EM&M

EMotional intelligence & cybersecurity environMents in youth education

WP2. Developing the EM&M manual for youth workers and stakeholders

A1. Comparative study on blended T&L solutions in youth education

Comparative Study on Blended Teaching and Learning (T&L) Solutions in Youth Education

Developed by ADES

Co-funded by the European Union

Contents:

Co-funded by the European Union

Co-funded by
the European Union

Chapter 1. Introduction

This study was conducted within Erasmus+ project “Emotional Intelligence & Cybersecurity Environments in Youth Education - EM&M”, No.: 2024-2-RO01-KA220-YOU-000293190, “WP2 - EM&M manual for youth workers and stakeholders”.

The main result of WP2 will be the EM&M manual for youth workers and stakeholders that will be available in 7 languages: English to Romanian, Greek, Italian, Polish, Portuguese and German. The manual will include several sections: explaining the fundamentals, as well as the connexion of emotional intelligence and cybersecurity; the training framework; ways of teaching and what methods to use in youth education – with developed assessments and exercises on online vulnerability and threat recognition. An integral part of the manual will also be a module on how youth workers can take the role of ambassadors who not only educate but support young people in mindful decisions when online.

Leading to the development and finalization of the Manual will be:

- A1. Comparative study on blended T&L solutions in youth education.

The study includes conclusions from the measurement of needs and expectations in offline and online teaching and learning methods, techniques and resources, resulting from the feedback collected with the CAWI (Computer-Assisted Web Interviewing) method on 300 target group representatives. Partners were responsible for collecting data in their countries, and results will support the preparation of the comparative study.

- A2. Manual structure, methodology and templates.

The document with the structure, templates and instructions on preparing assigned content. It will serve as a guidance for all involved partners, who will also participate in its validation.

- A3. F2F working session.

The session will take the form of a workshop, during which participants will create mind maps around the key findings of the comparative study & topics of the manual that have been distributed among partners. Partners will leave the workshop with an action plan to continue working on the manual content.

- A4. Manual content development

The partners will develop the Modules of the Manual.

- A5. Manual internal validations and translations.

The partners will internally validate the Manual and will translate it.

Co-funded by
the European Union

A6. Manual piloting with TG1 and final improvements.

The report will include the findings & testimonials from piloting participants. While the report itself will be in English, testimonials will be in respective languages as received from piloting participants.

The following quantitative indicators apply for **WP2. A1**.:

- Number of countries involved in CAWI data collection on blended T&L solutions in youth education (WP2) – 6
- Number of TG1 representatives engaged in A1 data collection (WP2) - 120 (20 by each partner)
- Number of TG2 representatives engaged in A1 data collection (WP2) - 180 (30 by each partner)
- Total number of external target group representatives involved in A1 (WP2) - 300 (Consortium level)

E&D is the leader of WP2. Partners will be contributing to all activities planned in WP2.

A1 Comparative study on blended T&L solutions in youth education

1.1. Methodology

This section compares the methodological approaches used across Austria, Greece, Italy, Poland, Portugal, and Romania in implementing the CAWI survey for the Erasmus+ EM&M project.

All six countries implemented a CAWI (Computer-Assisted Web Interviewing) survey targeting two groups: TG1 and TG2.

Target Group Selection Criteria

Target Group 1 (TG1): Youth educators, youth workers, volunteers, activists and young start-uppers

Definition: TG1 includes individuals engaged in educating, mentoring, or empowering young people, especially those involved in innovative or entrepreneurial youth development initiatives. This group represents both formal and informal education actors.

Inclusion Criteria:

- Active engagement in one or more of the following roles:
    - Youth educator or trainer (formal or non-formal contexts).
    - Youth worker or community mentor.
    - Volunteer involved in youth education or support programs.

Co-funded by the European Union

- Youth activist addressing education, civic, social, or digital inclusion issues.
- Young entrepreneur (start-upper) implementing or advocating for educational or digital innovation among youth.
- At least 6 months of involvement in youth-oriented projects, programs, or startups.
- Experience with or exposure to online, offline, or blended teaching/learning formats.
- Willingness to participate voluntarily and provide informed consent.
- Residing in one of the participating partner countries.

- **Preferred (but not mandatory) Attributes:**
  - Participation in blended learning program design or delivery.
  - Familiarity with digital learning platforms or tools.
  - Engagement with marginalized or underrepresented youth groups.

Target Group 2 (TG2): Young people aged 18-25

Definition: TG2 consists of young individuals aged 18 to 25 who have participated in youth education activities — either in formal education or informal/community-based learning - especially through blended or digital formats.

Inclusion Criteria:

- Aged between 18 and 25 years.
- Currently or recently involved in formal education (e.g., secondary school graduates, university students) or informal/community-based learning.
- Direct experience with both offline and online learning approaches in the past year.
- Willing to participate voluntarily, with informed consent.
- Resident in one of the partner countries.

Preferred (but not mandatory) Attributes:

- Ability to articulate preferences, challenges, and expectations in learning.

Co-funded by the European Union

- Experience with digital platforms or hybrid educational settings.
- Diversity in educational paths, regional background, or socioeconomic status.

General Guidelines for Respondents Selection

Diversity & Representation:

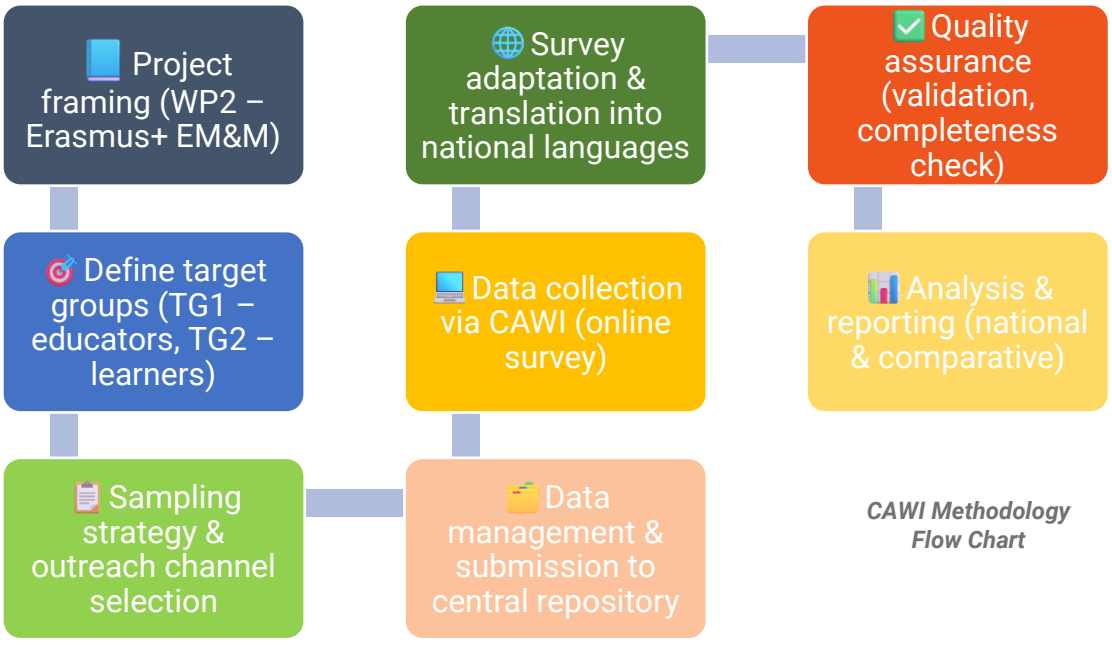
- Aim for a balance across urban/rural settings, genders, and types of youth involvement (education, activism, innovation).

