A European comparative analysis of adult education infrastructures and Public - Private Partnerships in the context of the green and digital transition

A research report based on a study in different European countries

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About the RESCALE project

The 2020 OECD statistics show that 9% of the 25–64 year–olds with an educational level below upper secondary school are unemployed. Besides, lots of in–transition workers, unemployed and inactive adults are not joining adult education. In addition, the EU argues that the green transition and digital transformation is likely to unevenly affect sectors. Therefore, the RESCALE project will develop an innovative approach to up– and reskill skills of in–transition workers, unemployed or inactive adults for new tasks and new jobs in particular from declining sectors into the green and digital economy.

By developing an innovative infrastructure called the 'Reskilling Lab', the labor market position and level of proficiency of transversal, basic, digital and green skills of these vulnerable adults will be improved. First, a comparative analysis will be realized to compare the educational and labor market infrastructures throughout Europe focussing on up– and reskilling skills. As a result an assessment tool for identifying skills among these adults and an innovative European 'Reskilling Labs'

model will be developed, existing of a blueprint for the European 'Reskilling Lab', a model for enhanced career guidance, counselling and mentoring and innovative training materials and –methods. In cooperation with stakeholders like companies, adult education and training providers and public and private organizations 'Reskilling Labs' in 7 countries for 210 to 350 in–transition workers, unemployed or inactive adults will be realised. These 'Reskilling Labs' will be scientific evaluated. Based on these results a digital European 'Reskilling Labs' manual and roadmap for sustainable implementation for professionals will be developed in addition to a policy–model for policy–makers existing of a prototype of a digital decision support system and a business model in order to stimulate effective strategies to up– and reskill skills of in–transition workers, unemployed or inactive adults.

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Content

Executive Summary

This report presents the results of Work Package 2 (WP2) of the RESCALE project, which analyses adult education (AE) infrastructures in partner countries, focusing on reskilling vulnerable adults—particularly in the context of the green and digital transition. The work examines how public–private partnerships (PPPs) can strengthen adult learning systems and support inclusive, demand-driven training through the establishment of Reskilling Labs.

Purpose and Methodology

Two standardized questionnaires were developed to collect comparable data across countries:

- A country-level questionnaire mapping AE systems, providers, stakeholders, and cooperation mechanisms.
- A program-level questionnaire capturing details of specific collaborative programs and their learning environments.

Both were designed through an iterative, evidence-based process informed by literature on digital and green skills, adult learning theory, and innovative learning environments (notably the High Impact Learning that Lasts (HILL) model).

Key Findings

Adult education infrastructure

Adult education is mainly delivered by public training institutions, complemented by NGOs and private providers. Primary objectives include employability, digital competence, and basic skills development; only a few countries emphasize green skills.

Access and participation

Programs are available but not always easy to access, often due to low motivation, lack of awareness, or financial barriers. Most initiatives are free or subsidized, with some offering childcare or transport support.

Stakeholders and cooperation

Adult education centres and NGOs are the most active actors, while national governments exert the greatest influence. PPPs exist in all countries but vary in maturity—ranging from ad-hoc collaborations to well-established frameworks (e.g., Iceland). Funding is primarily drawn from national/regional governments and EU programs.

Program characteristics and success factors

Forty-one public–private collaborative programs were analysed.

Successful initiatives share clear goals, trust-based communication, joint design and delivery, and a focus on workforce readiness in green and digital sectors.

Impactful programs feature urgency, agency, hybrid learning, team collaboration, employability support. One of the most striking characteristics of the learning environment differentiating between more and less impactful programs, is the existence of coaching.

Conclusions and Implications

WP2 highlights that strong PPPs can make adult education more relevant, inclusive, and responsive to labour-market needs. Sustained policy support, predictable funding, and cross-sector collaboration are essential for scaling up these efforts.

The findings provide a foundation for developing Reskilling Labs—innovative, co-created environments that align education and employment pathways for vulnerable adults within the green and digital economy. Focussing on coaching as an important feature of an impactful program is a promising step in the (further) development of Reskilling Labs in the partner countries.

