How did their 'stackability' actually work? What threat did they pose to full Bologna qualifications? How and to what extent should they be regulated?

The European Union policy framework

The seminar took place at the moment when the European Union was finalising its budget and main policy lines for the period 2021-27. It was therefore a timely opportunity to learn from **Klara Engels-Perenyi** (policy officer at the Directorate-General, Education, Youth, Sport and Culture) exactly how micro-credentials would fit into the European Commission's broader view of higher education.

Her [presentation](#) set micro-credentials in the context of the policy positions adopted by the Commission in the second half of 2020. These included the [Skills Agenda](#), the [European Education Area](#), and the [Digital Education Action Plan](#). Together, these initiatives represented a major push designed to achieve – in line with the conclusions of the 2020 Bologna ministerial conference – a more coherent and cohesive European Higher Education Area. They would help ensure that universities successfully made the transition to a green and digital learning environment based on inclusion, gender equality and lifelong learning.

A key component would be a European Approach to Micro-credentials, for which the Commission had already proposed a working definition²:

² Note that the Commission's working definition is not the only one. The [MICROBOL](#) project, in which EUA is a participant, has proposed the following: "A micro-credential is a small volume of learning certified by a credential."

"A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards."

The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable and may be combined into larger credentials or qualifications. They are underpinned by quality assurance following agreed standards.

The Commission was aiming to produce a draft Recommendation by the end of 2021. It would follow a wide public consultation and incorporate steps to firm up the quality assurance and recognition of micro-credentials. Klara Engels-Perenyi noted that the work currently being undertaken by the [European Consortium of Innovative Universities](#) (ECIU), a partnership bringing together university, industry and public authority stakeholders, was already functioning effectively as a pilot project.

As a prelude to discussion and with the aid of slides, complementary developments at country level were presented by [Hanne Shapiro](#) (Australia, Canada, Singapore and USA), [Nora Trench-Bowles](#) (Ireland) and [Julia Ziyatdinova](#) (Russia). They showed that upskilling for labour markets was the principal objective, with revenue generation a further consideration. Particularly interesting was the use of alumni associations as a target group, stimulating demand for micro-credentials as gap-fillers and top-ups for professional *curricula vitae*. Very pertinent in the Bologna context is the Irish government initiative which will fund seven universities for building their capacity for developing micro-credentials relevant to their regional enterprise networks.

Micro-credentials: perspectives from institutions, employers and students

For the third plenary session SPHERE welcomed four experts who each brought a different perspective to the discussion:

- Rasmus Benke-Åberg, Director of the Erasmus Student Network (ESN)
- Russell Brooks, Associate Director of Executive Education and Online Learning at the London School of Economics and Political Science (LSE)
- Elisabeth Hassek-Eder, Project Manager in business research at the Austrian Chamber of Commerce (*Wirtschaftsförderungsinstitut der Wirtschaftskammer Österreich*)

In the EHEA context, it can be offered by higher education institutions or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A micro-credential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Micro-credentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG."

- Eva Schelin, Director General of the Knowledge Foundation in Stockholm, Sweden

Their different interests were clearly articulated. For the students, while the prospect of more flexible learning paths was attractive, it was crucial to defend and preserve face-to-face teaching and physical mobility. The experience of LSE, on the other hand, showed that online student groups tended to network more creatively than campus-based cohorts; this was particularly the case in post-experience courses which were non-credit-bearing. This stance was borne out by the view of the Austrian Chamber of Commerce, an accreditor and provider of micro-credentials; it wanted as much flexibility and as little regulation as possible. The Swedish Knowledge Foundation, which funds higher education and research, set the highest priority on facilitating university-business collaboration, to the benefit of working professionals.

When the discussion turned specifically to funding, a varied picture emerged. Many mature students purchase micro-credential courses with financial support from their employers; others pay out of their own pocket without – for various reasons – informing their employers. Sometimes development costs are met by funding from government, business chambers, or corporate social responsibility grants from individual enterprises. The student panellist stressed that micro-credentials should be financially accessible to students, rather than predominantly offered at a high price to elite, continuing learners. However, the range of models and perspectives demonstrated that there cannot be a blanket approach to financing micro-credentials. Ultimately, there are too many variables to generalise: market conditions and legal constraints within national higher education cultures; the level, duration, delivery mode and costs, target group and perceived value of the qualification.

On the question of recognition, all the panellists agreed that micro-credentials must have credibility. Sometimes the profile of the provider – academic or corporate – was sufficient of itself. The wider picture suggested a spectrum of learner attitudes: from the post-experience professionals, who had little need of formal credentials, to the under-funded and risk-averse full-time student who required tangible proof of investment.

Transparency with micro-credentials and recognition

This session set out to explore in greater detail the links between micro-credentials and the principal Bologna tools (ECTS, qualification frameworks, learning outcomes and assessment), as well as the production, distribution and consumption of micro-credentials. **Tia Loukkola**, Director for Institutional Development, European University Association, chaired a discussion which brought together three experts – two from universities and one from a National Academic Recognition and Information Centre (NARIC):

- [Henri Pirkkalainen](#), Tampere University, Finland, and participant in the ECIU consortium already mentioned by Klara Engels-Perenyi
- Frederik de Decker, Head of the International Relations Office at Ghent University, Belgium
- Katrien Bardoel, Senior Policy Office, Nuffic, The Netherlands

Tia Loukkola set the scene with a reminder that recognition must satisfy three criteria: compliance with the Lisbon Recognition Convention; conformity with the Bologna three-cycle qualification framework; and compliance with the Standards and Guidelines on Quality Assurance in the European Higher Education Area (ESG).