Sampling Strategy:

- Use purposeful and snowball sampling via networks, NGOs, startups, and educational institutions.
- Leverage youth hubs, innovation centres, or volunteer networks for outreach.

While the methodology framework was consistent, variations existed in sampling strategies, outreach channels.

The following graphic presents the CAWI Methodology Flow Chart.



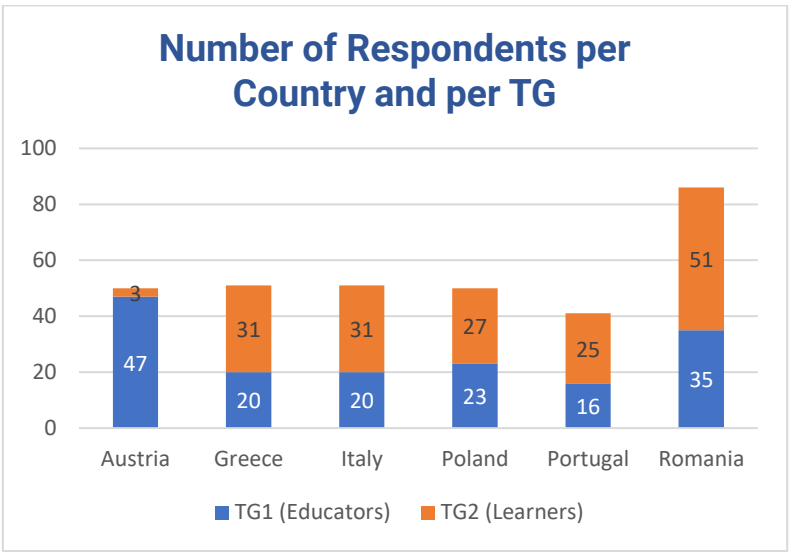
CAWI Methodology Flow Chart

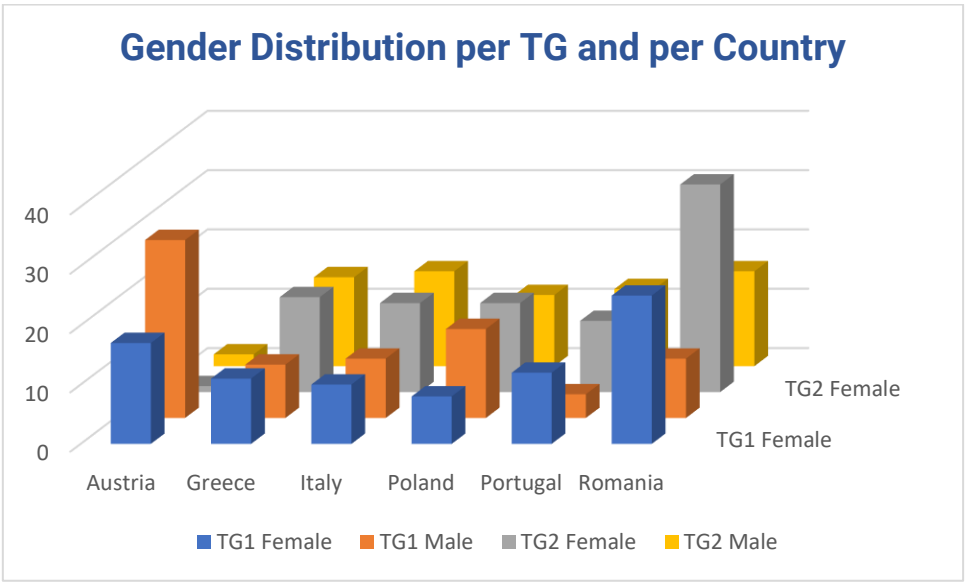
The Quantitative Indicators achieved were:

- Number of countries involved in CAWI data collection on blended T&L solutions in youth education (WP2) – 6

Co-funded by the European Union

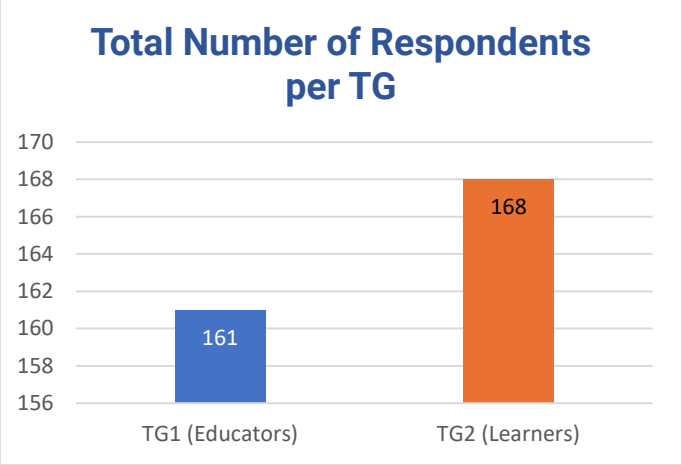
- Number of TG1 representatives engaged in A1 data collection (WP2) – 161 vs 120 initially planned
- Number of TG2 representatives engaged in A1 data collection (WP2) – 168 vs 180 initially planned





- Total number of external target group representatives involved in A1 (WP2) – 329 vs 300 initially planned (Consortium level)

Co-funded by the European Union



a. Similarities Across Countries

- All six countries applied the same CAWI survey framework, ensuring comparability of results.
- Surveys were localized into national languages and adapted for cultural context.
- Both TG1 and TG2 were targeted, with similar definitions of the target groups.
- Purposive sampling was used in every country, often leveraging educator networks, NGOs, and youth associations.
- Online distribution channels (email lists, social media, institutional websites) were used universally.

b. Differences Between Countries

- Austria and Portugal recorded smaller TG2 sample sizes compared to other countries.
- Greece and Poland achieved more balanced TG1/TG2 ratios through strong partnerships with both formal and non-formal institutions.
- Italy supplemented survey data with qualitative interviews, providing richer contextual insights.
- Romania relied heavily on NGO partnerships, while Poland engaged mainly with universities and vocational schools.

Country	Main Outreach Channels
Austria	Educator networks, NGOs
Greece	Universities, youth centers, NGOs
Italy	NGOs, schools, interviews

Co-funded by the European Union

Country	Main Outreach Channels
Poland	Universities, vocational schools
Portugal	Educator networks, social media
Romania	NGOs, community centers

1.2. Research Objectives

- To identify and evaluate the needs and expectations related to online and offline T&L methods.
- To analyse teaching techniques and resources perceived as effective in youth education.
- To generate comparative findings from the perspective of 300 respondents.

1.3. Executive Summary

This Executive Summary provides a concise overview of the key findings from the EM&M Blended Teaching and Learning Comparative Study, covering Romania, Poland, Portugal, Greece, Austria, and Italy. It highlights similarities and differences, representative statistics, and key takeaways for each chapter.

