QualityLink

Indicator Ranking with Students and Stakeholders

Deliverable of Task 2.5

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2 - Semantic Mapping of Quality Metrics and Sources in Higher Education

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Table of Contents

1 Introduction

The QualityLink project aims to empower stakeholders, including students, institutions, employers, and recognition information centres, by providing comprehensive, relevant quality data on courses and micro-credentials. This should help improve recognition decisions and allow learners to follow flexible learning pathways.

The project envisions contributing to a seamless, interoperable environment where high-quality information on study programs and micro-credentials is easily accessible and available across diverse sources.

The project's guiding principles are:

- **Quality**: ensuring that all project endeavours adhere to the highest standards.
- **Competition**: as a positive force for driving continuous improvement and innovation.
- **Student-centric approach**: empower learners to navigate the diverse landscape and make personalised choices.
- **Transparency**: avoiding compound indicators and allowing the end user to make their own informed decisions.
- **Openness and inclusivity**: aggregating, sharing, and disseminating data.
- **Democratisation of quality data**: making it universally accessible and beneficial to a broad spectrum of stakeholders.

The project aims to create a technical architecture for aggregating basic course data and quality indicators from various trusted data sources, including the ability to match data from different sources to the same micro-credential, course, or study programme.

The QualityLink consortium has identified five quality domains for judging the usefulness of learning opportunities and micro-credentials. Each quality domain contains between 4 and 7 separate indicators.

Table 1. Quality domains and indicators original list

Domains	Indicators
1. Content Relevance, Labour Market Demand and Accuracy	1.1 Accurate and up-to-date information
	1.2 Demand for skills in micro-credentials
	1.3 Specific requests for skills / micro-credentials
	1.4 Stackability
	1.5 Additional QA / Labels
	1.6 Quality Assurance (ESG)
2. Teaching Methods and Pedagogy	2.1 Quality Assurance (ESG)
	2.2 Platform QA

	2.3 Active methodologies
	2.4 Tutoring
	2.5 Student/staff ratio
	2.6 Assessment methods used
	2.7 Virtual learning environment available
3. Accessibility and Inclusivity	3.1 Make-up/diversity of the student body
	3.2 Recognition of prior learning
	3.3 Learner support services
	3.4 Eligibility for grants/loans
4. Learner-Centred Approach, Satisfaction and Success	4.1 Student ratings
	4.2 Graduation rate
	4.3 Student ratings of educators
	4.4 Student/graduate performance
	4.5 Grade distribution
	4.6 Course description
5. Institutional Reputation	5.1 Expertise of Lecturers
	5.2 Ranking
	5.3 Networks
	5.4 Recognition history (direct)
	5.5 Recognition history (skills)

2 Approach

2.1 Sample

Based on the domains and indicators presented in Table 1, the study aimed to explore how these elements were prioritised by various potential users with different profiles/backgrounds. To achieve this, two versions of a questionnaire were developed and distributed among learners and stakeholders. Additionally, focus groups were conducted in selected project contexts to gather complementary qualitative data.

2.2 Data collection tools and techniques

2.2.1 Questionnaire

The questionnaires were administered to participants within the scope of the project, and the focus groups were held in three regions: the Basque Country, Germany, and Lithuania. The

survey was implemented using the *encuesta.com* platform and was made available in four languages—English, Basque, Spanish, and German—to ensure participants could respond in their preferred language.

The two versions of the questionnaire differed primarily in their introductory sections. Learners were asked to provide background information relevant to their educational experience, while stakeholders were prompted to indicate the role from which they were responding.

Of the 88 learners who responded to the questionnaire, 62 completed it in full. Similarly, while 60 stakeholders began the questionnaire, only 45 provided complete responses that were included in the final analysis. These completion rates were considered during the interpretation of the data to ensure the reliability of the findings.

2.2.2 Focus groups

To complement data gathered through questionnaires, focus groups were conducted to obtain deeper qualitative insights into participants' experiences with micro-credential courses. These sessions were held in three project regions—the Basque Country, Germany, and Lithuania—and followed a standardised protocol developed within the framework of the Quality Link project.

Each focus group lasted approximately 60 minutes and was facilitated by a moderator who introduced the session, clarified its purpose, and ensured participants understood the format and ethical considerations, including anonymity and confidentiality. Participants were selected based on their prior or potential engagement with micro-credential courses and included both learners and stakeholders.

The discussions were semi-structured, guided by a set of predefined questions (see appendix 1) aligned with the indicators presented in Table 1. Sessions began with a brief round of introductions and progressed through thematic prompts designed to elicit participants' perceptions, motivations, and evaluations. All sessions were audio-recorded with consent and supplemented by facilitator notes. The resulting data were transcribed and prepared for thematic analysis to identify priorities of domains and quality indicators for micro-credential programs.

Two focus groups were conducted in the Basque Country. Each group included a combination of learners and stakeholders, reflecting the dual roles many participants held—several stakeholders had previously engaged with micro-credentials as learners, while others identified themselves as potential learners. In total, nine individuals participated across both sessions, contributing diverse perspectives informed by their professional and educational experiences.

Two focus groups were conducted in Germany: one with stakeholders and one with learners. The focus group with stakeholders was conducted with 50 participants during the DHBW

learning festival, reflecting backgrounds in teaching, research, and teaching support. The other focus group was conducted with 28 students of the bachelor's study program “Food Management”. In both groups, most participants had experience with online learning, but not yet with micro-credentials.

One focus group was conducted in Lithuania. There were 7 participants in the group. All of the members were lifelong learners, who were acquainted with micro-credentials either by learning about them in events, projects, conferences or by taking courses, leading to micro-credentials. Most of them had already received micro-credentials before.

3 Results

3.1 Quantitative results

The quantitative component aimed to assess the perceived importance of different domains and indicators related to micro-credentials among two key respondent groups: learners and stakeholders. The analysis focused on identifying patterns of prioritisation, as well as points of convergence and divergence between both groups.