The experts agreed that the recognition of micro-credentials, once considered problematic, was becoming easier as the debate widened and as consensus began to emerge. Asked what the prime considerations should be, they pointed to transparency and to skills development. Achieving the necessary transparency in higher education was also cited as one of the main challenges, along with quality assurance and the avoidance of excessive regulation.

When the discussion turned to the question of the level at which a micro-credential should be set, the experts agreed that, when the learning outcomes were clearly stated, it was possible to define the level with reference to the national qualifications framework. At the same time, it was clear that the immediate academic and pedagogic context mattered and that a micro-credential could in principle be multivalent, operating at different levels according to the logic of the course into which it was imported.

As for automatic recognition, the panel displayed a degree of caution, even scepticism. What was automatically *recognisable*, they noted, would not necessarily be automatically *recognised*. Context was all important.

Case studies and break-out groups

Interspersed between the plenary sessions were break-out groups. On Day One they discussed videos which had been made available prior to the seminar:

- An introduction to micro-credentials, by [Mark Brown](#) of Dublin City University, Ireland, and the Irish National Institute for Digital Learning
- Micro-credentials in maritime education, by [Ana Gundić and Leonardo Marušić](#) of the University of Zadar in Croatia
- Micro-credentials and universities, by [Frederik de Decker](#) of Ghent University
- Micro-credentials and professionals, by [Hans Hansson and Malin Rosqvist](#) of the PROMPT initiative in Mälardalen University, Sweden

Break-out groups on Day Two focused more closely on national and institutional strategies and on recognition.

There was a general recognition that micro-credentials have existed *de facto* for some time, albeit not in name. Their recent emergence as a discrete entity is to be welcomed. It will help make the qualifications landscape more transparent and more intelligible, particularly when set in the framework of Bologna.

The break-out groups also agreed that there exists a demand for micro-credentials that is met only partially. Legislative inertia plays a part in this, as does the absence of comprehensive provision. There was agreement, too, that, in addition to their contribution to satisfying labour market needs, micro-credentials constitute an opportunity for higher education to become more inclusive. Participants cautioned that there might be resistance from research-intensive universities.

Furthermore, national and cultural differences make it difficult to generalise about how best to articulate universities and business and how best to identify target groups. Higher education and the business sector have different target groups and different recognition criteria. While knowledge-transfer is a longstanding topic of dialogue, perhaps there now should be inaugurated a dialogue on recognition-transfer.

No break-out group dissented from the view that quality assurance is paramount. It must be sufficiently sensitive to cater for the proliferation and variety of micro-credentials, as well as sufficiently effective to give them credibility.

As for unanswered questions, participants await a final consensus-based definition of micro-credential. Such a definition would indicate how integration into the Bologna tools was to be achieved and whether the recognition of prior learning was a practice powerful enough to render further regulation unnecessary. Finally, the break-out groups looked forward to seeing what funding patterns emerge as micro-credentials grow in take-up and impact.

Conclusions, take-aways and recommendations for stakeholders

1. There is widespread acknowledgement that **labour market needs** are a major driver of the growth of micro-credentials. This is particularly the case in the circumstances of 2020. Higher education should not, however, become purely reactive. Nor should it respond mechanically to analyses of skills deficits generated at supra-national or national levels. Regional and local contexts are also important. Institutions could usefully audit their curricula in terms of what skills are no longer required; they could do this on a learning-outcomes basis and in collaboration with professional bodies and regional authorities.
2. Labour market needs raise the question of **university-business cooperation**. Well-developed in many countries in the spheres of innovation and knowledge-transfer, it is less obviously successful in the field of curriculum development of mainline qualifications as well as of micro-credentials. Higher education and business tend to operate independently of each other, applying different criteria for the award of credit, recognition, and funding. The seminar learned of good practices; these need to be generalised. Dialogue is required, both to build trust and to make the micro-credential marketplace more transparent to the learner.

3. Micro-credentials are versatile: they operate at different levels and in different sectors for different purposes. Their very versatility gives them the potential both for narrow application and for multivalency. Recognisability deriving from consensus-based criteria and methodologies is desirable, but **recognition** must always be context- and purpose-dependent.
4. Micro-credentials can be elements disaggregated from ‘whole’ qualifications, such as Bachelor and Master; they can also be bundled into ‘whole’ qualifications. The higher education sector must take steps to ensure that its **macro-credentials** are not eroded by this dual dynamic. This obliges them to find a balance between the precautionary principle and enterprise.
5. Versatility in curriculum development also entails sensitivity in **human resource** deployment. The casualisation of academic labour can pose a threat to the integrity and quality of provision. National and institutional employment policies must adapt to the realities of course design at the micro level: scholarship, pedagogic competence, and research cannot be allowed to diminish in importance.
6. Micro-credentials are designed to enhance the versatility of the learner. They must be accommodated, at national and institutional levels, within a **lifelong learning strategy**. This will promote inclusiveness, at least indirectly, as well as strengthening the delivery of continuing professional development and the methodology of recognition of prior learning.
7. Emerging strongly from the seminar is the sense that future developments must strive to find the correct **balance between the rigour of regulatory oversight and the flexibility required by course designers**. This may prove to be challenging for the highly regulated professions such as the healthcare professions.
8. Finally, the **seminar succeeded in framing an informed debate** on micro-credentials, even if it could not explore each of the relevant aspects in sufficient detail. Clearly, experience varies widely from country to country. The seminar allowed some informal mapping to take place, but it cannot be said to have audited micro-credential provision in each of the Partner Countries. This is a necessary future step. Further debate on quality assurance is also crucial. Participants look forward to opportunities to pursue the topic, particularly when the European Commission will have finalised its own thinking during 2021.