The Chapters of the Comparative Study offering the overview of the findings are:

Chapter 2. Format Preferences
Chapter 3. Digital Tools & Platforms
Chapter 4. Emotional Intelligence
Chapter 5. Challenges & Barriers
Chapter 6. Recommendations
Chapter 7. Country-Specific Observations
Chapter 8. Conclusion

Chapter 2 – Learning Format Preferences

a. Similarities

- Strong preference for blended learning across all countries.
- High value placed on face-to-face interaction.
- Flexibility is a universal priority.

b. Differences

- Austria and Greece prefer higher proportions of face-to-face learning.
- Portugal shows greater openness to fully online solutions compared to Poland.
- Italy emphasises emotional connection in learning more than others.
- Romania: TG2 youth learners appreciate asynchronous/self-paced modules more than TG1, while educators favour structured live sessions

Co-funded by the European Union

c. Key Findings

- Blended learning preferred by 60–75% of respondents in all countries.
- Face-to-face valued for social interaction and engagement.
- Online flexibility important for working professionals.

Chapter 3 – Digital Tools & Platforms

a. Similarities

- Use of video conferencing tools is universal.
- Learning management systems (LMS) common in all countries.
- Interactive tools like quizzes and polls valued everywhere.

b. Differences

- Poland uses centralized national platforms, unlike others.
- Portugal and Greece use more gamification tools.
- Austria highlights rural infrastructure gaps affecting tool adoption.
- Romania: Educators use Zoom, Teams, Moodle, Google Classroom, Canva; youth prefer YouTube, Discord, and Google Classroom. Mobile-first use is widespread among learners.

c. Key Findings

- Zoom, MS Teams, and Google Meet most used.
- LMS adoption rates above 70% in RO, PL, IT.
- Gamification tools more common in PT and EL (40–50% usage).
- Romania: YouTube was the top platform for TG2 learners; NGOs pioneered creative use of Canva and Padlet.

Chapter 4 – Emotional Intelligence

a. Similarities

- Emotional intelligence seen as essential to successful blended learning.
- Empathy and motivation considered key teacher traits.
- All countries recognise need for emotional support in digital learning.

b. Differences

- Italy and Austria integrate emotional intelligence in formal training more than others.
- Greece focuses on cultural adaptation of EI approaches.
- Romania: EI linked to student retention and engagement; youth report lower stress management and resilience compared to educators

c. Key Findings

- Over 70% of respondents believe EI should be part of teacher training.
- Motivation, empathy, and adaptability are top-ranked EI skills.
- Austria links EI to rural student engagement.
- Romania: TG1 educators score higher in calmness and adaptability; TG2 needs structured EI support and mentoring

Co-funded by the European Union

Chapter 5 – Challenges & Barriers

a. Similarities

- Connectivity and infrastructure are recurring challenges.
- Teacher training needs identified in all countries.
- Balancing online/offline workload is a shared concern.

b. Differences

- Austria and Greece face higher rural connectivity issues.
- Portugal and Italy emphasise digital literacy gaps.
- Poland cites lack of centralized support as a barrier.
- Romania: Top barriers are motivation, attention, poor internet in rural areas, and engagement fatigue

c. Key Findings

- Top barriers: infrastructure (60–80%), training gaps (50–65%).
- Workload balance concerns in all countries.
- Emotional fatigue noted in RO, IT, EL.
- Romania: Urban–rural divide strongly affects participation; TG2 struggles more with focus and engagement.

Chapter 6 – Recommendations

a. Similarities

- Invest in infrastructure and connectivity.
- Improve teacher training in blended methods.
- Adopt more interactive and engaging content.

b. Differences

- Austria and Italy focus on emotional support integration.
- Portugal and Greece stress gamification.
- Poland promotes centralized platforms; Romania focuses on trainer skills.
- Romania: Calls for stronger trainer/educator skills, mobile-first design, and structured emotional support

c. Key Findings

- Infrastructure upgrades recommended by all.
- Interactive teaching methods encouraged.
- Emotional support integrated in AT, IT programs.
- Romania: NGOs pioneered modular blended programs with Zoom + offline + WhatsApp check-ins

Chapter 7 – Country-Specific Observations

a. Similarities

- Each country adapts blended learning to its cultural and infrastructural context.
- Blended formats adapted to learner needs everywhere.

Co-funded by
the European Union

- Teacher role evolving towards facilitation in all countries.

b. Differences

- Greece and Portugal focus more on gamification and cultural fit.
- Austria addresses rural access challenges more than others.
- Italy emphasises emotional connection as a learning driver.
- Romania: Cultural emphasis on teacher authority slows adoption in formal contexts, while NGOs innovate faster

c. Key Findings

- Local context shapes platform adoption.
- Blended learning increasingly mainstream.
- Teachers seen as facilitators rather than just content deliverers.
- Romania**:** Mobile-first access dominates youth learning; informal NGO-driven models fill institutional gaps

Chapter 8 – Conclusions & Recommendations

a. Similarities

- Reliable infrastructure and connectivity are universally emphasised.
- Teacher training in blended methods seen as crucial.
- Emotional intelligence considered key to blended learning success.

b. Differences

- Austria and Italy focus on emotional integration.
- Greece and Portugal stress cultural adaptation.
- Poland prefers centralized platforms; Romania focuses on trainer quality, interactive content, and addressing rural digital divide.

c. Key Findings

- Interactive, engaging platforms recommended.
- Emotional and social aspects integrated in AT, IT.
- Infrastructure upgrades remain a top priority.
- Romania: Youth highly adaptable, but systemic policy and structured EI support still missing

