

D2.1: Learner Demand for Micro-Credentials. Insights from a Skills and Competency Survey.

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Executive Summary

Deliverable D2.1, prepared within the framework of the university alliance OpenEU, provides a comprehensive needs analysis that lays the groundwork for assembling an alliance-wide micro-credential portfolio. It summarises the key skills and competencies currently in demand, identifies the target audience, and outlines their preferences for flexible learning.

The analysis examines the skills and competencies currently prioritised across three interdisciplinary thematic areas, as outlined in the bullet points below:

- **Digital Transformation:** Learners report having a solid foundation in routine digital tasks, but also express a clear need for further training in advanced areas such as artificial intelligence, cybersecurity, and international networking.
- **Climate Emergency & Sustainability:** Respondents exhibit a strong theoretical understanding and reflective awareness of environmental impacts; however, they face challenges in translating this knowledge into concrete, actionable strategies.
- **Democracy & European Values:** Participants show a solid grasp of democratic principles and intercultural competence, but also highlight a need for additional support in applying these concepts to practical political analysis and active civic participation.

Overall, the analysis highlights the importance of bridging the gap between theory and practice. The findings will help guide the design of micro-credential courses that build on existing strengths while targeting specific areas for further skill development.

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1. Introduction

This document, Deliverable D2.1, has been developed as part of the university alliance OpenEU. It constitutes the initial phase of Subtask T2.2.1, titled “Flexible learning pathways through micro-credentials”. This subtask aims to develop a collectively recognized, alliance-wide portfolio of micro-credentials focused on three cross-disciplinary thematic areas: Digital Transformation, Climate Emergency and Sustainability, and Democracy and European Values. These micro-credentials can be earned as standalone units or integrated into traditional bachelor’s and master’s programs, thereby providing flexible learning pathways across the alliance.

To gain deeper insights into the target group and its current needs, this report provides a preliminary assessment of learners’ interest in educational offerings related to the topics mentioned above. The survey presented in this document was designed to identify the specific skills and competencies that European students must enhance to effectively address the evolving demands of both their professional and personal lives. In doing so, the report draws on key findings from the Erasmus+ project “Modularization of Continuing Education and Professionalization by Micro-Credentials (MCE).” The MCE project is an extensive collaborative initiative (2022–2025) involving ten leading European universities – including the current OpenEU partners FernUniversität in Hagen, Hellenic Open University, Open University of Cyprus, Open Universiteit, Universidade Aberta, Universitat Oberta de Catalunya and Universidad Nacional de Educación a Distancia. It explored modular, practice-oriented approaches to continuing education. These insights will directly inform the final assembly of the comprehensive micro-credential portfolio.

Following this introduction, the report is structured as follows:

Chapter 2 delivers background information, offers a summary of the MCE findings on learners’ preferences for micro-credential design and flexible learning, and gives an overview over the methodology used for the current survey. This section underscores the importance of identifying the specific skills and competencies needed in the areas of Digital Transformation, the Climate Emergency and sustainability, and Democracy and European values.

Chapter 3 presents the main results of the survey, detailing learners’ demand for additional learning opportunities and identifying the key competencies they require.

Chapter 4 consolidates these findings and underscores their importance as a preliminary stepping stone. These results lay the groundwork for future discussions that will ultimately shape the design and development of a comprehensive micro-credential portfolio.

2. Background and Methodology

2.1 Background and Key Findings from the MCE project

Recent years have witnessed a heightened emphasis on lifelong learning across the European higher education landscape, driven by the need for continuous reskilling and upskilling to keep individuals' competencies aligned with evolving demands (cf. European Commission, 2025, p. 1-2). This trend ongoing changes in the labour market, shaped by technological advancements, sustainability concerns, and the need to respond to climate change. In this dynamic context, flexible learning opportunities have become essential and play a key role in helping individuals keep pace with shifting societal and professional expectations.

Complementing these broader trends, micro-credentials have emerged as a promising tool to offer modular, practice-oriented learning experiences which address specific skills and competencies. These compact learning units enable learners to acquire targeted knowledge and skills tailored to their personal educational and career aspirations while also addressing the demands and expectations of the labour market. To clarify the term micro-credential, the European Commission has proposed the following definition:

“Micro-credential means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competencies that respond to societal, personal, cultural or labour market needs. Micro-credentials are owned by the learner, can be shared and are portable. They may be stand-alone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity.” (Council of the European Union, 2022, p.13)

The project “Modularization of Continuing Education and Professionalization by Micro-Credentials (MCE)” (2022–2025) provided valuable insights into how micro-credentials are perceived by a broad spectrum of learners, encompassing not only students in traditional degree programs but also participants in part-time continuing education. MCE's scope ranged from a systematic investigation of learners' expectations, needs, and preferences – ensuring that micro-credential formats are genuinely learner-centric – to pilot studies on modularization and micro-credentialing. In particular, the findings shed light on flexible learning preferences, clarifying which modular and adaptable formats are best-suited to the diverse demands of today's educational and professional environments. Moreover, analysis reveals that although the term “micro-credential” is not yet uniformly recognized among learners, it is commonly understood as referring to modular, practice-oriented learning formats comparable to traditional forms of continuing education. Key insights reveal that learners value flexibility, official university certification, and the support of teachers and peers. In practical terms, learners favoured delivery formats typically designed to span 1–3 months which take place predominantly online: approximately 59% preferred fully online courses

over face-to-face or blended options. In the online learning domain, a blended asynchronous/synchronous approach emerged as the most common preference, with nearly half of respondents favouring mixed formats and the remainder preferring fully asynchronous options. Scheduling preferences also leaned clearly towards weekend and evening courses, reflecting the need for compatibility with working professionals' routines (cf. Antonaci, Bruguera, Fitó & Pagés, 2023a, p. 20-21).

Furthermore, the results suggested that many learners are willing to pay for such courses, although the willingness to invest financially often depends on whether their motivation is driven by immediate professional needs or personal interest (cf. Antonaci, Bruguera, Fitó & Pagés, 2023a, p. 26). In terms of format, the data reflected a strong preference for part-time involvement – over 90% of participants preferred a commitment that is integrated alongside their other responsibilities (cf. Antonaci, Bruguera, Fitó & Pagés, 2023a, p. 21). These insights not only provide a comprehensive view of current learner preferences – ranging from course format and scheduling to financial commitment – but also highlight a gap: while universities are encouraged to prioritise modularity, flexibility, and rigorous quality assurance (cf. Antonaci, Bruguera, Fitó & Pagés, 2023b, p. 8-9), the specific topics, skills and competencies most urgently required have yet to be clearly identified. It is precisely this gap that our current survey aims to address.

2.2 Conceptualizing Skills and Competencies

To determine which skills and competencies are in demand among university learners, it is essential first to clarify these key concepts and explore their interrelationships. Over the years, educational and pedagogical scholarship – and debates across various disciplines – has grappled with the definitions and models of “skill” and “competence”, leading to several approaches in conceptualizing these terms. One influential model, derived from the European Commission’s framework *Key Competencies for Lifelong Learning* (published in 2018 and 2019), defines competence as a holistic concept comprising three interdependent components: knowledge, skills, and attitudes. Here, knowledge refers to the established concepts, theories, facts, and figures that form the foundation of a subject area; skills denote the capacity to apply this knowledge through practical processes to achieve concrete results; and attitudes refer to the dispositions or mindsets that shape how individuals engage with, adopt, or react to ideas.

This conceptualization is particularly noteworthy because it not only delineates the constituent elements of competence but also highlights their dynamic interplay. Although the original model identifies eight key competencies, its true utility for our purposes lies in articulating the relationship between broad competence and specific skills needed by learners. Furthermore, recent trends have moved toward a more granular classification. For example, the *European Skills Agenda* – along with its accompanying ESCO classification – currently distinguishes over 13,000 distinct domains of knowledge, skills, and competencies. In this detailed taxonomy, the previously clearly defined hierarchical separation between general

competencies and their individual skill components becomes less pronounced, enabling a more nuanced and operational framework for research.