The results are presented in two main sections. The first section examines perceptions of the five overarching domains —*Content Relevance, Labour Market Demand and Accuracy; Teaching Methods and Pedagogy; Accessibility and Inclusivity; Learner-Centred Approach, Satisfaction and Success; and Institutional Reputation*— as reported separately by learners and stakeholders, followed by a comparative summary. The second section details the perceived importance of specific indicators within each domain, again considering learners’ and stakeholders’ perspectives individually and in comparison. Together, these findings provide a structured overview of how different actors value the core elements underpinning the development and evaluation of higher education micro-credentials. Finally, an overview of the main trends and highlights emerging from the survey data is provided, offering a concise synthesis of the overall findings.

3.1.1 Domain priorities

3.1.1.1 Learners

According to the survey data, learners attributed the highest importance to the domain *Content Relevance, Labour Market Demand and Accuracy* (78.58%), ranking it as their top priority. This was followed by *Learner-Centred Approach, Satisfaction and Success* (66.20%), and *Teaching Methods and Pedagogy* (64.25%), positioned as the second and third priorities, respectively. *Institutional Reputation* was assigned a lower importance (31.83%), while *Accessibility and Inclusivity* received the lowest perceived importance among learners

(25.65%). These results suggest a clear emphasis on content relevance and learner-centred approaches over institutional or accessibility-related aspects. Table 2 summarises these results, illustrating the relative prioritisation of domains by learners.

Table 2. Learners' domain priorities

Domain	Perceived Importance (%)	Priority
1. Content Relevance, Labour Market Demand and Accuracy	78.58	1
2. Teaching Methods and Pedagogy	64.25	3
3. Accessibility and Inclusivity	25.65	5
4. Learner-Centred Approach, Satisfaction and Success	66.20	2
5. Institutional Reputation	31.83	4

3.1.1.2 Stakeholders

For stakeholders, the domain *Content Relevance, Labour Market Demand and Accuracy* was considered the most important (79.63%), followed by *Teaching Methods and Pedagogy* (75.31%) and *Institutional Reputation* (46.92%), ranked as the second and third priorities, respectively. *Learner-Centred Approach, Satisfaction and Success* obtained a moderate level of perceived importance (50.00%), while *Accessibility and Inclusivity* was rated as the least important domain (27.16%). Table 3 summarises these findings, showing stakeholders' prioritisation of domains in terms of perceived importance.

Table 3. Stakeholders' domain priorities

Domain	Perceived Importance (%)	Priority
1. Content Relevance, Labour Market Demand and Accuracy	79.63	1
2. Teaching Methods and Pedagogy	75.31	2
3. Accessibility and Inclusivity	27.16	5
4. Learner-Centred Approach, Satisfaction and Success	50.00	4
5. Institutional Reputation	46.92	3

3.1.1.3 Learners vs. stakeholders

When comparing learners' and stakeholders' views, both groups identified *Content Relevance, Labour Market Demand and Accuracy* as the most important domains (78.58% and 79.63% respectively), showing complete alignment in their top priority. Similarly, *Accessibility and Inclusivity* were consistently rated as the least important domain by both groups (25.65% for learners and 27.16% for stakeholders). Differences emerged in the remaining domains: while learners placed *Learner-Centred Approach, Satisfaction and Success* as their second priority (66.20%), stakeholders assigned it fourth place (50.00%). Conversely, stakeholders attributed greater importance to *Teaching Methods and Pedagogy*

(75.31%, second priority) and *Institutional Reputation* (46.92%, third priority), compared to learners' rankings of third and fourth, respectively. Table 4 summarises these comparative results, highlighting areas of convergence and divergence between both groups.

Table 4. Comparison between learners' and stakeholders' domain priorities

Domain	Perceived Importance (%)		Priority	
	Learners	Stakeholders	Learners	Stakeholders
1. Content Relevance, Labour Market Demand and Accuracy	78.58	79.63	1	1
2. Teaching Methods and Pedagogy	64.25	75.31	3	2
3. Accessibility and Inclusivity	25.65	27.16	5	5
4. Learner-Centred Approach, Satisfaction and Success	66.20	50.00	2	4
5. Institutional Reputation	31.83	46.92	4	3

3.1.2 Indicators priorities

3.1.2.1 Learners

Within the domain *Content Relevance, Labour Market Demand and Accuracy*, learners assigned the highest importance to *Accurate and up-to-date information* (90.47%), followed by *Specific requests for skills/micro-credentials* (80.95%) and *Stackability* (73.81%). *Additional QA/Labels* received lower relevance (40.47%) within this domain.

For *Teaching Methods and Pedagogy*, the indicator *Tutoring* reached the highest perceived importance (71.79%), while other indicators such as *Quality Assurance (ESG), Platform QA, Active methodologies, Student/staff ratio, Assessment methods used*, and *Virtual learning environment available* were also included, though without assigned priority values.

In the domain *Accessibility and Inclusivity*, *Recognition of prior learning* was perceived as the most important indicator (71.80%), followed by *Make-up/diversity of the student body* (66.66%). *Learner support services* and *Eligibility for grants/loans* shared equal importance scores (61.54%), both occupying the third position.

Concerning *Learner-Centred Approach, Satisfaction and Success*, the highest perceived importance was attributed to *Student ratings* (76.32%) and *Graduation rate* (76.31%), followed by *Student/graduate performance* (71.05%) and *Grade distribution* (55.27%).

Finally, in the domain *Institutional Reputation*, learners prioritised *Expertise of lecturers* (86.84%) as the most important indicator, followed by *Networks* (84.21%) and *Ranking* (81.58%). Other indicators, such as *Recognition history (direct)* and *Recognition history (skills),* were also considered, though without specified priority levels. Table 5 summarises these results, providing an overview of learners' perceived importance across all indicators within the five domains.