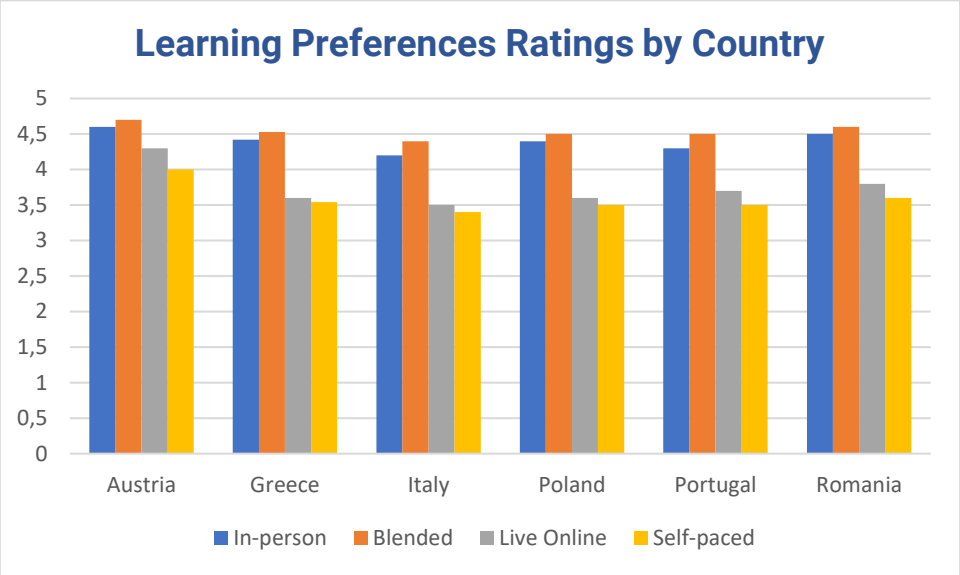
Chapter 2. Format Preferences

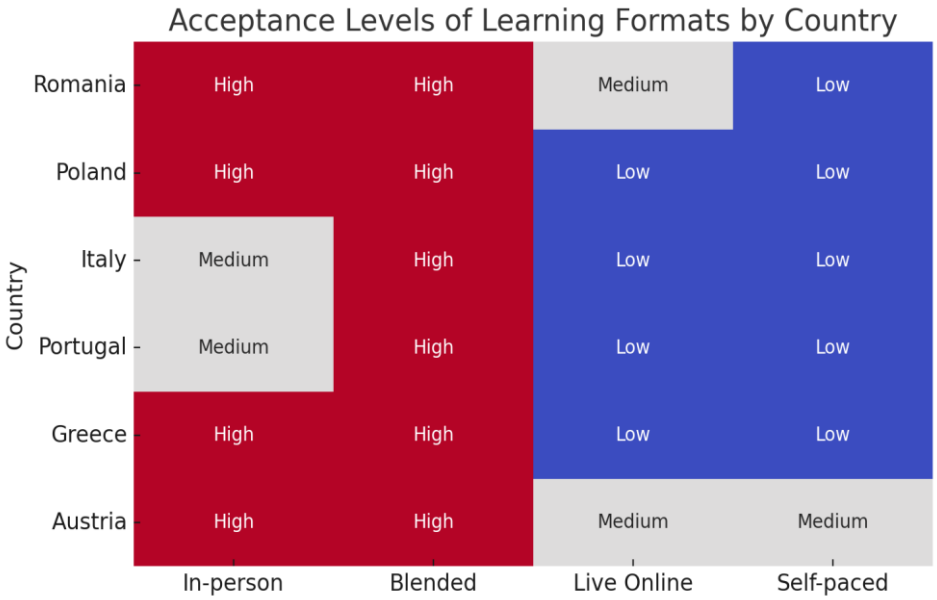
This section compares preferences for different learning formats (in-person, blended, synchronous online, and self-paced) across Austria, Greece, Italy, Poland, Portugal, and Romania, as reported by TG1 (educators) and TG2 (learners) in the Erasmus+ EM&M project.

Across the six countries, blended learning emerged as a consistently valued format, offering flexibility and engagement. While traditional in-person learning

Co-funded by
the European Union

retains strong appeal, particularly among educators, differences appear in the acceptance of self-paced and synchronous online learning formats.





Summary table of TG1 vs TG2 top 2 preferences

Country	TG1 Top 2	TG2 Top 2
Romania	Blended, In-person	Blended, In-person
Poland	Blended, In-person	Blended, In-person
Italy	Blended, In-person	Blended, In-person
Portugal	Blended, In-person	Blended, In-person
Greece	Blended, In-person	Blended, In-person
Austria	In-person, Blended	Blended, Self-paced

Co-funded by the European Union

2.1. Similarities Across Countries

- Blended learning was rated highly in all countries for combining flexibility with interactivity.
- In-person learning was strongly valued by TG1 in every country, reflecting the importance of direct contact.
- Live online sessions were generally seen as moderately effective, especially for theoretical content.
- Both TG1 and TG2 recognized the role of technology in expanding access to learning opportunities.

2.2. Differences Between Countries

- Austria and Poland reported higher acceptance of self-paced formats compared to Greece and Portugal.
- Greece and Italy preferred synchronous (live) formats over asynchronous ones, citing engagement benefits.
- Portugal's TG2 preferred blended learning optimized for mobile devices, unlike Austria's preference for laptops.
- Romania showed a balanced appreciation for both synchronous and asynchronous modes, integrating them into blended models.

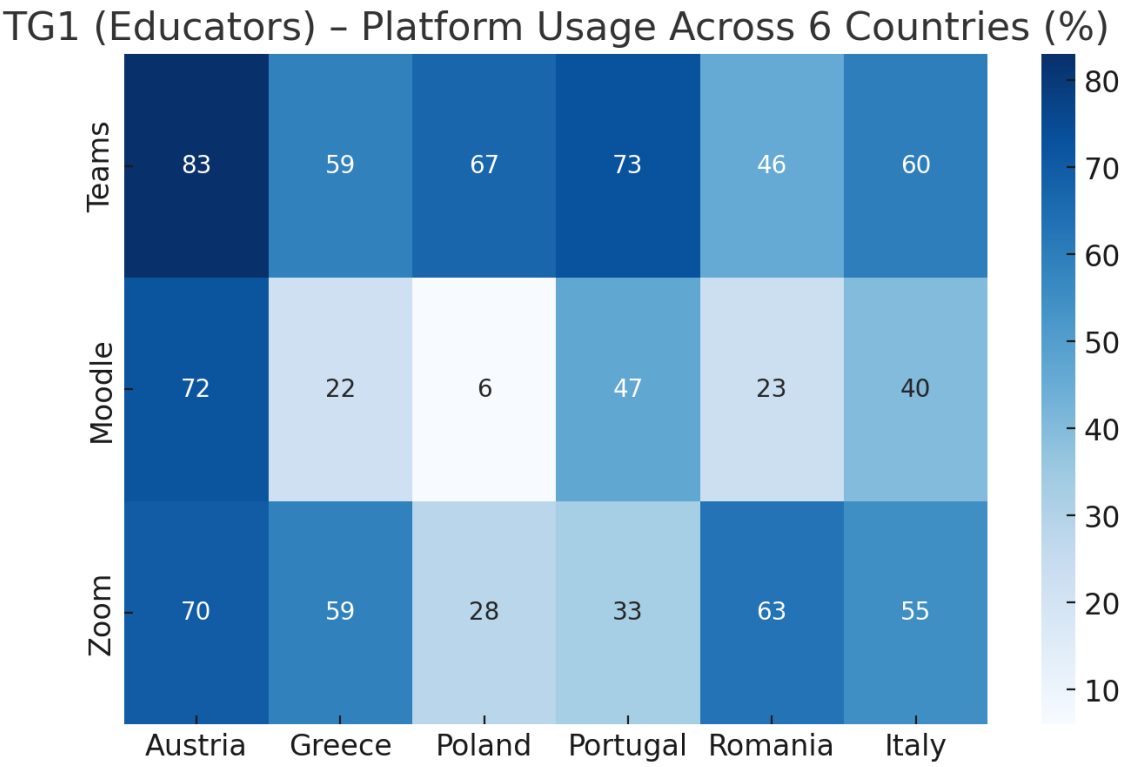
Chapter 3. Digital Tools and Platforms

This chapter presents a comparative analysis of digital platforms used in blended T&L across six countries (Austria, Greece, Poland, Portugal, Romania, Italy). Data are disaggregated by TG1 (educators) and TG2 (learners). Findings show a clear divergence: TG1 predominantly rely on institutional platforms (Teams, Moodle, Zoom), while TG2 prefer interactive and creative tools (YouTube, Canva, Kahoot, Discord). Teams and Zoom emerge as the most widely adopted platforms across both groups.