Building on these theoretical insights, the next step was to translate this conceptual framework into a concrete research design capable of encapsulating the current demand for micro-credential courses among the OpenEU learners.

2.3 Survey Design and Implementation

There are several strategies for operationalizing the research required to identify in-demand skills and competencies. For example, job advertisements can be analysed to determine the most sought-after skills, or the educational focus areas of OpenEU alliance institutions can be examined. For this study, a direct survey of learners at the participating universities was selected, yielding primary data on self-assessed proficiency while highlighting specific gaps across the overlapping themes of Digital Transformation, Climate Emergency and Sustainability, and Democracy and European Values.

The survey instrument was structured around the three interrelated components of competence – knowledge, skills, and attitudes – and was specifically tailored for OpenEU learners. Respondents were asked to evaluate their current level of theoretical understanding (knowledge), their ability to apply this foundation in practical contexts (skills), and their willingness or predisposition to address emerging challenges (attitudes) with respect to three thematic areas: Digital Transformation (Topic 1), Climate Emergency and Sustainability (Topic 2), and Democracy and European Values (Topic 3).

The questionnaire combined quantitative elements, utilizing standardized Likert scales to capture variations in strengths and developmental needs, along with one open-ended question for each of the three topics. The questions were designed to invite qualitative insights into learners' experiences, topic preferences, and learning needs.

The quantitative items are framed as positively worded statements. For example, Item 1 reads: "I feel confident in using digital technologies to succeed in an increasingly technology-driven work environment." This statement is designed to measure a proactive approach to digital technologies (observed phenomenon), thereby intertwining both the skill and attitude dimensions of competence. As such, the respondents' agreement reflects both their perceived technical aptitude and their readiness to embrace new challenges.

Recognizing that it is unfeasible to assess the entire spectrum of skills and competencies (as outlined in broader frameworks such as the ESCO classification), the quantitative sections of the survey focused on a targeted selection of items that encapsulate essential thematic aspects. For instance, within the Digital Transformation domain, items related to digital tools and artificial intelligence were prioritized, while in other areas, key skills such as critical thinking were considered essential.

To identify the skills and competencies sought after by learners, a self-report approach was employed to directly tap into their perceptions and experiences. This method efficiently gathers rich, first-hand insights on both proficiency and personal attitudes, ultimately providing a comprehensive picture of perceived strengths and developmental needs. Such an approach is particularly valuable for generating context-specific data relevant to the educational focus areas within the OpenEU alliance.

Furthermore, while the survey design was inspired by established frameworks such as the ESCO classification and Futures Literacies models, the items and subsequent competence classifications were independently developed to generate exemplary items that are applicable across multiple models.

Data was collected entirely online using random sampling techniques, which made it possible to collect a broad range of respondent perspectives. The survey was open from 11 March to 25 March 2025, during which 1,023 students from all 10 OpenEU beneficiaries took part – a cohort representing a total student population of approximately 238,000. Demographic information, including age groups, types of education, and study models, is provided in the appendix on p. 29. Additionally, significant age-related differences were observed in relation to lifelong learning across all three topics, which are examined more closely in the subsequent chapter. In cases where other aspects – notably the types of education – revealed interesting variations, these are briefly addressed within their respective thematic sections.

Quantitative results were examined using descriptive statistical methods, with each question clearly indicating the predominant competence dimension assessed (knowledge, skill or attitude). Qualitative responses were analysed by grouping the themes emerging in the free-text answers and manually counting their frequency.

3. Topic Areas and Survey Results

Respondents consistently showed strong agreement with the positively worded items in the survey across all closed sections. For nearly all statements, the most frequent response was a Likert value of 4 (on a 5-point scale), a trend that was consistent across all age groups, as well as among bachelor and master students, and professionals enrolled in continuing education programs. The second-highest number of responses emerged for the values of 3 or 5 for each item, yielding mean scores of around 4 (± 0.5) for each question. As detailed below, notable deviations were observed within the topic of “Climate Emergency and Sustainability”.

The free-text responses provided for each topic revealed distinct preferences and showcased a broader range of response behaviours.

For each topic, the results are presented sequentially: first, a presentation of the closed-ended survey items; second, a qualitative evaluation of the open-ended responses; and third, a discussion of the conclusions that can be drawn from these findings.

3.1 Topic 1: Digital Transformation

3.1.1 Quantitative Findings

In this section, we examine competencies in Digital Transformation through a set of nine closed-ended Likert-scale items. These items were designed to reveal the respondents’ self-assessed confidence, knowledge, skills, and attitudes regarding Digital Transformation. In all parts of the survey, responses were recorded on a 5-point scale (with “Strongly agree” coded as 5 and “Strongly disagree” as 1).

Incomplete responses were excluded from the analysis. Table 1 below summarizes the ranked mean values for each item, providing a quantitative snapshot of Digital Transformation competencies.

Ran-king	Item	Statement	Observed phenomenon	Dimension	Mean Value
1	1	<i>I feel confident in using digital technologies to succeed in an increasingly technology-driven work environment.</i>	Proactive approach to digital technologies	Skills & Attitude	4.63 (N = 901, Range: 1-5)
2	8	<i>I have the skills to use digital tools to improve collaboration with others.</i>	Digital technologies for collaboration	Skills	4.10 (N = 900, Range: 1-5)
3	9	<i>I feel confident and competent in using digital technologies to address challenges I face at work.</i>	Addressing challenges using digital solutions	Skills & Attitude	4.05 (N = 901, Range: 1-5)
4	5	<i>I have the appropriate skills to use digital tools and media specifically for the organization and design of my learning</i>	Practical tool use	Skills	4.03 (N = 901, Range: 1-5)

5	7	<i>I feel able to use digital technologies for intercultural communication.</i>	Communication across cultural barriers	Skills & Attitude	4.02 (N = 900, Range: 1-5)
6	2	<i>I have a deep understanding of the opportunities and risks of digital transformation in the labour market.</i>	Understanding the impact of digitalization on labour markets	Knowledge	4.01 (N = 901, Range: 1-5)
7	3	<i>I feel well prepared to assess the opportunities and risks of digital change on society.</i>	Digital Literacy & Critical Thinking	Knowledge & Attitude	3.74 (N = 900, Range: 1-5)
8	4	<i>I am familiar with the various applications of artificial intelligence relevant to my profession.</i>	Application of AI in professional contexts	Knowledge	3.60 (N = 901, Range: 1-5)
9	6	<i>I have the appropriate digital skills to build international professional networks.</i>	Building international professional networks	Skills	3.40 (N = 901, Range: 1-5)

Table 1: Ranked mean values for the Digital Transformation items

The highest levels of agreement were observed for items reflecting personal confidence in practical tasks, such as using digital technologies for problem-solving (Item 1, 4.63) and collaboration (Item 8, 4.10). Items addressing abstract or strategic areas, such as societal risk assessment (Item 3, 3.74) and AI knowledge (Item 4, 3.60), showed moderate agreement. International networking skills received the lowest rating (Item 6, 3.40), indicating limited confidence in this specific area.

3.1.2 Qualitative Findings

Overall, the responses regarding topic preferences related to Digital Transformation align with the findings discussed earlier: the moderate score for the AI-related item in section 3.1.1 is also reflected in the free-text responses. Many participants emphasized the need for more targeted teaching and learning opportunities in this regard (“use of AI in my field of study”; “I would like educational programs to incorporate the use of AI as a tool in building skills, doing research, work and study more efficiently”; “How do we ensure our employees are continuously upskilled in AI and digital technologies?”) while, at the same time, revealing a variety of other topics.

For this analysis, topic requests derived from a total of 196 free-text responses have been manually counted, organized into thematic clusters and listed below (ranked by their number of occurrences).