General Introduction

This work package focuses on analysing the adult education infrastructure in the partner countries, with a particular emphasis on reskilling both employed and unemployed individuals—especially in relation to the green and digital economy. The analysis highlights collaborative initiatives between the public and private sectors, most notably the innovative 'Reskilling Labs'. These labs represent joint ventures in which both sectors co-develop training content to facilitate large-scale reskilling, including programs designed to transition workers from declining industries into emerging green and digital sectors.

The adult education programs under review primarily serve vulnerable adults. These initiatives aim to foster the development of essential basic skills, such as literacy, numeracy, digital competencies, and transversal green skills. To collect data on the adult education infrastructure in each participating country, two questionnaires were developed.

The first questionnaire collects information for a comparative analysis of adult education systems targeting vulnerable adults across partner countries. This country-level survey addresses six key areas:

1. Providers of adult education
2. Objectives of adult education
3. Average duration of programs/courses/training
4. Participation rates
5. Key stakeholders
6. Public-private cooperation in adult education

The second questionnaire focuses on four specific types of basic skills programs:

1. Literacy and numeracy
2. Digital skills
3. Green skills
4. Integrated programs combining these areas

This survey exclusively targets programs characterized by public-private collaboration. Based on the data, we present first comparable findings on the infrastructure of adult education for vulnerable adults in the partner countries. Next, for the selected programs (3–4 per partner country), we report on the characteristics of the public-private partnership and the learning environments in which these programs are delivered.

Finally, we compare more and less impactful programs in terms

of the characteristics of the partnership and the learning environments in the selected programs. Impact is operationalized in terms of engagement and success, impact on hiring and employment opportunities and effectiveness.

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Part 1: Development of the Questionnaires

1.1   Introduction

This section of the report presents the development of two standardized questionnaires designed to collect data on training structures and success factors in basic skills programs where public and private sectors collaborate in shaping the content and delivery.

To our knowledge, no existing instruments specifically measure the infrastructure of adult education programs for basic skills that involve public–private collaboration. To address this gap, we designed two questionnaires, informed by adult learning theory, labour market research, and educational innovation. The develop–ment followed an agile, iterative process, incorporating feedback from both academic experts and relevant stakeholders to ensure the validity and relevance of the instruments.

Objective and Structure of the Questionnaires

To contextualize and better understand training structures and success factors in collaborative basic skills programs, we first developed a country–level questionnaire. Its purpose is to provi–de a comparative overview of the adult education infrastructure targeting vulnerable adults across participating countries. The focus is on basic skills such as numeracy, literacy, digital skills, and green skills.

The first questionnaire covers six core areas:

1. Providers of adult education
2. Objectives of adult education
3. Average duration of programs/courses/training
4. Participation rates in adult education
5. Key stakeholders involved

Public–private cooperation mechanisms

Building on this context, a second program–level questionnaire was developed to gather more detailed data on specific basic skills initiatives characterized by public–private collaboration. This tool allows for cross–country comparison of training structures and success factors in such programs. The insights gathered will inform the design of high–quality, inclusive Reskilling Labs aligned with labour market needs.

The second questionnaire is organized into three main sections:

Section 1: Program Description

Includes information on program type, target group, duration, ob–jectives, funding, implementation level (national or regional), years of operation, and collaboration with other organizations.

Section 2: Public-Private Collaboration

Examines the nature and impact of collaboration, including:

· The role of private investment
· The extent and type of employer involvement
· The stages at which employers are engaged
· Challenges and strategies to align with employer needs and maintain engagement
· Employment outcomes for graduates
· Overall effectiveness of the collaboration

Section 3: Learning Environment

Focuses on factors contributing to program success, including:

· Teaching and learning methods
· Active methodologies such as learning-by-doing
· Flexibility and adaptability of delivery
· Collaboration and knowledge co-creation
· Use of online and offline modalities
· Assessment practices
· Coaching
· Support for employability and vocational integration

1.2   Development process

The development of the questionnaires followed a four-step process:

1.   Literature Review of Core Concepts and Existing Instruments

The literature review focused on three main areas:

· The conceptualisation of digital and green skills
· Collaborative initiatives between the public and private sectors in adult education
· Key components of innovative learning environments

2.   Draft Development with Iterative Feedback

Initial drafts of the questionnaires were developed and refined through continuous feedback cycles involving experts in the fields of educational innovation and adult learning.