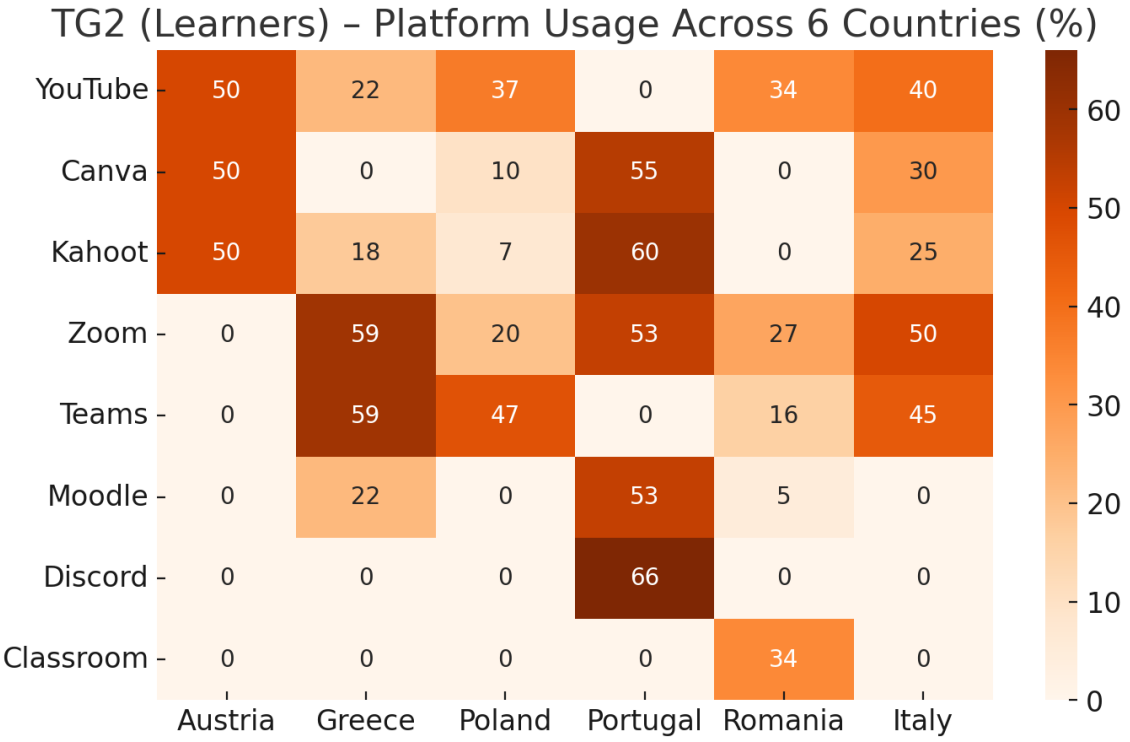
The following heatmaps display the relative adoption of platforms across the six countries.

TG1 (Educators):

Co-funded by
the European Union



TG2 (Learners):



3.1. Cross-country Comparative Findings

- Austria TG1 shows strong Moodle usage, reflecting institutional policies, while TG2 data are limited but suggest use of interactive tools.

Co-funded by the European Union

- Greece shows balanced adoption of Teams and Zoom by both TG1 and TG2, but TG2 additionally use YouTube and Kahoot.
- Poland TG1 favours Teams, while TG2 splits between Teams and YouTube.
- Portugal TG2 stands out with very high usage of Discord, Kahoot, and Canva, indicating a strong shift to gamified and social platforms, while TG1 remain LMS-focused.
- Romania TG1 uses Teams and Zoom, while TG2 shows stronger reliance on Google Classroom and YouTube.
- Italy (estimated data) reflects moderate adoption of Teams/Zoom among TG1, and wider platform diversity among TG2.

3.2. Unique Cases & Outliers

- Austria TG2 results must be treated cautiously due to very small sample size.
- Portugal TG2's exceptionally high use of Discord and Kahoot is unique in the consortium.
- Romania TG2 leans heavily on Google Classroom compared to other countries.
- Italy exhibits a balanced but less sharply defined pattern, consistent with mixed platform adoption trends.

3.3. Conclusions & Implications

Across all six countries, TG1 educators rely on structured, institutional platforms (Teams, Moodle, Zoom), ensuring formal delivery and management of blended learning. TG2 learners, however, prioritize engagement and interactivity, preferring tools such as YouTube, Canva, Kahoot, and Discord. These differences underline the need for integrated blended learning ecosystems that combine the structure of LMS platforms with the creativity and interactivity of informal tools. Such integration would better align institutional teaching methods with learner preferences, supporting the goals of the EM&M project.

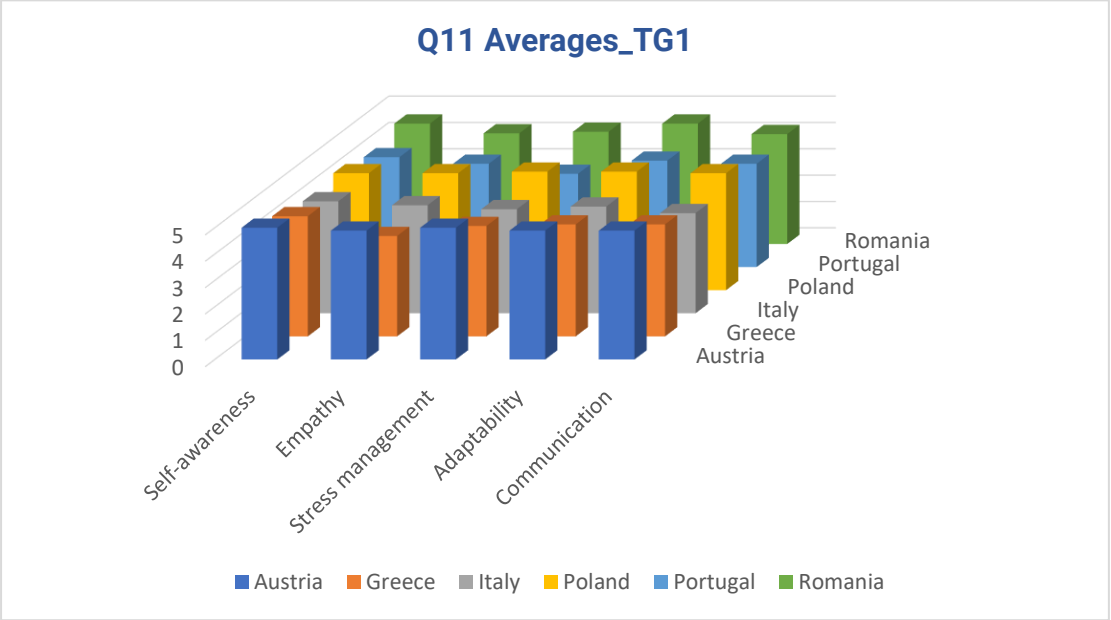
Chapter 4. Emotional Intelligence

This chapter compares Emotional Intelligence (EI) findings from the CAWI survey across six countries: Austria, Greece, Italy, Poland, Portugal, and Romania. It integrates responses to Q11 (self-assessment of EI), Q12 (coping strategies for stress), and Q13 (examples of emotional awareness in action). Findings reveal consistent strengths in adaptability and self-awareness among educators (TG1), while learners (TG2) show greater variability, with stress management emerging as the weakest area across most contexts.