- Technology and Security:
 - AI (General) (93 mentions)
 - Safety (31 mentions)
 - Risks (unspecified) (16 mentions)
 - Cybersecurity (10 mentions)
 - Trustworthy Tools/Sources (3 mentions)
 - Data Security/Privacy (2 mentions)

- Application-Oriented Dimensions:
 - Data Processing and/or Data Architecture (15 mentions)
 - Digital Tools for Collaboration (10 mentions)
 - Intercultural/International Communication (7 mentions)
 - Digital Collaboration (general) (3 mentions)
- Societal and Ethical Dimensions:
 - Implications for Society and Communities (9 mentions)
 - Ethics (9 mentions)
 - Governance (General) (7 mentions)
 - Legal Aspects (5 mentions)
 - Public Sector Applications (3 mentions)
- Education and Professional Contexts:
 - AI in Education/Teaching/Schools (16 mentions)
 - Studies and Academic Work/Research (10 mentions)

Despite the diverse range of interests and concerns expressed by learners, the responses from this survey clearly highlight a strong interest in AI and its applications, particularly in areas such as security (“How can we use AI to enhance threat detection and risk management?”), education and professional tools (“How can AI tools be leveraged to optimize workflows and decision-making?”; “What role should AI play in recruitment and talent management?”). In fact, these findings are in line with the World Economic Forum’s Future of Jobs Report 2025, which identified rising skills where AI and Big Data took first place with an 87% net increase, followed by Networks and Cybersecurity at 70%, and Technological Literacy at 68% (cf. World Economic Forum (2025): Future of Jobs Report 2025, p. 37).

While ethical and societal dimensions were acknowledged in the survey, they received fewer mentions, indicating that these topics may be emerging areas of concern rather than immediate priorities for most respondents.

3.1.3 Implications

This section of the survey was designed to examine learners’ competencies in the field of Digital Transformation and to identify areas where further training might be needed.

One hypothesis posited that even in situations where a solid foundation of basic knowledge was already in place, there may still be a need to develop applied skills; specifically, the practical implementation of this knowledge. The results, however, revealed a more nuanced picture: many respondents provided a very positive self-assessment of their abilities in handling digital technologies. At the same time, uncertainties emerged when they were asked to situate Digital Transformation within broader societal contexts. It can be assumed that this discrepancy between expected and generated results is partly due to the design of the questions: respondents’ replies may be linked to the use of the broad and unspecified term “digital” in the survey, which allowed for a wide range of interpretations. Many respondents seemed to associate “digital” predominantly with familiar software

tools or devices that they routinely use without necessarily understanding the underlying technical intricacies.

Consequently, positive self-assessments regarding the practical application of knowledge seem mostly to reflect confidence in routine, e.g. applied digital practices, rather than advanced or abstract technological expertise. In fact, when confronted with tasks that required a deeper or more technical evaluation of digital competencies (for example, when asked to explore emerging trends like AI or specialized fields such as cybersecurity), this self-assurance diminished noticeably. While the data in its present form is not sufficient to fully verify this assumption, the observed pattern suggests that the initially positive ratings may be partly attributed to respondents' potential low-threshold, practice-oriented interpretation of "digital".

Based on these observations, the findings described above may be tentatively contextualized within three overarching perspectives:

- **Technological Dimension:** Respondents expressed significant interest in the capabilities and implications of emerging technologies. For example, artificial intelligence was mentioned 93 times and data processing 15 times. Nevertheless, quantitative results indicate only moderate familiarity with AI (Item 4, scoring 3.60), suggesting a potential gap between the high levels of interest and deeper technical expertise. Furthermore, safety-related concerns, noted in 31 mentions, imply that data security and risk assessment might need to be integrated more comprehensively within technology understanding. This pattern suggests that while enthusiasm for technological innovation is apparent, the underlying technical mastery remains variable.
- **Societal and Cultural Dimension:** Themes such as ethics (9 mentions), broader societal implications (9 mentions), and governance (7 mentions) underscore the importance of critically reflecting on the societal impact of digital transformation. Despite being mentioned less frequently, these topics indicate a possible need for educational initiatives to foster stronger critical thinking and societal awareness – especially considering that Item 3 ("assess opportunities and risks of digital change on society") achieved a moderate mean score of 3.74. This contrast implies that although respondents recognize the extensive influence of digital transformation, deeper engagement with its ethical and societal dimensions may be warranted.
- **Application-Oriented Dimension:** The survey also reveals a robust orientation towards practical, everyday applications of digital technologies. High ratings for items like Item 8 (collaboration, scoring 4.10) and references to tools for international communication (7 mentions) and collaboration (10 mentions) underscore a strong affinity for routine digital practices. However, lower performance in areas such as networking (Item 6, scoring 3.40) indicates that, despite overall confidence, specific skill gaps persist – particularly in professional and intercultural contexts – which could be addressed through more targeted training.

3.1.4 Differences in Participant Characteristics: Age Groups

The survey results reveal a nuanced picture of respondents' competencies, knowledge and attitudes toward digital transformation. Given the vital role of digital skills in the context of lifelong learning, this section focuses solely on differences across age groups. Across all age groups, high confidence in fundamental digital skills, such as problem-solving and collaboration tools, was a recurring theme. Items addressing the practical use of digital tools (Fig. 1: Item 5) showed consistently high scores, with minimal generational differences. When answering questions about their confidence in proactively approaching digital technologies (Fig. 2: Item 1), learners from 30–39 years and from 50–59 years showed even more self-confidence than those in other age groups. Areas such as AI knowledge (Fig. 3: Item 4) and intercultural communication skills (Fig. 4: Item 7) revealed more variability between generations. Younger respondents, particularly those aged 20–29, were more likely to express stronger agreement with statements about AI knowledge, reflecting greater familiarity or enthusiasm for emerging technologies. Older respondents (60+) demonstrated cautious optimism, with their responses frequently concentrating around moderate agreement, especially on more specialized competencies such as networking.

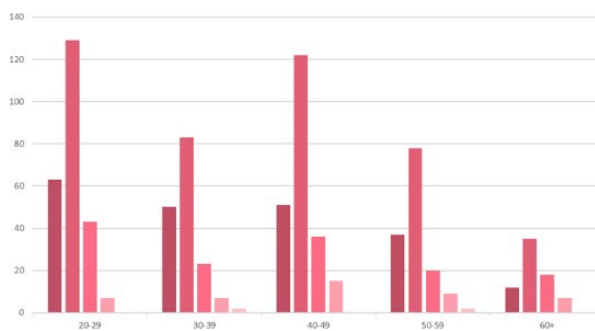


Fig. 1: Item 5
Practical tool use

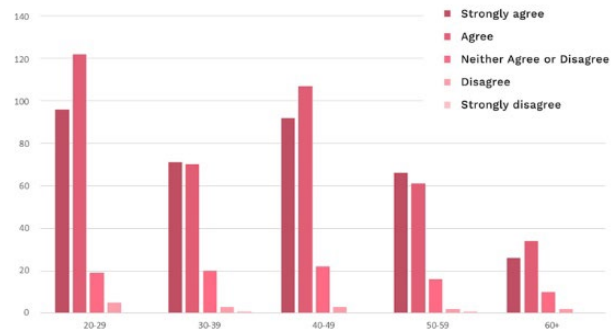


Fig. 2: Item 1
Proactive approach to digital technologies

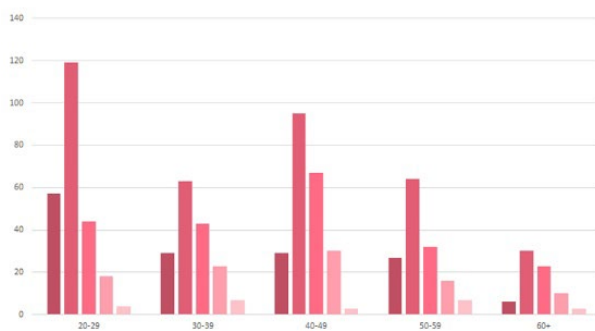


Fig. 3: Item 4
Application of AI in professional contexts

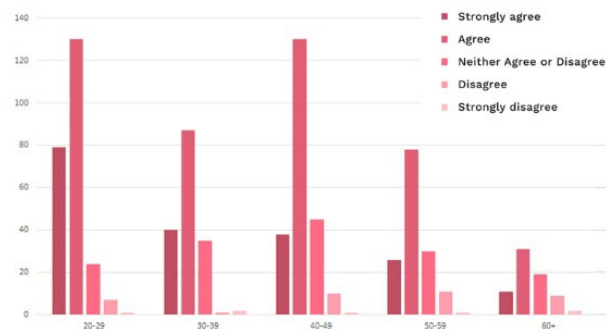


Fig. 4: Item 7
Communication across cultural barriers

Qualitative insights further highlighted themes that resonated across generations, including interest in AI applications, cybersecurity and collaboration tools. While the open-ended responses did not explicitly link these themes to specific age groups, a general emphasis on both practical tools and ethical considerations emerged. These findings underline the importance of tailoring educational initiatives: younger participants may benefit from a stronger emphasis on critical thinking and societal implications of technology, while older participants could gain from targeted support in mastering advanced tools like AI and strengthening professional networking abilities.