Table 5. Learners' indicators priorities

Domain	Indicator	Perceived Importance (%)	Priority
1. Content Relevance, Labour Market Demand and Accuracy	1.1 Accurate and up-to-date information	90,47%	1
	1.2 Demand for skills in micro-credentials		
	1.3 Specific requests for skills / micro-credentials	80,95%	2
	1.4 Stackability	73,81%	3
	1.5 Additional QA / Labels	40,47%	4
	1.6 Quality Assurance (ESG)		
2. Teaching Methods and Pedagogy	2.1 Quality Assurance (ESG)		
	2.2 Platform QA		
	2.3 Active methodologies: the most highly valued methodologies were Interactive quizzes (94,87%) and Hands-on simulations (92,31%)		
	2.4 Tutoring	71,79%	
	2.5 Student/staff ratio		
	2.6 Assessment methods used		
	2.7 Virtual learning environment available: the most highly valued was a Mix of Asynchronous and Synchronous (82,05%).		
3. Accessibility and Inclusivity	3.1 Make-up/diversity of the student body	66,66%	2
	3.2 Recognition of prior learning	71,80%	1
	3.3 Learner support services	61,54%	3
	3.4 Eligibility for grants/loans	61,54%	3
4. Learner-Centred Approach, Satisfaction and Success	4.1 Student ratings	76,32%	1
	4.2 Graduation rate	76,31%	2
	4.3 Student ratings of educators		
	4.4 Student/graduate performance	71,05%	3
	4.5 Grade distribution	55,27%	4
	4.6 Course description		
5. Institutional Reputation	5.1 Expertise of Lecturers	86,84%	1
	5.2 Ranking	81,58%	3
	5.3 Networks	84,21%	2
	5.4 Recognition history (direct)		
	5.5 Recognition history (skills)		

3.1.2.2 Stakeholders

Within the domain *Content Relevance, Labour Market Demand and Accuracy*, stakeholders rated *Accurate and up-to-date information* as the most important indicator, receiving full agreement (100.00%). This was followed by *Specific requests for skills/micro-credentials* (83.78%), while *Stackability and Additional QA/Labels* shared the third position with equal importance values (56.76%).

In the domain *Teaching Methods and Pedagogy*, *Tutoring* emerged as the highest-rated indicator (75.00%), whereas other items such as *Quality Assurance (ESG), Platform QA,*

Active methodologies, Student/staff ratio, Assessment methods used, and *Virtual learning environment available* were also considered, but without specified priority rankings.

Regarding *Accessibility and Inclusivity, Recognition of prior learning* was identified as the most relevant indicator (80.55%), followed by *Learner support services* (69.44%) and *Eligibility for grants/loans* (61.11%). *Make-up/diversity of the student body* obtained the lowest importance within this domain (52.78%).

For *Learner-Centred Approach, Satisfaction and Success*, stakeholders prioritised *Student/graduate performance* (83.34%) as the leading indicator, followed by *Student ratings* (80.56%) and *Graduation rate* (69.45%). *Grade distribution* (44.45%) was placed fourth.

Finally, in the domain *Institutional Reputation, Networks* received the highest perceived importance (97.23%), followed by *Expertise of lecturers* (91.67%) and *Ranking* (69.44%). Additional indicators such as *Recognition history (direct)* and *Recognition history (skills)* were also included, though without assigned priority. Table 6 summarises these findings, providing an overview of stakeholders' perceived importance across all indicators and domains.

Table 6. Stakeholders' indicators priorities

Domain	Indicator	Perceived Importance (%)	Priority
1. Content Relevance, Labour Market Demand and Accuracy	1.1 Accurate and up-to-date information	100,00%	1
	1.2 Demand for skills in micro-credentials		
	1.3 Specific requests for skills / micro-credentials	83,78%	2
	1.4 Stackability	56,76%	3
	1.5 Additional QA / Labels	56,76%	3
	1.6 Quality Assurance (ESG)		
2. Teaching Methods and Pedagogy	2.1 Quality Assurance (ESG)		
	2.2 Platform QA		
	2.3 Active methodologies: the most highly valued methodologies were Self-paced reading materials (95,51%) and Live webinars (90,12%).		
	2.4 Tutoring	75,00%	
	2.5 Student/staff ratio		
	2.6 Assessment methods used		
	2.7 Virtual learning environment available: the most highly valued was Mostly Asynchronous with Some Synchronous Elements (85,19%).		
3. Accessibility and Inclusivity	3.1 Make-up/diversity of the student body	52,78%	4
	3.2 Recognition of prior learning	80,55%	1
	3.3 Learner support services	69,44%	2
	3.4 Eligibility for grants / loans	61,11%	3
4. Learner-Centred Approach, Satisfaction and Success	4.1 Student ratings	80,56%	2
	4.2 Graduation rate	69,45%	3
	4.3 Student ratings of educators		
	4.4 Student/graduate performance	83,34%	1
	4.5 Grade distribution	44,45%	4
	4.6 Course description		

Domain	Indicator	Perceived Importance (%)	Priority
5. Institutional Reputation	5.1 Expertise of Lecturers	91,67%	2
	5.2 Ranking	69,44%	3
	5.3 Networks	97,23%	1
	5.4 Recognition history (direct)		
	5.5 Recognition history (skills)		

3.1.2.3 Learners vs. stakeholders

The comparative analysis between learners and stakeholders reveals several points of convergence across domains. In *Content Relevance, Labour Market Demand and Accuracy*, both groups aligned in their prioritisation of *Accurate and up-to-date information* as the most important indicator (90.47% for learners and 100.00% for stakeholders), as well as *Specific*

requests for skills/micro-credentials (80.95% and 83.78%) and *Stackability*, ranked third by both (73.81% and 56.76% respectively).

Within *Accessibility and Inclusivity*, both learners and stakeholders agreed on the highest importance of *Recognition of prior learning* (71.80% and 80.55%) and the consistent ranking of *Eligibility for grants/loans* as third. Differences were observed in *Make-up/diversity of the student body*, which was rated higher by learners (66.66%) than by stakeholders (52.78%).