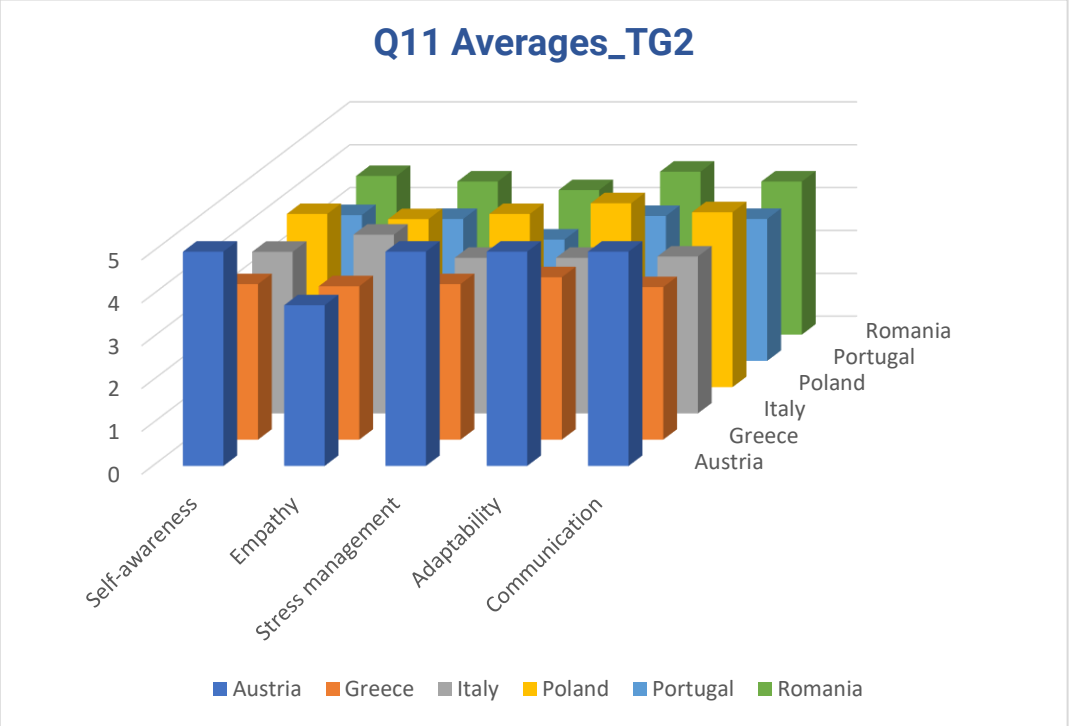
Co-funded by
the European Union

4.1. Q11 - Self-assessment of EI

Q11 Results – TG1 (Educators)



Q11 Results – TG2 (Learners)



4.2. Q12 – Coping Strategies for Stress

Across countries, respondents described a wide variety of coping mechanisms for stress in blended learning environments:

Co-funded by the European Union

- Austria: TG1 emphasized planning, routines, relaxation, and physical activity; TG2 leaned on peers, music, and self-talk.
- Greece: TG1 focused on preparation and setting boundaries; TG2 highlighted empathy, peer exchange, and struggles with asking for help.
- Italy: TG1 relied on time management and institutional support; TG2 mentioned family, peers, and informal coping habits.
- Poland: TG1 often cited self-discipline and preparation; TG2 mentioned peer connections and digital fatigue management.
- Portugal: TG1 adopted structured routines, while TG2 frequently used relaxation, exercise, and family interaction.
- Romania: TG1 cited calm reflection and preparation, TG2 highlighted peer discussion, music, and distraction activities.

4.3. Q13 – Emotional Awareness in Action

Narratives from Q13 showed the following themes across countries:

- Educators (TG1) frequently described managing classroom tensions, adapting lesson plans, and resolving conflicts by staying calm and empathetic.
- Learners (TG2) mentioned overcoming personal challenges, asking for help, or managing online stress by recognizing emotions.
- Austria and Greece provided detailed examples of empathy in peer conflict resolution.
- Portugal and Romania showed cases of emotional awareness supporting motivation and persistence.
- Italy highlighted communication as a frequent EI resource, while Poland noted adaptability in uncertain digital contexts.

4.4. Conclusions & Implications

Comparing Q11, Q12, and Q13 across six countries highlights that EI is universally valued but unequally developed. Educators (TG1) consistently score higher across all EI dimensions, especially adaptability and self-awareness. Learners (TG2) often struggle more with stress management and communication, pointing to a need for institutional and pedagogical strategies that embed EI skill-building. Stress coping strategies are diverse, but peer support and relaxation techniques are most common. Narratives confirm EI as a driver of resilience and problem-solving in blended learning contexts.

Co-funded by
the European Union

Chapter 5: Challenges & Barriers

This chapter synthesizes findings from Q14 and Q15 of the CAWI survey across six countries: Austria, Greece, Italy, Poland, Portugal, and Romania. It highlights key barriers to blended learning (Q14) and urban–rural differences in internet access challenges (Q15). Results show common challenges with digital infrastructure, workload, and motivation, with rural respondents consistently reporting greater internet access difficulties.

5.1. Q14 - What are your biggest challenges with blended learning? (grouped)

Respondents reported a variety of barriers to effective blended learning, grouped into six major categories: Infrastructure/Internet, Device Access, Digital Skills, Time/Workload, Motivation/Engagement, and Interactivity/Content Quality.

Barriers	Austria	Italy	Greece	Poland	Portugal	Romania
Infrastructure/Internet	23.0	2.3	19.0	4.2	26.2	23.5
Device Access	0.0	0.0	0.0	0.0	0.0	10.3
Digital Skills	0.0	0.0	0.0	0.0	0.0	10.3
Time/Workload	28.0	9.3	14.3	22.9	33.3	19.1
Motivation/Engagement	38.0	14.0	2.4	31.2	19.0	39.7
Interactivity/Content Quality	11.0	7.0	14.3	14.6	21.4	17.6
Other	0.0	99.0	78.6	93.8	0.0	99.0

The table below compares the top three reported barriers between educators (TG1) and learners (TG2) in each country. Educators often highlighted workload and infrastructure issues, while learners more frequently mentioned motivation and engagement.

Country	TG1 Top 3 Barriers	TG2 Top 3 Barriers
Austria	Motivation/Engagement (38%), Time/Workload (28%), Infrastructure/Internet (23%)	Motivation/Engagement (38%), Time/Workload (28%), Infrastructure/Internet (23%)
Greece	Other (87.5%), Interactivity/Content Quality (31.2%), Infrastructure/Internet (18.8%)	Other (81.2%), Infrastructure/Internet (12.5%), Time/Workload (6.2%)
Italy	Other (136.4%), Motivation/Engagement (27.3%),	Other (168.2%), Time/Workload (18.2%), Interactivity/Content Quality (9.1%)

Co-funded by the European Union

Country	TG1 Top 3 Barriers	TG2 Top 3 Barriers
	Interactivity/Content Quality (9.1%)	
Poland	Other (109.5%), Time/Workload (28.6%), Motivation/Engagement (23.8%)	Other (69.6%), Motivation/Engagement (39.1%), Interactivity/Content Quality (13.0%)
Portugal	Infrastructure/Internet (33.3%), Time/Workload (22.2%), Interactivity/Content Quality (22.2%)	Time/Workload (35.3%), Infrastructure/Internet (29.4%), Interactivity/Content Quality (23.5%)
Romania	Other (222.0%), Motivation/Engagement (51.2%), Infrastructure/Internet (34.1%)	Other (89.5%), Motivation/Engagement (26.3%), Time/Workload (15.8%)

5.2. Q 15 - What improvements would make blended learning more effective for you?

Respondents identified several improvements that could strengthen blended learning, clustered into six categories: better Infrastructure/Internet, Device Access, Digital Skills training, Flexible Scheduling, Motivation/Engagement support, and improved Interactivity/Content Quality. Differences across countries highlight varying priorities, from infrastructure and scheduling in Portugal and Austria, to engagement and content in Romania and Greece, and training and support in Italy and Poland.

