ProcToGo

GUIDELINES FOR THE EFFECTIVE DESIGN OF MICRO-CREDENTIALS

The ProcToGo Experience

Working Group on Lifelong Learning

Yerun
Young European Research Universities

The Purpose

GUIDELINES FOR THE EFFECTIVE DESIGN OF MICRO-CREDENTIALS
The ProcToGo Experience

These guidelines were created, bringing together the experiences and challenges collected in implementing the ProcToGo blended courses and inside the YERUN working group on Life-Long Learning.

These guidelines aim to provide higher education institutions /educators with practical support for developing and delivering micro-credentials by

- facilitating a common understanding of basic principles and concepts related to micro-credentials

- highlighting the most relevant features for an effective design of micro-credentials

- identifying the challenges educators must grapple with when designing micro-credentials

Key phases in HEIs adopting micro-credentials
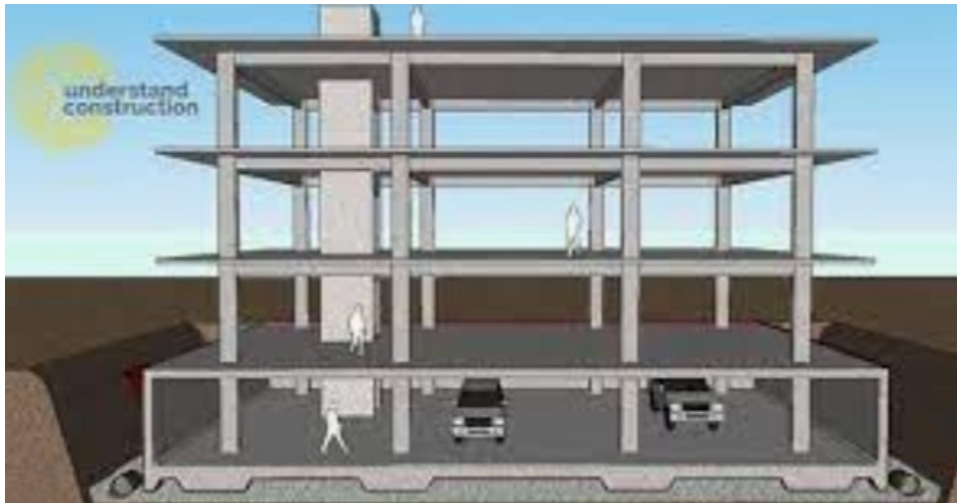
Planning the micro-credential initiative

...including national frameworks
[Belgium/Flanders, Germany, Ireland, Italy, Portugal, Spain]

Designing a micro-credential course

...including thematic areas focus
[Sustainability – AI – Procurement]

Planning the micro-credential initiative

- Incorporate micro-credential within the overall HEI vision, mission and strategy

- Assess the potential impact of the micro-credential initiative

- Empathize with the learners to create a supportive and accessible learning environment

- Build an effective management approach to support the initiative

- Ensure recognition and quality

Incorporate micro-credential within vision, mission and strategy

HEIs should frame micro-credentials within their overall vision, mission and strategy and should set out overall guiding principles and procedures for the development, approval, delivery and recognition of micro-credentials.

HEI should align micro-credentials with the overall academic objectives by:

- ✓ **Positioning micro-credentials within the HEI offering structure**, defining the model/approach the university intends to follow in offering micro-credentials, including its existing teaching offer and/or new offerings

- ✓ **Developing a common understanding of the purpose and value of micro-credentials**, integrating micro-credentials into higher education requires rethinking, adaptation, and changes

- ✓ **Allocating appropriate funds, dedicated staff, and defining specific procedures**.

TIP

hold preliminary collegial discussions inside the governing boards and then carry out a "cascade" towards the departments/schools/units

Assess the potential impact of the micro-credentials initiative

HEIs should assess the potential of the micro-credentials initiative by developing a SWOT analysis on strengths and weaknesses of their current academic offering, as well as on the opportunities and threats in the skills requirements demanded by their reference labour market.

HEI should:

✓ **Map the current academic offering** with a specific focus on its long-life learning courses and on any relevant area of weaknesses, especially as to rapidly changing areas such as digital transformation/AI and sustainability

✓ **Carry out an in-depth labour-market analysis** on the required skills, including industry-specific ones and looking also towards future labour-market needs

✓ **Take into account the potential social impact** of micro-credentials, given the opportunities they are offering for a renewed learning policy, customised learning opportunities, supporting inclusion, and facilitating access to education.

TIP

establish agreements with professional/industry associations (and other HEIs) in order to develop joint micro-credentials courses and foster the recognition and the portability of the micro-credentials offered.

Empathise with the learners for a supporting environment

HEI should fully embrace the concept of student-centered learning, leveraging on the micro-credential characteristics to become highly responsive to the learners' needs/ timing, eventually using a Design Thinking approach to shape the learners' micro-credential "journey".

As to the **tutoring activities**, HEI should review of the existing tutoring procedures considering that these learners:

✓ engage with a shorter time commitment

✓ might have very little or no physical presence on campus.

As to the **operational procedures**, HEI should adapt their student management systems to integrate this new learner status and provide clear information considering that these learners

✓ ask for simple administrative procedures

✓ care much about evidence of completion and recognition.

TIP

Plan a significant training for both the teaching and the non-teaching staff involved, considering also that digital technologies are likely to play a major role in the initiative.