3.1.5 Conclusions

The data collectively indicate that respondents seem to be confident in routine technological practices but face challenges in applying knowledge to more complex or abstract areas. The overlap between quantitative and qualitative results reveals two primary areas of focus for a micro-credential portfolio for this topic area:

- **Enhancing Knowledge:** Addressing gaps in understanding AI, data security and societal impacts.
- **Improving Skills:** Strengthening practical competencies in networking, collaboration and intercultural communication.

These findings might indicate a need for courses that combine theoretical insights with practical exercises, enabling respondents to navigate both familiar technologies and emerging challenges effectively.

3.2 Topic 2: Climate Emergency and Sustainability

3.2.1 Quantitative Findings

Following the methodology established for Topic 1, this section investigates the domain of “Climate Emergency and Sustainability” using nine corresponding Likert-scale items. In line with the “Key Competences for Lifelong Learning” (2019) framework, competencies are viewed as an interplay of knowledge, skills, and attitudes. Each item was rated on the same 5-point scale, and non-responses were omitted from the calculations. Table 2 below presents these items ranked from the highest to the lowest mean value, along with a brief indication of the core competency areas and dimensions they address.

Ran-king	Item	Statement	Observed phenomenon	Dimension	Mean Value
1	12	<i>I can critically reflect on my behaviour and my consumption habits in relation to the climate crisis.</i>	Critical Reflection on Personal Sustainability Practices	Knowledge	4.04 (N = 840, Range: 1-5)
2	11	<i>I believe that the climate crisis and environmental awareness should be more strongly integrated into interdisciplinary educational programs.</i>	Advocacy for Greater Integration of Environmental Issues in Education	Attitude	3.99 (N = 840, Range: 1-5)
3	10	<i>I have a good understanding of the global impact of the climate crisis on society and our coexistence in Europe.</i>	Awareness of Global Environmental Impacts	Knowledge	3.95 (N = 840, Range: 1-5)
4	18	<i>I feel able to think in a future-oriented way and act with foresight.</i>	Future-Oriented and Strategic Thinking	Skills & Attitude	3.89 (N = 839, Range: 1-5)
5	16	<i>I have a good understanding of how technological developments contribute both to the challenges and solutions of the climate crisis.</i>	Understanding of Technological Influences on Climate Challenges and Solutions	Knowledge	3.63 (N = 839, Range: 1-5)
6	15	<i>I have the necessary skills to act sustainably and climate-consciously in my job.</i>	Sustainable and Climate-Conscious Workplace Skills	Skills	3.56 (N = 839, Range: 1-5)
7	17	<i>I am capable of interdisciplinary thinking to develop collaborative solutions to complex environmental problems.</i>	Interdisciplinary Thinking for Collaborative Problem-Solving	Skills	3.47 (N = 839, Range: 1-5)
8	13	<i>I feel well prepared to actively tackle the challenges of the climate crisis in my professional activity.</i>	Climate Action Skills in Professional Contexts	Skills & Attitude	3.45 (N = 840, Range: 1-5)
9	14	<i>My education has equipped me with skills to find solutions to environmental problems and the climate crisis.</i>	Environmental Problem-solving Skills	Skills	3.12 (N = 839, Range: 1-5)

Table 2: Ranked mean values for the Climate Emergency and Sustainability items

In contrast with the Digital Transformation section, in which respondents demonstrated very high self-confidence (with the top item reaching a mean of 4.63), Climate Emergency and Sustainability shows a noticeably lower peak at 4.04. What, then, accounts for this difference?

The ranked results reveal a clear pattern in respondents' self-assessed competencies. Notably, Item 12 (assessing the ability to critically reflect on one's behaviour and consumption habits) registers the highest mean value (4.04), indicating strong self-awareness in personal sustainability practices. This is closely followed by Item 11 (mean = 3.99) and Item 10 (mean = 3.95), which respectively point to a high level of support for integrating environmental issues into education and a solid awareness of global environmental impacts. In contrast, items requiring practical application of strategies, such as Item 14 (Environmental Problem-Solving Skills, mean = 3.12) and Item 13 (Professional Climate Action Skills, mean = 3.45), score considerably lower. These findings suggest that while learners feel confident in their understanding and reflective capacities, they perceive a gap when it comes to translating this knowledge into tangible, workplace-relevant actions. Moreover, competencies requiring interdisciplinary thinking and strategic foresight (Items 18, 16, and 17) exhibit moderate mean values, indicating an area where targeted training could enhance the practical application of these skills.

3.2.2 Differences in Participant Characteristics: Age Groups and Types of Education

While the survey was focused on climate and sustainability, an intriguing interplay emerges when the data is disaggregated by age, revealing not only expected age-related differences but also early indications of distinctions in types of education. For instance, regarding "Advocacy for Greater Integration of Environmental Issues in Education" (Fig. 5, Item 11), respondents in their 20s, 30s and 40s tended towards "strongly agree" (Likert 5), while among 30-year-olds there was noticeable drop-off with "agree" (Likert 4) and those aged 50 and above shifted slightly more toward this moderate stance. By contrast, on "Future-Oriented and Strategic Thinking" (Fig. 6, Item 18), a Likert score of 4 dominated across all age groups; yet while the 20–29 cohort's subsequent rating peaked at the highest level, the older respondents (from 30 onward) tended to register more neutrally, with "neither agree nor disagree" (Likert 3) as their second most frequent choice. Interdisciplinary thinking (Fig. 7, Item 17) presents a similar nuance: the youngest participants (20–29) exhibited somewhat lower confidence compared to their older counterparts – a trend further underscored by the differentiation between bachelor's and master's students (Fig. 8, Item 17), where bachelor's students felt less secure. When it comes to feeling "well prepared to actively tackle the challenges of the climate crisis in my professional activity" (Figs. 9 and 10, Items 13 & 14), the age groups 20–29 and 50–59 reported the highest readiness, with the bulk of votes leaning toward "agree" (Likert 4) and a close secondary frequency for neutrality (Likert 3), whereas respondents in the 30–49 and above-60 brackets more frequently endorsed a neutral stance.

Finally, regarding "Environmental Problem-Solving Skills" (Fig. 10, Item 14), the age group 30–39 stood out by awarding the highest confidence (Likert 5) by a significant margin; in contrast, the 20–29 group's ratings were more evenly distributed between Likert 4 and 5, the 40–49 cohort exhibited a more heterogeneous pattern – with a leading vote for Likert 5 yet a notable share for Likert 3 – and for those

aged 50 and older the responses revealed a nearly uniform descending pattern from Likert 5 to 4 to 3.