3.   Face Validity Check by Project Partners

The face validity check was conducted in two stages:

· First round: During a plenary meeting, each question and its response options were discussed with all partners, focusing on relevance and clarity. This led to a revised version of the questionnaire.
· Second round: Based on the revised version, individual interviews were conducted with each partner. They were asked to evaluate each question for clarity and relevance, and to suggest any missing questions or answer options.

4. Final Revision

The final version of the questionnaire was produced based on the feedback collected during the face validity process.

1.3   Results of the Literature Review: Conceptual Foundations

The conceptualisation phase consisted of two parts. First, we explored the core concepts of digital and green skills, and examined the role and impact of public-private collaboration in adult education.

Second, we reviewed key literature on learning environments in adult basic skills education—particularly in programs for vulnerable adults—as well as in adult education within business training contexts. This helped to inform our understanding of the pedagogical and organisational elements needed to support effective skills development.

We included literature focussing on challenges and barriers of adult education within business training contexts, case studies and regional examples, in addition to policy and governance. Besides we searched for literature focussing on adult education and reskilling, green skills into adult education programs, green skills in relation to sustainable development, public-private partnerships and effective policies of public-private partnerships.

1.3.1   Digital and green skills

The concept of digital skills is central to the RESCALE project and its associated deliverables. As Lyons et al. (2019) note, strategies to promote digital literacy must be tailored to the specific needs of vulnerable populations, who face a heightened risk of exclusion from both the digital economy and the broader labour market. In today's job market, both basic and advanced digital skills—such as the ability to use computers, software applications, and the internet—are increasingly essential. Individuals with higher levels of digital competence often experience a "skills premium," receiving higher wages due to their advanced capabilities (Van Dijk, 2020).

Over the past 25 years, labour market demands have become increasingly polarized. There is a growing preference for workers with higher education and advanced digital skills, while demand for mid-level qualifications has declined (Van Dijk, 2020). This labour market shift aligns closely with the RESCALE project's objectives: to upskill and reskill workers in ways that improve socio-economic mobility, increase earning potential, and reduce the risk of exclusion from a fast-changing labour market.

Importantly, digital skills extend well beyond the basic ability to operate specific tools or software. As Joseph et al. (2024) emphasize, digital competence encompasses a wide range of capabilities, including:

*   Technical know-how
*   Critical thinking and evaluation

- Creative problem-solving
- Effective communication
- Ethical and responsible use of digital technologies

The development of digital and green skills is influenced by a combination of individual, institutional, and systemic factors, including personal circumstances, the learning environment, and access to reintegration opportunities in education and the labour market. Designing effective training programs requires a holistic understanding of these influences and the development of strategies that address them meaningfully.

1.3.2   Conceptualising Transversal Green Skills

Transversal green skills—also referred to as "skills for sustainability"—are transferable across sectors and play a critical role in fostering environmental responsibility and sustainable development. CEDEFOP defines these skills as the knowledge, values, and abilities needed to address climate change and contribute positively to the environment and human well-being (Sern et al., 2018).

Green skills can take various forms depending on perspective. They may involve:

- Environmental awareness
- Concrete actions (e.g. recycling)
- A personal motivation to protect the natural world

Climate change not only impacts the environment but also reshapes industries, economies, and everyday life. This transformation requires countries to shift toward a green economy, supported by a workforce that understands and applies climate-relevant solutions.