In the domain *Learner-Centred Approach, Satisfaction and Success*, the indicator *Student ratings* held first position among learners (76.32%) but second among stakeholders (80.56%), whereas *Student/graduate performance* was rated as the top priority by stakeholders (83.34%) and third by learners (71.05%). *Grade distribution* remained the least important indicator for both groups (55.27% and 44.45%).

Finally, regarding *Institutional Reputation*, *Expertise of lecturers* and *Networks* were consistently rated among the top indicators, though their order differed: learners prioritised *Expertise of lecturers* first (86.84%) and *Networks* second (84.21%), while stakeholders reversed this ranking, giving *Networks* the highest importance (97.23%) and *Expertise of lecturers* the second position (91.67%). Ranking occupied the third position for both groups (81.58% and 69.44%). Table 7 summarises these results, highlighting the main areas of agreement and divergence in the perceived importance of indicators between learners and stakeholders.

Table 7. Comparison between learners' and stakeholders' indicators priorities

Domain	Indicator	Perceived Importance (%)		Priority	
		Learners	Stakeholders	Learners	Stakeholders
1	1.1 Accurate and up-to-date information	90,47%	100,00%	1	1
	1.2 Demand for skills in micro-credentials				
	1.3 Specific requests for skills / micro-credentials	80,95%	83,78%	2	2
	1.4 Stackability	73,81%	56,76%	3	3
	1.5 Additional QA / Labels	40,47%	56,76%	4	3
	1.6 Quality Assurance (ESG)				
2	2.1 Quality Assurance (ESG)				
	2.2 Platform QA				
	2.3 Active methodologies: the most highly valued methodologies were Interactive quizzes (94,87%) and Hands-on simulations (92,31%)				
	2.4 Tutoring	71,79%	75,00%		
	2.5 Student/staff ratio				
	2.6 Assessment methods used				
	2.7 Virtual learning environment available: the most highly valued was a Mix of Asynchronous and Synchronous (82,05%).				
3	3.1 Make-up/diversity of the student body	66,66%	52,78%	2	4
	3.2 Recognition of prior learning	71,80%	80,55%	1	1
	3.3 Learner support services	61,54%	69,44%	3	2
	3.4 Eligibility for grants/loans	61,54%	61,11%	3	3
4	4.1 Student ratings	76,32%	80,56%	1	2
	4.2 Graduation rate	76,31%	69,45%	2	3
	4.3 Student ratings of educators				
	4.4 Student/graduate performance	71,05%	83,34%	3	1
	4.5 Grade distribution	55,27%	44,45%	4	4
	4.6 Course description				
5	5.1 Expertise of Lecturers	86,84%	91,67%	1	2
	5.2 Ranking	81,58%	69,44%	3	3
	5.3 Networks	84,21%	97,23%	2	1
	5.4 Recognition history (direct)				
	5.5 Recognition history (skills)				

3.1.3 General results from questionnaires

Overall, the questionnaire results reveal a strong emphasis on the practical and labour market relevance of university micro-credentials across respondent groups. Both learners and stakeholders consistently prioritised the domain *Content Relevance, Labour Market Demand and Accuracy*, while *Accessibility and Inclusivity* received the lowest importance ratings.

Respondents showed particular concern for the accuracy and currency of information, recognition of prior learning and lecturer expertise, all of which were rated as the most important elements influencing the perceived value of micro-credentials. In contrast, aspects related to grade distribution and additional quality labels were considered comparatively less important .

These general findings indicate that both groups value the direct applicability, transparency, and credibility of micro-credentials, placing less emphasis on formal recognition mechanisms or institutional prestige.

3.2 Qualitative results

As previously explained, in addition to the quantitative data from the questionnaire, the study also included a qualitative phase based on focus groups conducted in the three participating countries. The results of this analysis are presented in three sections, each corresponding to one of the national contexts — the Basque Country, Germany, and Lithuania — in order to reflect the specific perspectives and experiences shared by participants in each setting. Finally, a fourth section summarises the general findings emerging across all countries, highlighting common trends and cross-national insights derived from the qualitative data.

3.2.1 Results from the Basque Country

The focus group discussion conducted in the Basque Country revealed several recurring themes that align closely with the predefined domains and indicators of quality.

3.2.1.1 Content Relevance, Labour Market Demand and Accuracy

Participants consistently emphasised the importance of up-to-date and relevant content, particularly in relation to current professional demands. Micro-credentials were seen as valuable when they addressed specific skill gaps and offered practical applicability in real-world contexts. The alignment with labour market needs was considered essential, especially for individuals seeking employment or career advancement. Additionally, the clarity of course objectives and ECTS credits was highlighted as a key factor in evaluating content quality.

3.2.1.2 Teaching Methods and Pedagogy

There was a strong preference for active and practical methodologies over passive learning formats. Participants valued courses that enabled them to "learn by doing" and apply knowledge directly to their professional tasks. The definition of learning objectives and assessment methods was considered crucial for transparency and engagement. Flexibility in delivery formats, including asynchronous options, was also appreciated, particularly for learners with limited availability. The presence of tutoring and personalised feedback was seen as a significant contributor to perceived quality.

3.2.1.3 Accessibility and Inclusivity

Focus group members recognised micro-credentials as a means of expanding access to higher education, especially for individuals without formal academic qualifications. The recognition of prior learning and flexible entry requirements were viewed as inclusive practices that enhance accessibility. Participants also valued learner support services, such as access to university resources and communication channels, which fostered a sense of belonging and continuity. The importance of diverse formats to accommodate different learner profiles and life circumstances was repeatedly emphasised.

3.2.1.4 Learner-Centred Approach, Satisfaction and Success

Satisfaction was closely linked to the practical relevance and personal applicability of the micro-credential. Participants expressed a desire for courses that were intuitive, adaptable to individual needs, and capable of delivering tangible outcomes. The clarity of course descriptions, including time commitment and expected results, was considered essential for informed decision-making. The impact on professional identity and competence development was highlighted as a key measure of success.