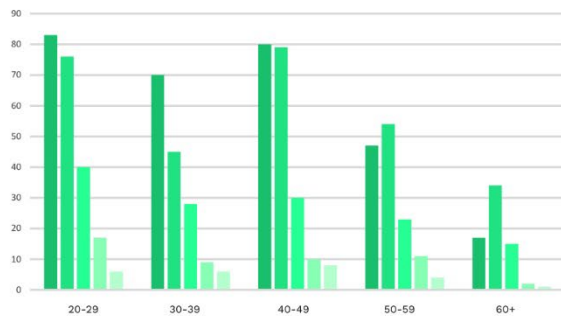


Fig. 5, Item 11: Age
Advocacy for Greater Integration of Environmental Issues in Education

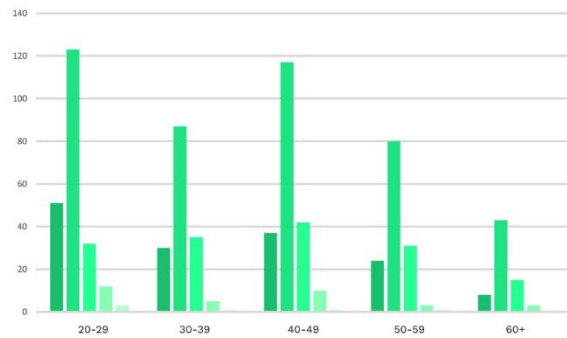


Fig. 6, Item 18: Age
Future-Oriented and Strategic Thinking

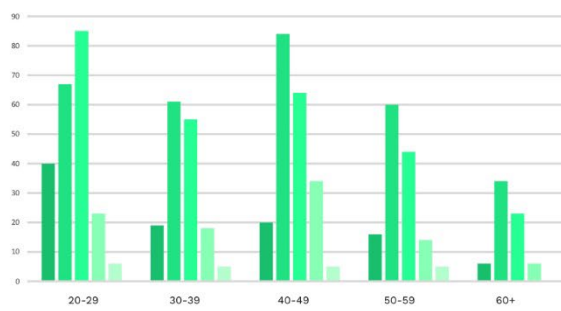


Fig. 7, Item 17: Age
Interdisciplinary Thinking for Collaborative Problem-Solving

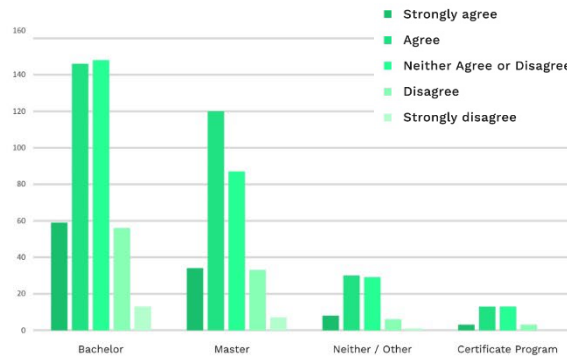


Fig. 8, Item 17: Types of Education
Interdisciplinary Thinking for Collaborative Problem-Solving

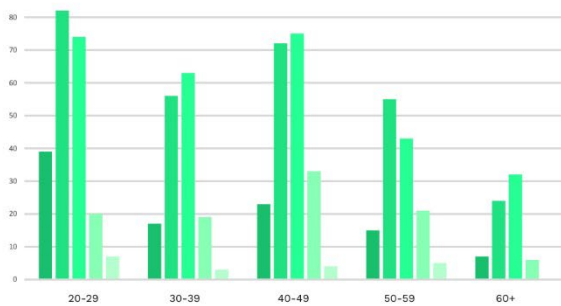


Fig. 9, Item 13: Age
Climate Action Skills in Professional Contexts

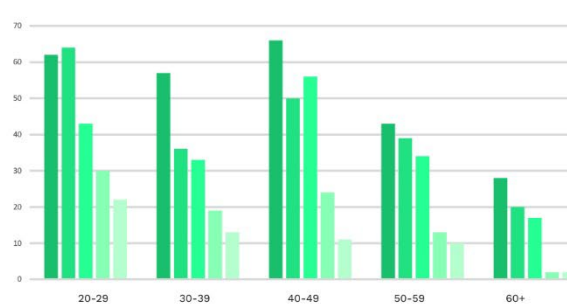


Fig. 10, Item 14: Age
Environmental Problem-solving Skills

This nuanced differentiation not only underscores the varied perspectives across generations but also hints at the complex interactions between educational experience and self-perceived competencies in addressing environmental challenges.

3.2.3 Qualitative Findings

An analysis of the 150 free-text responses reveals a broad diversity in the way learners approach the issues of Climate Emergency and Sustainability. This diversity cannot be reduced to a few constant themes, as was more evident in the “Digital Transformation” section. Rather, climate and sustainability emerge as multifaceted issues addressed at various levels and interconnected with a range of other thematic areas. The tendencies in the responses can be broadly grouped as follows:

- **Public Awareness and Engagement:** Many contributions call for an enhanced collective consciousness and more avenues for active involvement (“Climate awareness in relation with economic impact on society’s [sic] that decide to take action to protect it.”). Respondents stress the need to raise awareness and create opportunities for activism across society (aggregated mentions: 12 for general public awareness and engagement, 5 for raising public awareness, 4 for opportunities for activism, and 3 for public engagement).
- **Social Implications and Individual-Society Dynamics:** Several responses (aggregated mentions: 11 for social implications, 6 for effects on communities and society, and 5 for individual versus societal consequences) address the broader impact of climate change, indicating that learners are concerned with both community-wide transformations (“How to empower local communities to drive change?”) and the individual’s role within these processes.
- **Concerns About Individual Behaviour and Practical Action:** Many free-text entries focus on the need for personal change, offering practical advice on self-management, habit modification and the application of sustainable practices in professional settings (aggregated mentions: 10 for individual behaviour, 5 for self-management/changing habits and 5 for sustainability in the workplace).
- **Systemic Responses and Policy-Level Interventions:** Another grouping reveals a recognition of the necessity for systemic change – calling for improvements in laws, policies, and international cooperation – to effectively address the climate challenge (aggregated mentions: 9 for systemic approaches, 4 for international frameworks, 3 for laws & policies, and 2 for global cooperation).
- **Broad Thematic Interests in Economic, Technological, and Ideological Dimensions:** Another aggregated group (totalling approximately 49 mentions) encompasses diverse themes such as the impacts of digitalization and AI on energy consumption, the economic consequences of climate change, technology and innovation for improved climate outcomes, as well as critiques of capitalism and calls for degrowth. Additional aspects include interdisciplinary collaboration, fundamental insights into the causes of climate change, skills for adapting to future challenges, climate justice, as well as psychological dimensions like climate anxiety and resilience, alongside strategies for tackling misinformation.
- **Focus on the Role of Education:** A significant number of comments (12 mentions) highlight the importance of education (especially programmes targeting young people) as a key strategy to drive change and cultivate a proactive mindset regarding environmental challenges (“Respect for the environment should be learned through the educational system from an

early age”; “I think there could be a stronger information campaign in schools”).

The focus on education in this last bullet point can be assumed to be indicative for the student demography of this survey, which is consistent with the results for other topics and the occasional mentioning of teacher training. However, a focus on education aligns with the general impression that many of the respondents perceive the climate emergency predominantly as a social matter.

3.2.4 Implications and Conclusions

When comparing these qualitative insights with the quantitative findings – such as the highest mean of 4.04 observed for the item on critical self-reflection – the overall narrative reveals a robust theoretical awareness paired with a multifaceted call for action. Although learners believe they possess an excellent grasp of environmental concepts, their free-text responses highlight a strong demand not for singular, technology-driven solutions but for joint action and cooperation. Specific technological approaches such as revitalization, reforestation, changes in agriculture, circular economy and urban mining were mentioned only sparingly. Instead, requests for knowledge are intertwined with a desire for interdisciplinary, future-oriented frameworks that promote active participation, foster international collaboration, and equip society to confront the pressing realities of a Climate Emergency.

Collectively, these outcomes underscore the need for curricular approaches that not only foster critical awareness and advocacy but also strengthen actionable, problem-solving competencies in the context of climate emergency and sustainability.