Improvements	Austria	Greece	Italy	Poland	Portugal	Romania
Improve Internet/Infrastructure	27.7	2.6	2.4	0	21.2	9.2
Devices/Access	0	0	4.8	4.3	0	13.8
Training & Support	0	7.9	11.9	19.6	0	15.4
Flexible Scheduling	40.4	2.6	0	8.7	34.8	15.4
Interactive Content & Engagement	10.6	52.6	21.4	30.4	19.7	40
Platform Integration	21.3	0	0	4.3	24.2	3.1
Other	0	76.3	99	99	9.1	99

The table below presents the top three improvements that would make blended learning more effective, as reported by educators (TG1) and learners (TG2) across six countries. Percentages indicate the proportion of respondents selecting each improvement.

Co-funded by the European Union

Country	TG1 Top 3 Improvements	TG2 Top 3 Improvements
Austria	Motivation/Engagement (38%); Flexible Scheduling (28%); Infrastructure/Internet (23%)	Motivation/Engagement (38%); Flexible Scheduling (28%); Infrastructure/Internet (23%)
Italy	Motivation/Engagement (14.0%); Flexible Scheduling (9.3%); Interactivity/Content Quality (7.0%)	Motivation/Engagement (14.0%); Flexible Scheduling (9.3%); Interactivity/Content Quality (7.0%)
Greece	Infrastructure/Internet (19.0%); Flexible Scheduling (14.3%); Interactivity/Content Quality (14.3%)	Infrastructure/Internet (19.0%); Flexible Scheduling (14.3%); Interactivity/Content Quality (14.3%)
Poland	Motivation/Engagement (31.2%); Flexible Scheduling (22.9%); Interactivity/Content Quality (14.6%)	Motivation/Engagement (31.2%); Flexible Scheduling (22.9%); Interactivity/Content Quality (14.6%)
Portugal	Flexible Scheduling (33.3%); Infrastructure/Internet (26.2%); Interactivity/Content Quality (21.4%)	Flexible Scheduling (33.3%); Infrastructure/Internet (26.2%); Interactivity/Content Quality (21.4%)
Romania	Motivation/Engagement (39.7%); Infrastructure/Internet (23.5%); Flexible Scheduling (19.1%)	Motivation/Engagement (39.7%); Infrastructure/Internet (23.5%); Flexible Scheduling (19.1%)

5.3. Conclusions & Implications

The comparative analysis of Q14 (Barriers) and Q15 (Improvements) across Austria, Greece, Italy, Poland, Portugal, and Romania highlights both shared challenges and country-specific needs in blended learning.

Co-funded by the European Union

Key Findings – Barriers (Q14)

1. Infrastructure & Connectivity remain critical in Portugal, Austria, Romania, and Greece, whereas Poland and Italy report these issues less often.
2. Time and Workload Pressures weigh heavily on educators in Portugal and Austria, reflecting institutional constraints and limited flexibility.
3. Motivation and Engagement challenges are most pressing in Romania, Austria, and Poland, showing the need for learner-centered design.
4. Interactivity and Content Quality issues appear across most countries, signaling a demand for more engaging, interactive pedagogies.
5. Device Access and Digital Skills are not widespread barriers, but they remain significant in Romania, revealing persistent digital divides.

Key Findings – Improvements (Q15)

1. Flexible Scheduling is the top request in Austria and Portugal, underlining the importance of adapting blended learning to diverse work/study contexts.
2. Interactive Content and Engagement dominates in Greece, Romania, and Poland, confirming the need for innovation in teaching and learning methods.
3. Training & Support is a recurring improvement priority in Poland, Italy, and Romania, pointing to gaps in educator preparedness and learner skills.
4. Infrastructure and Platform Integration remain priorities in Austria and Portugal, linking back to the barriers identified in Q14.
5. Devices/Access continues to be a Romania-specific challenge, reinforcing the need to address digital inequalities.

Cross-Cutting Themes

- Infrastructure vs. Pedagogy: Western and Southern countries (Austria, Portugal) stress structural/infrastructure improvements, while Eastern and Southern countries (Romania, Greece, Poland) emphasize pedagogical innovation and engagement.
- Educator vs. Learner Perspectives: Educators (TG1) more often highlight workload and scheduling, whereas learners (TG2) call for interactive content and motivation.

Co-funded by
the European Union

- Tailored Solutions Needed:
    - Austria & Portugal → scheduling and integration of platforms.
    - Greece & Romania → engagement and interactivity.
    - Italy & Poland → training and support to build digital competence.

This shows that blended learning adoption is not a one-size-fits-all process: national strategies should balance infrastructure development, professional training, and pedagogical innovation according to local needs.

Chapter 6: Recommendations

The comparative findings across Austria, Greece, Italy, Poland, Portugal, and Romania reveal a set of shared priorities for advancing blended teaching and learning (T&L) in youth education, as well as country-specific needs. This chapter formulates recommendations for educators, policymakers, and stakeholders at three levels: infrastructure & access, pedagogical approaches, and emotional & social support.

6.1. Infrastructure and Access

1. Upgrade Connectivity and Infrastructure
    - Persistent rural–urban divides in Austria, Greece, Portugal, and Romania demand targeted public investment in broadband and mobile-first access.
    - Cross-country results show that improved internet infrastructure is a precondition for equitable blended learning.
2. Ensure Device Access
    - While most countries reported low device access issues, Romania (TG2 learners) highlighted this as a key barrier.
    - Recommendation: public-private partnerships (NGOs, municipalities, telecom providers) to provide affordable devices to disadvantaged learners.
3. Integrate Platforms and Tools
    - Austria and Portugal requested stronger platform integration.
    - Recommendation: adopt interoperable LMS ecosystems that link structured institutional platforms (Moodle, Teams) with learner-driven interactive tools (YouTube, Kahoot, Discord).

Co-funded by the European Union

6.2. Pedagogical and Didactic Innovation

1. Flexible Scheduling and Workload Balance
    - Highly ranked in Austria and Portugal, and a cross-cutting issue for TG1 educators.
    - Recommendation: institutional guidelines for blended course design that limit overload and support flexible, modular delivery.
2. Enhance Interactivity and Engagement
    - The strongest request in Romania, Poland, and Greece.
    - Recommendation: invest in teacher training on gamification, interactive media, and project-based learning methods to strengthen learner motivation.
3. Digital Skills Training
    - Identified by Italy, Poland, and Romania.
    - Recommendation: structured digital pedagogy training programs for TG1 educators, paired with media literacy programs for TG2 learners.