3.2.1.5 Institutional Reputation

The credibility of the institution and the expertise of the lecturers were important factors influencing course selection. Participants expressed greater trust in micro-credentials offered by recognised institutions or professionals with established reputations. The potential for collaboration between universities and industry was seen as a promising avenue for enhancing quality, combining academic rigour with market relevance. The value of certification, especially when payment was involved, was linked to the perceived legitimacy and recognition of the issuing body.

3.2.2 Results from Germany

The QualityLink domains and indicators were presented and discussed at two events at DHBW:

- at the DHBW Learning Festival on Feb 19, 2025, with a focus on stakeholders,
- with a group of 28 students on Oct 28, 2025, with a focus on learners.

In both groups, most participants had experience with online learning, but not yet with micro-credentials. The focus group discussions were preceded by an introduction to the concepts of micro-credentials, flexible learning pathways and an inter-institutional catalogue of learning opportunities.

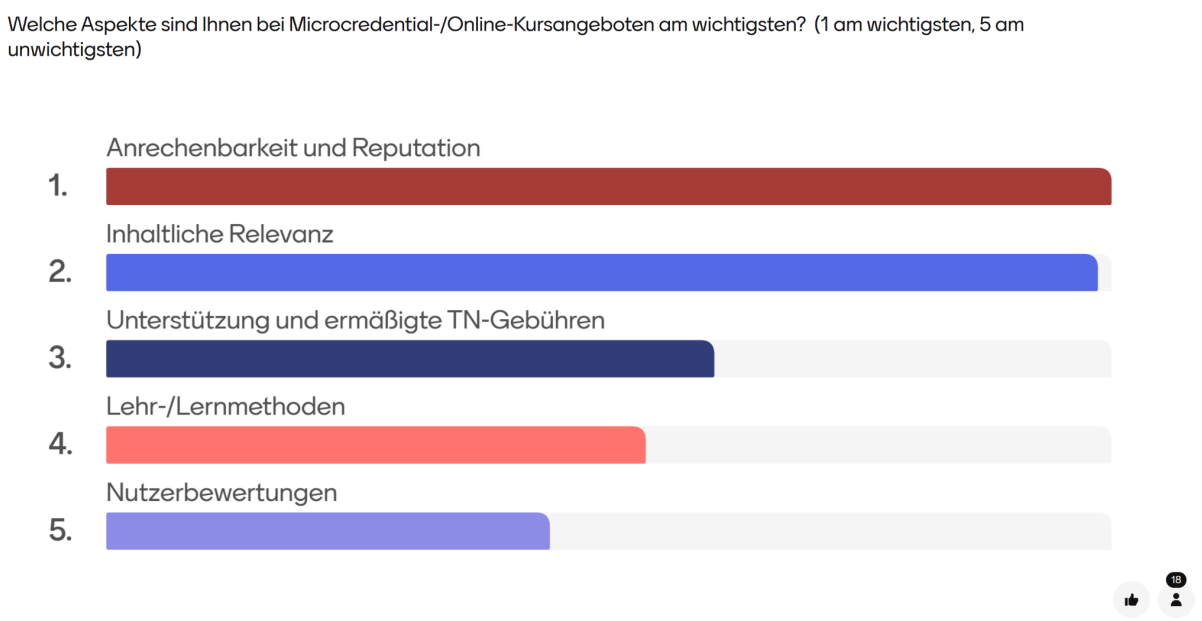
The purpose of the focus group was also to find blind spots, i.e., aspects that we as the project team might have missed in our proposal of quality domains and indicators. Therefore,

a free-text mentimeter question asked “Which information do you expect from an inter-institutional catalogue of learning opportunities?”

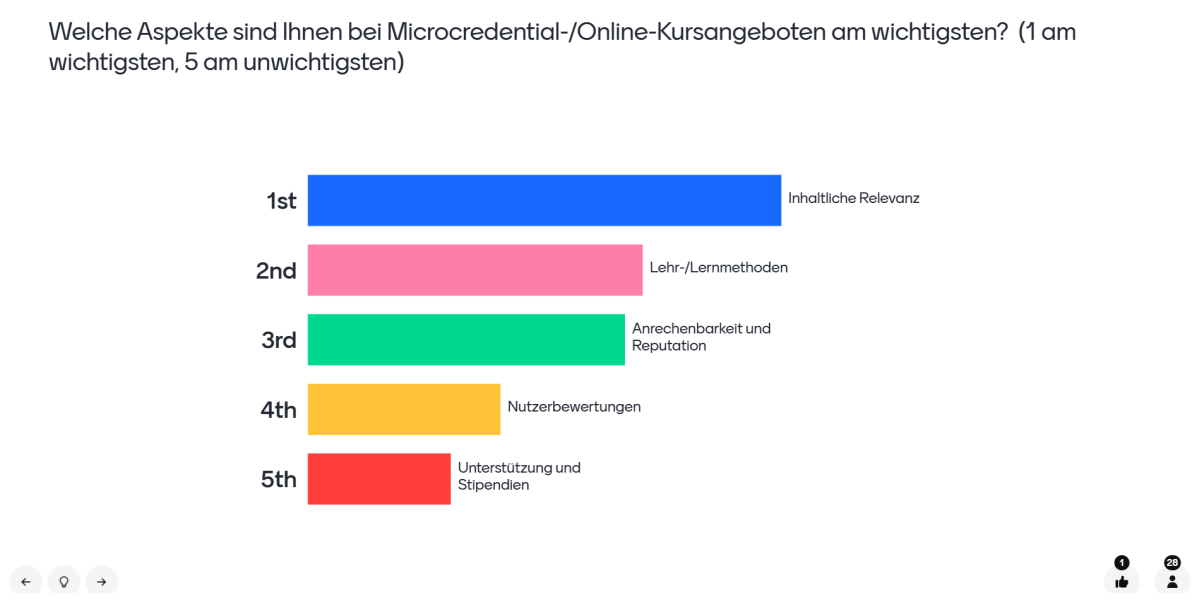
Learners (17 responses) put the practical aspects into the focus of their considerations. They voiced information needs on costs and benefits, workload, start/end date and recognition. They also mentioned integration into their study program, added value, language, learning outcomes, assessment and exchange.