3.3 Topic 3: Democracy and European Values

3.3.1 Quantitative Findings

The final section of the survey focuses on examining learners’ competencies related to Democracy and European Values. As with the previous topics, a closed set of nine Likert-scale items was utilized to provide a quantitative overview of self-assessed competence. In addition, open-ended responses were gathered to capture qualitative insights regarding learners’ specific learning interests for future initiatives.

Table 3 below presents the nine survey items ranked from the highest to the lowest mean value, based on the arithmetic mean computed from the closed responses.

Ran- king	Item	Statement	Observed phenomenon	Dimension	Mean Value
1	23	<i>I feel confident working with people from different European countries and cultures.</i>	Confidence in Intercultural Collaboration	Attitude	4.22 (N = 817, Range: 1-5)
2	20	<i>I have a good understanding of common European values (including democracy, tolerance, diversity, the rule of law, equality and human rights).</i>	Awareness of common European values	Knowledge	4.14 (N = 817, Range: 1-5)
3	19	<i>I have a good understanding of democratic principles and their importance for European cohesion.</i>	Knowledge of Democratic Principles and Cohesion	Knowledge	4.11 (N = 817, Range: 1-5)
4	22	<i>My education has helped me to develop critical thinking skills to better understand democratic processes and political systems.</i>	Critical Thinking about Political Systems	Knowledge & Skills	3.97 (N = 817, Range: 1-5)
5	21	<i>I feel well prepared to actively participate in democratic processes and take on social responsibility.</i>	Readiness for Civic Participation	Skills & Attitude	3.91 (N = 817, Range: 1-5)
6	25	<i>I am familiar with the EU's historical responsibility regarding Europe's role in world history.</i>	Knowledge of European Historical Responsibility	Knowledge	3.90 (N = 816, Range: 1-5)
7	24	<i>I have a deep understanding of intra-European diversity and its role in social cohesion.</i>	Knowledge of Intra-European Diversity	Knowledge	3.83 (N = 817, Range: 1-5)
8	26	<i>I have the necessary skills to analyse political issues in the context of Democracy and European values.</i>	Political Issues Analysis Skills	Skills	3.65 (N = 817, Range: 1-5)
9	27	<i>My education has equipped me with the intercultural skills essential for understanding European values.</i>	Intercultural Competence in European Values	Skills	3.63 (N = 817, Range: 1-5)

Table 3:
Ranked mean values of survey items concerning democratic and European values competences

The quantitative data reveal that learners rate their competence highest in terms of intercultural confidence, foundational knowledge of European values and democratic principles. Items 23, 20, and 19 all score above 4.0, suggesting a strong self-assessment in these areas, particularly with respect to theoretical understanding and intercultural aptitude. In contrast, the lower mean values for items 26 and 27 indicate that learners feel less proficient in applied analytical and intercultural skills that require integrating and critically evaluating political issues and European values. The slightly lower scores for items combining skills and attitudes (Items 22 and 21) hint at a potential gap between theoretical knowledge and the practical ability to apply that knowledge in real-world contexts.

3.3.2 Differences in Participant Characteristics: Age Groups and Types of Education

The detailed breakdown of responses reveals subtle yet noteworthy differences across age groups and academic levels with respect to intercultural aspects of Democracy and European values. This section examines not only age-related differences, but also variations based on educational background, particularly distinctions between bachelor's and master's students. In Item 24 (Fig. 11), although all age brackets predominantly select a Likert score of 4, further analysis shows that respondents in their 20s and those between 40 and 59 often follow this primary rating with the highest agreement (Likert 5). Meanwhile, the 30–39-year-old group exhibits a more balanced pattern, where the frequencies of Likert 5 and Likert 3 are almost equal – with a notable majority still at Likert 4 – while respondents over 60 tend to shift more clearly towards a lower self-assessment, as indicated by a more pronounced emphasis on Likert 3 after their dominant choice.

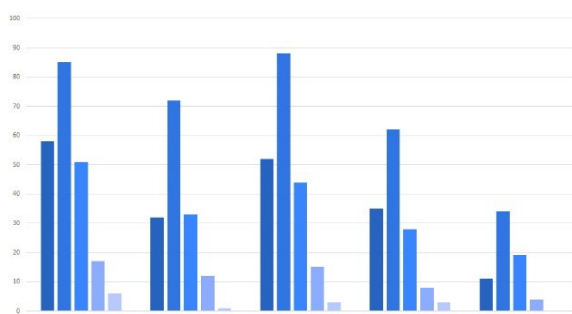


Fig. 11, Item 24: Age
Knowledge of Intra-European Diversity

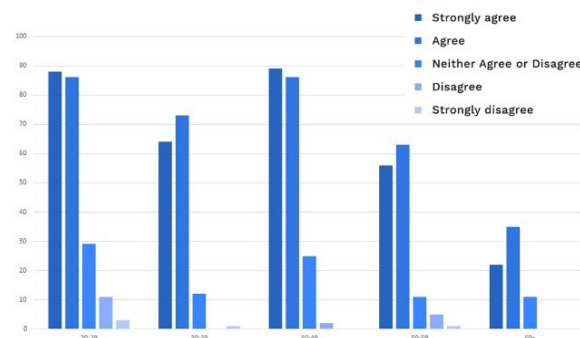


Fig. 12, Item 23: Age
Confidence in Intercultural Collaboration

Similarly, for Item 23 (Fig. 12), which measures confidence in working with people from different European countries and cultures, the predominant response again remains Likert 4 across age groups. The pattern, however, diverges for the youngest cohort; respondents aged 20–29 more frequently indicate a neutral position (Likert 3) as their secondary response, whereas older groups show a tendency for the second most frequent response to be the highest agreement (Likert 5).

Further distinctions emerge when the data is disaggregated by type of education. Bachelor's students report a slightly lower confidence regarding their knowledge of intra-European diversity in Item 24 (Fig. 13) compared to master's students. In contrast, when it comes to the assessment of "Confidence in Intercultural Collaboration" (Fig. 14, Item 23), bachelor's students are more inclined to choose the highest rating, while master's students respond with greater reservation.

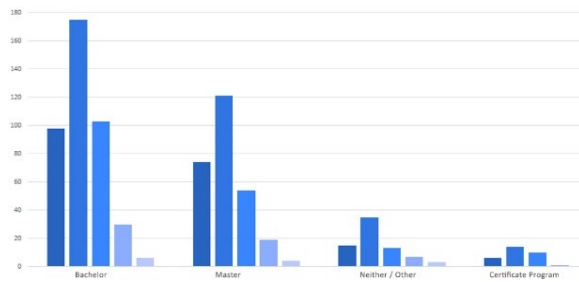


Fig. 13, Item 24: Types of Education
Knowledge of Intra-European Diversity

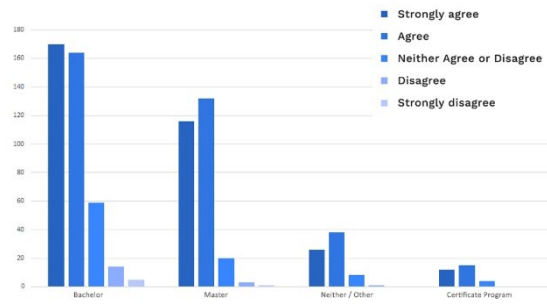


Fig. 14, Item 23: Types of Education
Confidence in Intercultural Collaboration

While overall evaluations of fundamental European values and democratic principles appear consistent, these nuanced differences point to subtle variations in how intercultural competence is perceived. The free-text responses, which will be discussed in the following section, are likely to shed further light on these subtleties.

3.3.3 Qualitative Findings

Complementing the findings from the closed questions, a qualitative analysis of the free-text responses provides further context to these numerical trends. Learners expressed a clear interest in skills-oriented content within the scope of “Democracy and European Values”, including out of 136 entries:

- Critical thinking and analysis skills (10 mentions)
- Political analytical thinking (5 mentions)
- Intercultural skills and communication (5 mentions)
- Teaching-related skills (4 mentions)

However, unlike the results in the previous topic areas, the concept of “European Values” proved to be significantly more abstract, noticeably blurring the lines between thematic categories in the free-text answers. This abstract nature of the topic made it difficult to distinguish between fundamental concepts, skill-based needs, and responses to current issues, as many learner contributions spanned multiple areas of interest.