Build an effective management approach to support the initiative

HEI should manage the micro-credential initiative by:

✓ **setting clear roles and responsibilities**, with a coordinator, a steering committee and a dedicated staff, in line with the level of centralization/decentralization characterizing the university

✓ **allocating enough financial and human resources** so to allow the launch of initiative, especially as to the update of the IT infrastructure (should this be required)

✓ **building up a micro-credential repository** (even in the form of a comprehensive web page), listing and promoting all the micro-credentials courses towards the learners and the recruiters/companies

✓ **strengthening (if necessary) the e-learning environment** as many micro-credential courses will be delivered - partially or in full - online

✓ **upgrading (if necessary) the student management system** to simplify the enrolment procedures and to support a seamless issue of course certificates (including the possibility of digital badges).

TIP

Be aware that the effective management of the micro-credential initiative is very much related to the IT infrastructure, its effectiveness and flexibility..

Ensure recognition and quality

HEI should assure high quality standards to establish trust and highlight the value of the short learning courses leading to micro-credential, in line with the EU Council Recommendation identifying quality as the first principle for the design and issuance of micro-credentials.

HEIs should deal with the concerns regarding the recognition, portability and quality by:

✓ referring to the **legal instruments, procedures and transparency tools** set by the Lisbon Recognition Convention and the Bologna process, in particular the EQF

✓ integrating the evaluation of micro-credentials within the existing **external and internal quality assurance systems**

✓ providing precise information on **learning outcomes**, **workload**, and **level** characterising each micro-credential course.

TIP

Finetune your existing quality assurance system to make it more appropriate and proportionate to small/short learning courses.

Designing a micro-credential course

- Ground the course design on the target learning outcomes

- Develop an effective assessment strategy

- Design a student-centered micro-credentials course

- Target stackability through a modular design

- Monitoring and reviewing the micro-credentials courses

Ground the course design on the target learning outcomes

The instructor/course planner should ground the course design on the targeted learning outcomes defined in terms of the competencies and the skills learners should be able to achieve at the end of the course.

The focus on the learning outcomes:

✓ helps **maintain student-centricity**, focusing on what the students will be able to do upon successful completion of the course rather than what the teacher will cover or do in the course

✓ gives **learners a clear understanding** of where they are heading and a clear picture of what is expected to be successful in the course

✓ represent a key reference to **develop collaborations with industries and professional associations**, collaborations that make micro-credentials very attractive for students.

─── **TIP** ───

Consider adopting a backward-design methodology, starting with a clear definition of the learning outcomes and of the characteristics the final assessment and as the last step selecting the contents.

Develop an effective assessment strategy

The instructor/course planner should identify the most appropriate assessment strategy, to select relevant materials for the course and to prove to the learners and the labour market the micro-credential course effectiveness, in line with the targeted learning outcomes.

The instructor/course planner should consider :

✓ the insertion of **frequent formative assessments**, as they represent a valid opportunity for providing learners with feedback to better support and prepare them for their summative assessment

✓ the design of a **final summative assessment** in line with the professional orientation of micro-credentials, weighting the different elements of the summative evaluation to reflect the competency-based nature of the course.

TIP

Consider an "authentic" assessment as final summative evaluation, engaging learning to apply the acquired knowledge and skills in solving complex problems in a meaningful context.

Design a student-centered micro-credentials course

The instructor/course planner should take into account that micro-credential courses engage with a variety of learners, for upskilling, for reskilling or for achieving additional competencies frequently beyond their field of study.

In order to design a student-centered course, the instructor/course planner should consider the need to create a flexible learning pathway along the micro-credential journey through:

- ✓ a **variety of modes** (online asynchronous or synchronous; on-campus; blended)
- ✓ a **variety of teaching/pedagogical approaches** (lectures, workshops, seminars, workgroups, virtual learning environments, etc.).

TIP

Consider adopting on demand approach for (some) micro-credential courses delivered online asynchronously allowing learners flexible and self-paced schedules with adaptive learning paths.

Target stackability through a modular design

The instructor/course planner should design micro-credentials not only as standalone courses but also as "stackable" elements, so that, when combined as a series of related micro-credentials, they can fulfil all the requirements for a higher-level certification, considering that:

✓ In case micro-credentials have been selected from a **coherent grouping of courses within an institution/consortium** (in a similar manner to traditional degrees out of a predefined series of courses), the instructor/course planner should ensure validity and consistency towards a higher-level certification in terms of the volume and the depth of the acquired learning;

✓ In case micro-credentials have been obtained **outside a predefined path** as the result of courses attended by learners on the basis of their interest or needs, at different institutions and/or other providers, the instructor/course planner should make sure that the contents and the learning of individual micro-credentials are transparent and clear, to facilitate their recognition by a different institution and its appreciation by the employers … however learners might find difficult to get them recognized for a broader certification.

TIP

Consider the alignment to open standards so to ensure that learners can build up a micro-credential portfolio that can be easily recognized and verified by employers and other educational institutions.

Monitoring and reviewing the micro-credential courses

The instructor/course planner should regularly monitor and review micro-credential course quality, not only in terms of students' feedback and completion rates, but also so to:

✓ ensure their **effectiveness and relevance** in a rapidly changing labour-market

✓ verify whether the intended learning outcomes, the course assessments and the course contents are still **aligned with the required skills and competencies** and, if relevant, with industry standards and best practices

✓ verify whether the course is actually **accessible to the target learners**.

TIP

Consider more frequent (although simplified) monitoring and reviewing cycles and adjust operational procedures accordingly.

GUIDELINES FOR THE EFFECTIVE DESIGN OF MICRO-CREDENTIALS

The ProcToGo Experience

The Challenge

Micro-credential courses are challenging several HEIs "traditional" characteristics.

Can the flexibility and speed characterising micro-credential courses become a relevant reference/leverage for making the overall HEIs academic offer more flexible, reactive and learner-centered?