Stakeholders (48 responses) in the focus group consisted of lecturers/professors, researchers and teaching support staff. They mostly expected information on learning outcomes, enrolment requirements and the workload of a learning opportunity. They also mentioned information needs on recognition, target groups, assessment, collaboration possibilities and cost, as well as individual recommendations for competence development.

A second mentimeter question at the focus groups asked respondents to rank the importance of the quality domains.



Learners (18 respondents) put Institutional Reputation in the first place, which also includes the aspect of recognizability of a credential. Content Relevance was the second most important, Accessibility and Inclusivity was the third one. Teaching Methods and Pedagogy were ranked in fourth place, and Learner-Centred Approach, Satisfaction and Success was considered least important.



Stakeholders (28 respondents), in contrast, ranked Content Relevance as most important, followed by Teaching Methods and Pedagogy. Institutional Reputation was ranked third,

followed by Learner-Centred Approach, Satisfaction and Success. Information on Accessibility and Inclusivity was ranked last by stakeholders.

The following five sections present the results from the focus group discussions.

3.2.2.1 Content Relevance, Labour Market Demand and Accuracy

Accurate and up-to-date information with clearly defined learning objectives was highlighted as the most important indicator. The quality of this information was considered indicative of the overall quality of the learning opportunity. Labour market demand for skills in micro-credentials was also given high importance, as well as Stackability.

3.2.2.2 Teaching Methods and Pedagogy

Participants pointed out the importance of assessment methods, because a rigorous assessment makes a credential more valuable. Equally, participants felt that ECTS credits and Quality Assurance would give additional value to the credential. Information about teaching methods was also considered important, although there was no clear preference regarding specific learning modes.

3.2.2.3 Accessibility and Inclusivity

Information needs around accessibility and inclusivity focus on the cost of a micro-credential and the information about financial support. Recognition of prior learning was also mentioned, as well as learner support services.

3.2.2.4 Learner-Centred Approach, Satisfaction and Success

Focus group members saw student ratings as the most important indicator, and pointed out that they wanted both: a quantitative five-star rating, but also written comments from previous learners as qualitative information on the course. An additional functionality that students wanted was the possibility to give feedback to the educators on the course, to enable iterative improvement based on feedback from learners.

3.2.2.5 Institutional Reputation

Information on the recognizability of a micro-credential was the most important indicator in this domain, so the indicators recognition history (direct) and recognition history (skills), were ranked highest, followed by expertise of lecturers and ranking.

3.2.3 Results from Lithuania

The focus group discussion conducted in Lithuania revealed several recurring themes that align closely with the predefined domains and indicators of quality.

3.2.3.1 Content Relevance, Labour Market Demand and Accuracy

The first and most important criterion for selecting a course leading to credentials was its topic – i.e. what the course is about or what competencies/skills it promises. This information is the most essential to be mentioned in the course description. Second, they emphasised that the micro-credential course is qualitative if the knowledge you receive is useful and reusable.

Other criteria that are also important, according to focus group participants, depend on the purpose of your learning or the purpose of the intended learning:

- If it is for self-learning, participants stressed that the most important element they would be looking for would be the lecturer.
- If it is more for official CPD/ your career, then the organisation which is delivering the course, and the information in the MC are more important. Participants mentioned that only if the course is important for your career, you would focus on what the employer or the labour market needs.

3.2.3.2 Teaching Methods and Pedagogy

The focus group participants agreed that it is very important to know how intensive the course is and if the course is delivered face-to-face or online. The mentioned teaching and assessment methods would let you know the learning intensity and the type of learner contribution needed. Thus, depending on the possibilities, a learner may choose if what is indicated suits his/her possibilities to attend and contribute.

The choice regarding face-to-face or online preferences may depend on the topic/personal/job-related needs, but knowing this info before the start is very important.

3.2.3.3 Accessibility and Inclusivity

Reflecting on the attended courses that can lead to micro-credentials, focus group participants stressed that more support is needed for an asynchronous course. And information about the support must be indicated both in the course and information before entering it.

The focus group participants also stressed the importance of the information indicated in the micro-credential, as well as the platform it is issued in/viewed in: if the received micro-credential is not valid after some time, or you cannot view it easily, it's really annoying.

Participants also indicated that the course location may be the deciding factor for a face-to-face course - if it is not convenient, it won't be chosen. Thus, the preference for online or face-to-face / synchronous or asynchronous may depend on the topics and possibilities to attend, but information about that is important to make decisions to choose the right learning opportunity.

3.2.3.4 Learner-Centred Approach, Satisfaction and Success

While choosing the course, the reviews by other course participants were indicated as very important, mentioning that if there are no reviews by former learners, the information about the course may be misleading.

Second, they found the information about the course significant in indicating the target group it is intended for. They also stressed that participants should be accepted based on this indicator, as the learners coming from different groups may not only find the course unsatisfactory, but also misleading.

3.2.3.5 Institutional Reputation

The institutional reputation was assessed as a diverse factor. If a learner is looking for opportunities for personal development, institutional reputation may not be a driving factor; in this case, the topic, the lecturer, and the type of learning would be more important. But if a person is focusing on courses for his/her career/CPD/responding to employer needs, the institution's quality indicator for the micro-credential course was mentioned as the next most important thing after topic selection.

3.2.4 General results from focus groups

Focus groups conducted across the three participating contexts revealed a set of recurring expectations regarding the quality of micro-credentials. Participants consistently emphasised the importance of clear, accurate and up-to-date information, particularly concerning course content, learning outcomes, workload and assessment. The relevance of courses to current labour-market needs and the possibility of building flexible learning pathways were frequently highlighted, underscoring the perceived value of stackability and transparency in course design.