Notably, a substantial number of responses focused on well-established topics within existing curricula. These included:

- Learning about European values and identity (mentioned 11 times)
- (Cultural) diversity in the EU (11 mentions)
- Understanding democracy, its mechanisms, and civic participation (8 mentions)
- History (7 mentions)

Many learners emphasized the importance of addressing pressing societal challenges, particularly protecting democracy and defending democratic values (11 mentions)

- Disinformation, fake news, and framing (10 mentions)
- Populism (7 mentions)
- Social cohesion (7 mentions)

This might reflect underlying concerns rather than already favoured ideas for solutions, in contrast to the more practical and specific suggestions seen in the topic areas “Digital Transformation” or the collaborative and action initiatives in the topic area “Climate Emergency”.

It seems worth mentioning that including the themes of values and political concepts yielded corresponding reactions from several survey participants. 28 out of 136 comments included statements of political views or demands and varying expressions as to what degree the respondents perceived the survey questions as politically charged. While such statements reflecting participants’ attitudes towards EU values and policies may appear reasonable and could be welcomed as valuable insights in a different setting, they cannot be meaningfully analysed without additional background information and this is beyond the scope of this study.

For example, several learners used the terms populism and propaganda in their responses. Some were referring to discourse they apparently thought was a threat to European Democracy which in turn should be defended while others referred to European values and the concept of EU as propaganda. Others posed fundamental or almost philosophical counter-questions (“Shared European Values? Does that even exist?”). It is not clear whether these questions were meant to be food for thought or a statement of political views. When deriving needs for educational materials from the data, key words can therefore indicate different or even opposing types of requested course content.

3.3.4 Implications and Conclusions

The survey results indicate that while learners report high confidence in their foundational knowledge and intercultural competence (with mean values above 4.1 for items related to understanding European values and democratic principles), there is a noticeable gap in applied analytical skills and intercultural application (with mean values around 3.65 for political issue analysis and intercultural skills for European values). Moreover, qualitative responses indicate a demand for increased opportunities for training in critical thinking, political analysis, and intercultural communication. These findings suggest that learning opportunities would be most beneficial if they focus on practical, skills-based micro-credentials.

However, differing political views may influence both the teaching of relevant micro-credentials and students’ willingness to enrol in courses on Democracy and European Values, particularly among those with EU-critical perspectives.

4. Conclusion

4.1 Overview of Key Findings and Discussion

Across all three thematic areas – Digital Transformation, Climate Emergency and Sustainability, and Democracy and European Values – a consistent pattern emerges. Learners report having strong foundational competencies in each domain. In Digital Transformation, for example, participants are confident in everyday skills such as basic digital tool usage, effective collaboration, and problem solving. Similarly, in the Climate Emergency and Sustainability section, respondents exhibit robust theoretical awareness and a reflective understanding of their personal and collective environmental impact. In the area of Democracy and European Values, learners reveal a solid grasp of core democratic principles accompanied by a commendable level of intercultural competence.

It is important to acknowledge certain limitations of the survey: response rates varied across the 10 universities and the instrument was only available in English. These factors may have affected the representativeness of the data, potentially leading to an underrepresentation of certain needs. Nevertheless, the given number of responses provide initial insights into trends among the students in our alliance, while recognising the usual caveats associated with generalising from a non-systematic sample.

While the strengths in foundational knowledge are evident, some areas for further development emerged – not as critical deficits but as opportunities for enhancing practical skills:

- Digital Transformation: Learners report strong proficiency with everyday digital tools but rate their advanced digital skills – such as those related to AI, cybersecurity, and international networking – considerably lower.
- Climate Emergency and Sustainability: Despite a strong conceptual understanding and reflective self-assessment, there is room for enhanced practical application of sustainable practices in professional or interdisciplinary settings.
- Democracy and European Values: While learners demonstrate strong theoretical and intercultural knowledge, they express a need for additional support in converting this knowledge into practical political analysis and active civic engagement.

These observations suggest that there is considerable potential across all areas to enhance hands-on, skill-oriented approaches, while maintaining the overall strong academic foundation already evident among the learners. Additionally, age group differences indicate that younger students tend to show more enthusiasm for emerging technologies, whereas older students – despite their proficiency with everyday tools – are more reserved when addressing complex or abstract challenges.

In summary, the comparative evaluation of the three thematic areas reveals that while learners possess commendable theoretical knowledge in digital skills, environmental awareness and democratic values, clear opportunities exist for further skills development. The self-assessments indicate that, although the

baseline competencies are strong, learners express both a desire and a need for additional training to bridge the gap between theory and application. This is particularly evident in areas such as advanced digital capabilities (for example, AI and cybersecurity) and in the practical realisation of environmental and political insights in real-world contexts. Importantly, the observed differences are not indicative of severe shortcomings but rather highlight avenues for enhancement that align with the expressed interest in further training and courses.

Furthermore, these findings align strongly with the European Commission's call for a more skills-focused approach to lifelong learning, as outlined in the recent strategy paper *A Union of Skills* (2025). The survey findings support the notion that learners within our university alliance are seeking a tighter integration between theoretical foundations and practical applications. This need for greater synergy between fundamental knowledge and advanced applied skills is evident even though a large proportion of the survey respondents were bachelor students and the share of participants aged 20–29 was higher than the average at some institutions. These demographic factors should be considered when interpreting the results, as they may influence the specific types of further education required.

4.2 Implications for Micro-Credential Portfolio Development

Overall, the insights derived from this analysis lay a solid foundation for designing a flexible, modular micro-credential portfolio that builds on existing strengths while addressing areas for further enhancement. The findings suggest that future course selections should be carefully aligned with the three core thematic areas. For example, although learners are proficient with routine digital tools, their clearly expressed interest in more advanced topics such as artificial intelligence and cybersecurity highlights the value of offering micro-credential courses that bridge the gap between theory and applied expertise.

In parallel, the areas of environmental and democratic studies would benefit from courses that integrate theoretical insights with practical applications. Emphasising interdisciplinary approaches and encouraging collaborative problem-solving could help to support the practical realisation of sustainable practices and foster more active civic engagement. It is important to stress that these recommendations are offered as guiding principles rather than prescriptive directives; they are intended to inform strategic considerations regarding portfolio content and structure.

Furthermore, while the current report is primarily based on self-assessment data from over one thousand respondents, it is acknowledged that future investigations may enrich our understanding of learner needs. Ongoing surveys, supplemented by additional data sources or alternative assessment methods, could further refine the picture of evolving educational demands and ensure that the portfolio remains responsive over time. Such a longitudinal approach would help balance immediate learner interests with the broader, long-term goals of the European Commission's "Union of Skills" strategy.

5. Appendix

5.1 Survey Questionnaire

Introduction

The OpenEU Alliance unites 14 universities and 13 academic, economic, regional, municipal and civil society organizations from across Europe to create a pan-European open university. Its mission is to enhance the digital, green and social dimensions of the European Higher Education Area (EHEA) by ensuring access to high-quality higher education and lifelong learning for all, providing inclusive and sustainable international experiences for students, and driving the digital transformation of institutions.

For further information:

- <https://www.openeu.eu/>
- <https://www.fernuni-hagen.de/english/university/news/openeu-alliance.shtml>

One of the OpenEU's goals is to develop and offer a lifelong-learning portfolio of micro-credentials in digital transformation, climate emergency, democracy and European values.

- Micro-credentials, as new qualification formats and digital certificates, demonstrate the acquisition of certain skills, knowledge and competences in a specific, focused area for personal and professional development. The emphasis is on practical application and flexible learning pathways tailored to individual priorities.