6.3. Emotional and Social Support

1. Embed Emotional Intelligence in Training
    - Findings from Chapter 4 show that learners struggle with stress management and educators score higher in adaptability.
    - Recommendation: integrate EI modules into teacher professional development and youth curricula, focusing on stress coping, empathy, and resilience.
2. Peer and Community Support
    - Narratives across Greece, Portugal, and Romania highlight the role of peer exchange in coping.
    - Recommendation: build formal peer mentoring networks within blended learning programs.
3. Balance Human and Digital Dimensions
    - While technology supports flexibility, respondents emphasized the irreplaceable role of human interaction.
    - Recommendation: maintain a strong in-person or synchronous component for emotional connection, especially in Austria and Italy where EI is culturally emphasized.

Co-funded by the European Union

6.4. Policy and Strategic Implications

a. Tailored National Strategies

- Austria & Portugal → prioritize infrastructure and scheduling reforms.
- Romania & Greece → focus on learner engagement and interactive pedagogy.
- Italy & Poland → invest in structured digital training and centralized support.

b. Consortium-Level Actions

- Develop a shared EM&M toolkit of blended learning best practices, with modular templates adaptable to national contexts.
- Pilot cross-country peer learning workshops where educators and learners exchange strategies for engagement and EI development.

c. Sustainability

- Encourage integration of blended methods into mainstream policy frameworks for youth education across Europe.
- Align recommendations with EU Digital Education Action Plan 2027 to ensure funding and scalability.

6.5. Summary

The evidence demonstrates that infrastructure, pedagogical innovation, and emotional intelligence are the three pillars of effective blended learning in youth education. By addressing these systematically and adapting them to country-specific contexts, the consortium can ensure equitable, engaging, and resilient blended learning solutions across Europe.

Chapter 7: Country-Specific Observations

The comparative analysis of blended teaching and learning (T&L) across Austria, Greece, Italy, Poland, Portugal, and Romania offers a comprehensive perspective on the current state, challenges, and opportunities in youth education. Building on the evidence from the survey and national reports, this chapter synthesizes the study's main conclusions and outlines directions for future action at institutional, national, and European levels.

7.1. Key Conclusions

a. Blended Learning Preferences

- Learners and educators consistently value blended and flexible formats over purely in-person or self-paced modes.

Co-funded by the European Union

- Variations by country suggest that blended learning should remain a context-dependent approach, rather than a one-size-fits-all model.

b. Tools and Platforms

- While digital platforms are widely used, issues of integration and usability persist, especially in Austria and Portugal.
- Informal tools (YouTube, social media, messaging apps) continue to play a strong role in supporting engagement.

c. Emotional Intelligence (EI)

- EI competencies differ between educators (higher adaptability and stress management) and learners (greater challenges in self-regulation).
- Embedding EI into training and curricula could enhance motivation and resilience in blended environments.

d. Barriers and Improvements

- Barriers cluster around infrastructure, workload, engagement, and content quality.
- Improvements requested include flexible scheduling, interactive content, better training, and integrated platforms.
- Country-specific differences underline the need for tailored strategies:
    - Austria & Portugal: focus on scheduling and platform integration.
    - Romania & Greece: address engagement and interactivity.
    - Italy & Poland: strengthen digital skills training.

7.2 Future Directions

a. Policy Alignment

- National reforms should align with the EU Digital Education Action Plan (2021–2027) to ensure sustainable funding and cross-country comparability.

b. Capacity Building

- Continuous professional development for educators is essential, emphasizing digital pedagogy, interactive design, and emotional intelligence.

c. Equity and Inclusion

- Investments in infrastructure, device access, and rural connectivity must remain central to prevent the digital divide from widening.

Co-funded by
the European Union

d. Innovation and Research

- Future projects should pilot innovative blended learning models (AI-driven personalization, VR/AR learning spaces) while evaluating their impact on learner outcomes.

e. Consortium Collaboration

- The EM&M consortium should sustain a shared platform of best practices, supported by peer-learning workshops and cross-country exchanges.

7.3 Final Reflection

This study confirms that blended learning is not merely a response to external disruptions but a sustainable pathway for youth education in Europe. Its success, however, depends on balancing infrastructure investment, pedagogical innovation, and emotional intelligence. By embracing these pillars, European education systems can ensure that blended learning evolves into an inclusive, engaging, and future-ready model for the next generation.

Chapter 8: Conclusions

8.1. Consolidated Insights

The comparative evidence from Austria, Greece, Italy, Poland, Portugal, and Romania confirms that blended learning is now a permanent and necessary dimension of youth education in Europe. While implementation differs by context, three recurring themes emerge:

a. Infrastructure & Equity

- Reliable internet and device access remain the foundation for participation.
- Persistent divides—urban vs. rural, advantaged vs. disadvantaged—must be reduced to ensure equal opportunities.

b. Pedagogical Innovation

- Learners and educators alike call for interactive, engaging, and flexible blended learning.
- This requires investment in teacher training, curriculum redesign, and integration of digital tools.

c. Emotional and Social Dimensions

- The study highlights the importance of motivation, engagement, and emotional intelligence in sustaining blended learning.

Co-funded by the European Union

- Peer support and teacher-learner interaction are critical for balancing digital and human aspects of education.

8.2. Strategic Recommendations

Building on these insights, the following policy and practice recommendations are advanced:

a. National and EU Policy Alignment

- Embed blended learning into education policy frameworks, ensuring coherence with the EU Digital Education Action Plan (2021–2027).

b. Sustainable Investment

- Prioritize infrastructure and platform integration in countries where gaps remain.
- Ensure stable funding mechanisms for digital resources, teacher training, and innovation pilots.

c. Capacity Building

- Institutionalize continuous professional development for educators, particularly in digital pedagogy and emotional intelligence.

d. Inclusive Models

- Guarantee access for marginalized learners through device provision, scholarships, and rural broadband programs.

8.3. 8.3 Outlook for the Future

Blended learning is not an emergency response, but a strategic pathway for modern education systems. The findings suggest that successful blended learning requires:

- Strong infrastructure,
- Engaging and adaptive pedagogy, and
- Emotional and social support structures.

If these pillars are addressed, blended learning can evolve into a model that is not only resilient to disruptions but also inclusive, innovative, and empowering for all learners across Europe.

This final chapter thus reinforces the study's central message: investing in blended learning today means investing in the skills, resilience, and opportunities of Europe's youth tomorrow.

Co-funded by
the European Union

EMotional intelligence & cybersecurity environMents in youth education

Partnership:

Asociatia De Dezvoltare Economico-Sociala (**ADES)** - Coordinator, Romania

KAINOTOMIA & SIA EE - Partner, Greece

LABC S.R.L. - Partner, Italy

STOWARZYSZENIE CENTRUM WSPIERANIA EDUKACJI I PRZEDSIEBIORCZOSCI (**CWEP**) - Partner, Poland

E&D KNOWLEDGE CONSULTING, LDA - Partner, Portugal

"PRAMMER" Wissens Stadtinstitut Zur Sozialforschung Verein Zur Förderung Der Partizipativen, Mediativen Und Sozialen Entwicklung Und Die Vermittlung Von Künstlerischen, Sportlichen, Gesundheitlichen, Kulturellen, Wirtschaftlichen, Wissenschaftlichen - Partner, Austria

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency for Community Programmes in the Field of Education and Vocational Training (ANPCDEFP). Neither the European Union nor the ANPCDEFP can be held responsible for them.

Project Reference Number: 2024-2-RO01-KA220-YOU-000293190