Learners also placed importance on the learning experience, noting that information on teaching methods, delivery modes and the availability of tutoring or support is essential when deciding whether a course fits their personal and professional circumstances. Recognition-related aspects, particularly recognition of prior learning, were considered crucial for access and progression.

Finally, although institutional reputation was not prioritised consistently, participants across the three countries emphasised the importance of lecturer expertise and the overall credibility of the issuing institution when assessing the reliability of a micro-credential. They also considered the availability of student feedback or ratings useful for evaluating course quality, as well as the participation of the institution in different networks.

These common themes across contexts provide a coherent basis for understanding learners' priorities. They also inform the selection and refinement of the indicators discussed in the conclusions.

4 Conclusions

4.1. General mixed conclusions

Triangulating the quantitative and qualitative evidence provides a consistent picture of how learners perceive and prioritise quality indicators for micro-credentials. Students across the three participating contexts generally emphasised elements that help them make informed decisions about the value, credibility and relevance of a learning opportunity. This general pattern is consistent across countries, questionnaire data, and focus group discussions.

A first area of convergence relates to the importance of content relevance and labour-market alignment. Learners consistently prioritised the *Content Relevance, Labour Market Demand and Accuracy* domain. *Accurate and up-to-date information* (1.1) was the highest-rated indicator across the entire dataset, confirming that transparency and currency of course information are perceived as essential. Similarly, the high importance attributed to both *Demand for skills in micro-credentials* (1.2) and *Specific requests for skills / micro-credentials* (1.3) validates the decision to merge these two indicators into a single indicator.

A second area of agreement is the importance of indicators that improve the usability and long-term relevance of micro-credentials. *Stackability* emerges as a clearly appreciated characteristic, as it enables learners to build flexible pathways and accumulate learning in a meaningful way. Similarly, the *Recognition of prior learning* (3.2) indicator was consistently prioritised within the *Accessibility and Inclusivity* domain, reflecting learners' desire for recognition mechanisms that support mobility and modular education. In addition, within the *Learner-centred approach, Satisfaction and Success domain*, the *Student Rating* (4.1) indicator was identified as a significant measure of quality, as it provides prospective learners with evidence of previous participants' satisfaction and facilitates informed decision-making. Taken together, these findings justify leaving *Recognition of Prior Learning* (3.2), *Student Rating* (4.1) and *Recognition History (direct)* (5.4) unchanged.

The third area of convergence relates to aspects of support and educational quality. Within the *Teaching Methods and Pedagogy* domain, *Tutoring* (2.4) was one of the most valued indicators, particularly in the qualitative data, where learners emphasised the importance of guidance and personalised feedback. While institutional prestige is not the primary driver, the relevance attributed to *Expertise of lectures* (5.1) and *Networks* (5.4) within the *Institutional Reputation* domain highlights that learners consider the credibility and professionalism of teachers, instructors and the institution itself to be essential to their trust in the course.

Finally, the findings revealed clear lower-priority areas. Indicators such as *Additional QA/Labels* (1.5) and *Grade distribution* (4.5) were consistently rated as less important. Similarly, despite containing some highly valued indicators, the *Accessibility and Inclusivity* domain was ranked the lowest overall in the domain-level prioritisation process. This

suggests that, while certain aspects of inclusivity are important, others may play a more contextual or secondary role in learners' decision-making processes.

Overall, the findings reflect a coherent structure: learners prioritise the direct relevance, clarity, applicability and recognition potential of micro-credentials, while placing less emphasis on formal institutional or procedural characteristics. The alignment of these findings across countries and data sources provides a strong empirical basis for refining the set of indicators to be used in the pilot implementation.

4.2. Final proposal for priority domains and indicators

Based on the general conclusions above and the detailed analysis of domain and indicator ranking, the following refinements are proposed for the Quality-Link pilot implementation:

Firstly, the two indicators relating to labour-market demand, *Demand for skills in micro-credentials* (1.2) and *Specific requests for skills/micro-credentials* (1.3), should be combined to create a single, more coherent indicator reflecting external skills requirements. This reflects both the conceptual proximity of the items and learners' consistent interpretation of them as interconnected. In addition, the indicator *Accurate and up-to-date information* (1.1) should be retained, given its strong relevance to ensuring content accuracy and reliability.

Secondly, indicator *Quality Assurance (ESG)* (1.7) should be renamed to clearly distinguish it from indicator *Quality Assurance (ESG)* (2.1). The data indicate that learners perceive ESG-related information as relevant; however, the two indicators may be confused or perceived as overlapping. To address this, maintaining *Quality Assurance (ESG)* (2.1) should be maintained as a priority indicator, as it more reflects the learner perspective and aligns with the general conclusions drawn from the previous analysis. .

Thirdly, in line with learners' expressed expectations regarding recognition and pathway flexibility, the indicators *Recognition of Prior Learning* (3.2), *Student Ratings* (4.1) and *Recognition History (Direct)* (5.4) should be maintained without modification, as previously agreed, given their strong perceived relevance across groups and contexts.

Finally, the empirical findings suggest that several indicators that were not originally shortlisted for the pilot should be included due to their consistently high relevance scores. These are:

- *Stackability* (1.4), which is valued for enabling cumulative and flexible and cumulative learning pathways.
- *Tutoring* (2.4), reflecting the importance of guidance, support and personalised interaction.
- *Virtual learning environment available* (2.7), which is considered essential for providing structured access to resources and facilitating interaction in digital formats.

- *Expertise of Lecturers* (5.1), which is seen as a core element of trust, quality, and credibility.
- *Networks* (5.3), highlighting the significance of institutional collaboration to enhance credibility and create new opportunities.

Table 8 summarises the updated set of domains and indicators, incorporating the adjustments proposed in the conclusions section. The prioritised indicators have also been highlighted for better identification.