Welcome message

Dear students,

In this short survey, we would like to find out more about your perspectives on the topics of digital transformation, the climate emergency, democracy and European values. We want to know how well prepared you feel for these global and future challenges. The survey focuses on how you assess your skills and competences in in these areas and the experiences you have had in dealing with them. Your insights will help us to identify which skills and competences you would like to develop through micro-credential courses and which topics are of interest to you. Thank you for taking part!

The survey takes about 15 minutes to complete. You can exit the survey at any time. There are 34 questions in this survey.

Demographic data

[D1] Which age group do you belong to? Please choose one of the following answers:

- <20
- 20-29
- 30-39
- 40-49
- 50-59
- >=60

[D2] Which institution do you belong to? Please choose one of the following answers:

- Universitat Oberta de Catalunya (ES)
- Universidad Nacional de Educación a Distancia (ES)
- Open Universiteit (NL)
- FernUniversität in Hagen (DE)
- Open University of Cyprus (CY)
- Bifröst University (IS)
- St. Cyril and St. Methodius University of Veliko Tarnovo (BG)
- Universidade Aberta (PT)
- Daugavpils University (LV)
- Hellenic Open University (GR)

[D3] Which course of education are you following? Please choose one of the following answers:

- Bachelor's degree program
- Master's degree program
- Certificate program (professional development)
- Neither (please state briefly in the text field)

[D4] What kind of study model do you follow? Please choose one of the following answers:

- Full-time study / Full-time degree
- Part-time study / Part-time degree
- Neither

Topic 1 – Digital Transformation

Please rate your answers using a Likert scale, ranging from “strongly disagree” to “strongly agree”, to indicate the intensity of your agreement with the following statements. Your responses will provide insight into your perspectives, attitudes and perceptions on the three main topics. This will help us to better understand the connection between your needs and interests and the development of relevant micro-credential courses, as well as the skills and competences needed to address these global issues.

- [Item 1] I feel confident in using digital technologies to succeed in an increasingly technology-driven work environment.
- [Item 2] I have a deep understanding of the opportunities and risks of digital transformation in the labour market.
- [Item 3] I feel well prepared to assess the opportunities and risks of digital change on society.
- [Item 4] I am familiar with the various applications of artificial intelligence relevant to my profession.
- [Item 5] I have the appropriate skills to use digital tools and media specifically for the organization and design of my learning.
- [Item 6] I have the appropriate digital skills to build international professional networks.
- [Item 7] I feel able to use digital technologies for intercultural communication.
- [Item 8] I have the skills to use digital tools to improve collaboration with others.
- [Item 9] I feel confident and competent in using digital technologies to address challenges I face at work.
- [FT1] Share your topic requests and interests on the topic of digital transformation using brief, precise bullet points. Which aspects and questions interest you the most? Which topics should be covered from your perspective? Your suggestions and ideas will help us develop relevant content for future micro-credential courses. Please keep your input concise. Thank you!

Topic 2 – Climate Emergency and Sustainability

- [Item 10] I have a good understanding of the global impact of the climate crisis on society and our coexistence in Europe.
- [Item 11] I believe that the climate crisis and environmental awareness should be more strongly integrated into interdisciplinary educational programs.
- [Item 12] I can critically reflect on my behaviour and my consumption habits in relation to the climate crisis.
- [Item 13] I feel well prepared to actively tackle the challenges of the climate crisis in my professional activity.

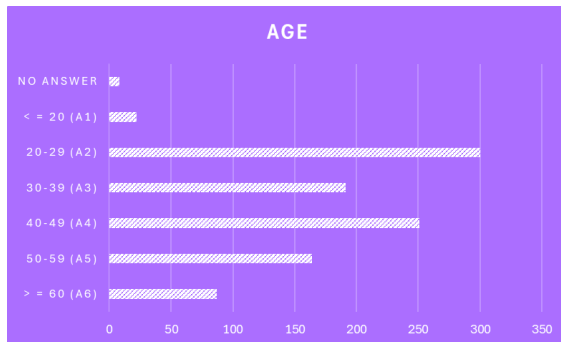
- [Item 14] My education has equipped me with skills to find solutions to environmental problems and the climate crisis.
- [Item 15] I have the necessary skills to act sustainably and climate-consciously in my job.
- [Item 16] I have a good understanding of how technological developments contribute both to the challenges and solutions of the climate crisis.
- [Item 17] I am capable of interdisciplinary thinking to develop collaborative solutions to complex environmental problems.
- [Item 18] I feel able to think in a future-oriented way and act with foresight.
- [FT2] Share your topic requests and interests on the topic of climate emergency using brief, precise bullet points. Which aspects and questions interest you the most? Which topics should be covered from your perspective? Your suggestions and ideas will help us develop relevant content for future micro-credential courses. Please keep your input concise. Thank you!

Topic 3 – Democracy and European Values

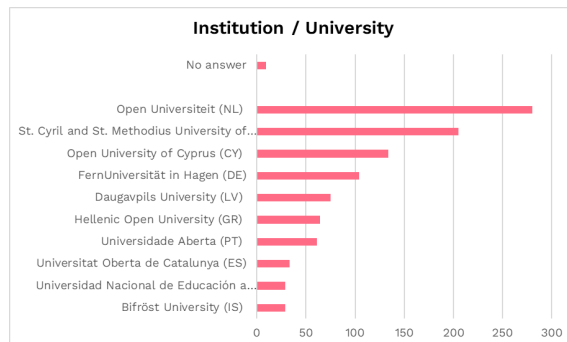
- [Item 19] I have a good understanding of democratic principles and their importance for European cohesion.
- [Item 20] I have a good understanding of common European values (including democracy, tolerance, diversity, the rule of law, equality and human rights).
- [Item 21] I feel well prepared to actively participate in democratic processes and take on social responsibility.
- [Item 22] My education has helped me to develop critical thinking skills to better understand democratic processes and political systems.
- [Item 23] I feel confident working with people from different European countries and cultures.
- [Item 24] I have a deep understanding of intra-European diversity and its role in social cohesion.
- [Item 25] I am familiar with the EU's historical responsibility regarding Europe's role in world history.
- [Item 26] I have the necessary skills to analyse political issues in the context of democracy and European values.
- [Item 27] My education has equipped me with the intercultural skills essential for understanding European values.
- [FT3] Share your topic requests and interests on the topic of democracy and European values using brief, precise bullet points. Which aspects and questions interest you the most? Which topics should be covered from your perspective? Your suggestions and ideas will help us develop relevant content for future micro-credential courses. Please keep your input concise. Thank you!

5.2 Demographic Data of Survey Participants

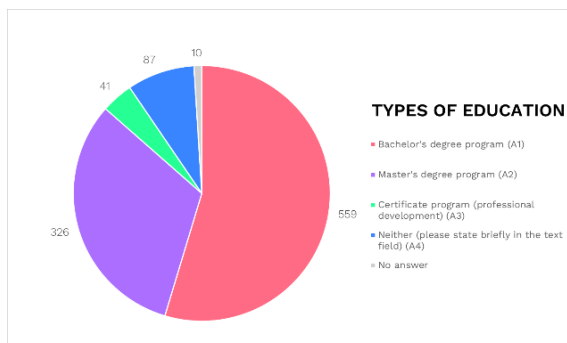
Age Group



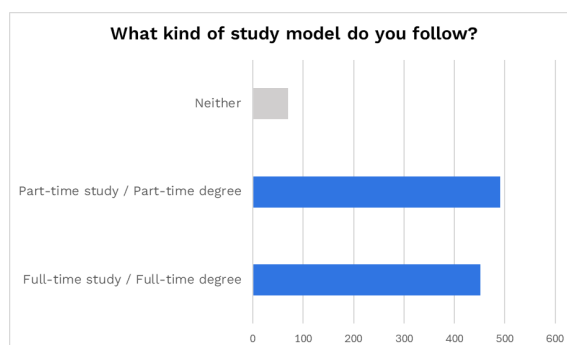
Respondents per Institution



Types of Education



Study Model



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