Table 8. Quality domains and indicators updated list

Domains	Indicators
1. Content Relevance, Labour Market Demand and Accuracy	**1.1 Accurate and up-to-date information**
	1.2 Demand for skills in micro-credentials
	1.3 Stackability
	1.4 Additional QA / Labels
	1.5 EQF Level specified
2. Teaching Methods and Pedagogy	**2.1 Quality Assurance (ESG)**
	2.2 Platform QA
	2.3 Active methodologies
	2.4 Tutoring
	2.5 Student/staff ratio
	2.6 Assessment methods used
	2.7 Virtual learning environment available
3. Accessibility and Inclusivity	3.1 Make-up/diversity of the student body
	3.2 Recognition of prior learning
	3.3 Learner support services
	3.4 Eligibility for grants/loans
4. Learner-Centred Approach, Satisfaction and Success	**4.1 Student ratings**
	4.2 Graduation rate
	4.3 Student ratings of educators
	4.4 Student/graduate performance
	4.5 Grade distribution
	4.6 Course description
5. Institutional Reputation	**5.1 Expertise of Lecturers**
	5.2 Ranking
	5.3 Networks
	5.4 Recognition history (direct)
	5.5 Recognition history (skills)

These adjustments, taken together, result in a refined set of indicators that is both empirically grounded and consistent with the project's objectives. The updated configuration will support the development of a micro-credential pilot that reflects learners' expectations, enhancing the clarity, relevance, and usefulness of the QualityLink framework.

The information in this report is based on participants' perceptions (learners and stakeholders). The final proposal for priority domains and indicators should be contrasted with hands-on experiences that nuance the context.

5 Appendix

5.1. Guideline for focus group discussions

Resources needed:

- Voice recorder
- Blank sheets of paper on the table, in case somebody wants to take notes.
- Pens

Duration (time): 60 minutes

Beginning: Contextualisation (10 minutes)

The researcher will introduce him/herself.

Introduction. Before we begin, we would like to thank you very much for your readiness to participate in this focus group. You have been selected because you have taken a micro-credential course offered by `[XXXXX, e.g. Mondragon Unibertsitatea]. Similar focus groups will also be carried out with other participants from other universities.

- **What do we want to analyse with these discussion groups?** Quality indicators of micro-credential courses that you, as students, can use to identify the quality of a micro-credential. This is a study within the framework of the Quality Link project of the European Erasmus+ call. The main objective of the project is to develop a comprehensive picture of the quality of micro-credential courses based on a set of indicators that are usually collected.

- **How will we achieve this?** By taking into account your opinions, perceptions, feelings and experiences. To do that, we will carry out this focus group in the next 50 minutes.

Clarify what a focus group is. As facilitator, I will propose some topics and you will have to express what you think, feel... about the topic. That is what you are asked to do, there are no right or wrong answers. You can say whatever you want, as long as you do it with respect for others... of course. So you can speak freely, expand on what others say, clarify it, express the opposite if that's the case.... In other words, it is not a question-answer dynamic; the topic will be placed on the table and you will share and enrich each other's opinions, experiences, perceptions... with others. We would be grateful if you could, please, take turns speaking, otherwise it will not be clear in the recording. Is it clear? Are there any questions?

Anonymity and confidentiality. Please keep in mind that everything that is said in this space will be anonymous and confidential.

What will the data be used for? The data from this research will be analysed by the research team of the Quality Link project. The results of the research will be used for the elaboration of the list of quality indicators of micro-credential courses and, if necessary, may be used in scientific publications or congresses, keeping your anonymity and confidentiality, and taking into account the ethical criteria required for research.

Permission for the recording and purpose of the recording. In order to record and analyse your discussions in the best possible way, this type of session is recorded, so do you agree to record and analyse this session under the conditions indicated? At certain moments I may take notes because I think it is necessary to take up some of what has been said, so as not to forget it, or to write down some ideas.

Reminder. Remember that the discussion group lasts approximately one hour. Remember to take turns speaking. And remember that the aim is to collect your opinions, experiences, perceptions, and feelings based on your experience. So speak calmly, because there are no right or wrong answers.

Breaking the ice: Introduction of participants (5 minutes)

To begin with, I propose a short round of introductions. I will ask you in turns...

- **Name, age and location**
- Level of education
- How did you find out about micro-credential courses?

Development: Issues and questions (45 minutes)

About previous experience

1. What are your experiences with micro-credential courses? What motivated you to enrol in them?

Experience and General Knowledge:

2. How would you describe your experience?
3. What criteria did you use when deciding to enrol in a micro-credential course?
    - Appropriateness of content, alignment with market demands, perceived self-efficacy, familiarity with the format and methodology....

Content and market demand:

4. How do you rate the usefulness and applicability of the content provided in a micro-credential course?

Learning methodologies and pedagogy:

5. How important is it to you that a micro-credential course clearly defines its learning objectives and assessment methods?

6. What didactic methods and modalities do you prefer in micro-credential courses (e.g. video lectures, interactive questionnaires, discussion forums, synchronous sessions, asynchronous work...)?

Accessibility and inclusion:

7. What obstacles have you encountered in accessing micro-credential courses?
8. What inclusive aspects (e.g. student support, accessibility to tutoring, variety of formats...) do you consider relevant when assessing the quality of a course and ensuring accessibility to the course?

Satisfaction and success:

9. Which indicators do you consider most important in assessing the quality of a micro-credential course (e.g. recognition of prior learning, student-centred learning, availability of scholarships, reputation of the institution offering the course...)?

General:

10. If you were to recommend a quality micro-credential course, what characteristics would you look for in it?

Closing (5 minutes)

- If a topic has not been covered in depth, go back to it again.
- Summarise what has been said, mentioning the important ideas.
- Offer the possibility to make final contributions... Add, underline, go deeper, ask if they want to take up an opinion.
- Thanking the participants for their contributions.