From an industry standpoint, Sern et al. (2018) identify ten essential green skills:

1. Design skills
2. Leadership
3. Management
4. City planning
5. Landscaping
6. Energy-related skills
7. Financial skills
8. Procurement
9. Waste management
10. Communication

Strietska-Ilina et al. (2011) further highlight the importance of both technical green skills (e.g. renewable energy expertise) and transversal skills (e.g. communication and leadership) for supporting a sustainable economic transition. This requires a coordinated effort: industries must move toward greener jobs, while education and training providers must integrate green skills into curricula.

Beyond technical STEM capabilities, education providers must also foster sustainable mindsets and values, as these are crucial to addressing today's environmental and economic challenges. According to Kwauk & Casey (2022), green skills are core competencies needed to navigate and thrive in a rapidly changing world.

1.3.3   Application in the RESCALE Project

Within the RESCALE project, transversal green skills are integrated into the design of training programs that combine technical and soft skills. For example, Reskilling Labs might offer courses in:

- Energy efficiency
- Sustainable procurement
- Waste management

Alongside training in:

- Leadership
- Communication
- Collaboration for sustainable solutions

These skills increase an individual's ability to adapt across industries, improving their resilience in an evolving labour market. The broad applicability of sustainable practices and environmental management across sectors further highlights the importance of green skills.

1.3.4   Digital and Green Skills in the Context of the Twin Transition

The Twin Transition—the simultaneous shift toward digitalisation and environmental sustainability—makes transversal green skills just as important as digital competencies for today's and tomorrow's workforce. The green transition in industry is inextricably linked to digital innovation, requiring workers to operate new technologies and digital tools effectively.

As a result, the RESCALE project places strong emphasis on equipping vulnerable adults—including the unemployed, inactive, or those in career transition—with the digital and green skills needed to meet current and future labour market demands. By aligning training with the needs of both the digital and green economies, RESCALE aims to ensure inclusive and sustainable pathways into meaningful employment.

1.3.5.   Collaborative initiatives between private and public sector in adult education

The concept of public–private partnerships (PPPs) has long been discussed in the management literature. Broadly, PPPs refer to collaborative institutional arrangements between public and private sector entities (Hodge & Greve, 2007). However, the definition of PPPs remains contested.

Some scholars view PPPs as a modern governance tool replacing traditional competitive tendering in public service contracting, while others interpret them as a reframing of longstanding practi-

ces involving private sector participation in public service delivery (Linder, 1999). Another perspective emphasizes PPPs as primarily mechanisms for infrastructure development, such as tunnel construction or harbour revitalization (Savas, 2000). The interchangeable use of terms like "contracting" and "PPP" has further blurred the conceptual boundaries.

1.3.6   PPPs in the Context of Education and Vocational Training

In education—and particularly vocational adult education—literature on PPPs remains limited, including efforts to define the concept. For example, Davies and Hentschke (2006) describe PPPs as involving the exchange, sharing, or co-development of products, technologies, or services in the education sector.

The World Bank defines PPPs in education as recognition that education services can be delivered through alternatives to exclusive public funding and provision. More specifically, Radkevych (2023) describes PPPs as interactions between the public and private sectors to achieve sustainable development in vocational and technical education (VTE), guided by the principle of "value for people. "Tilak (2016) provides a detailed definition of PPPs in education as contractual relationships in which the public and private sectors jointly participate, sharing costs, risks, benefits, and rewards. These partnerships may involve a range of stakeholders—including governments at all levels, companies, foundations, NGOs, academic institutions, and individual citizens—working collaboratively towards shared educational objectives.

1.3.7   Typologies and Models of PPPs

Borodiyenko et al. (2021) offer a comprehensive classification of PPPs based on various criteria:

1. By Area of Partnership

- Infrastructure partnerships: Based on the build–operate–transfer model.
- Private operation of public schools: Management by private entities under contract.
- Outsourcing of educational services: Includes program development, assessment, evaluation, textbook supply, etc.
- Outsourcing of non-educational services: Such as catering, transportation, medical care, and dormitory management.
- Innovation and research partnerships: Foster collaboration between industry and research institutions, with an aim toward commercialization.
- Vouchers and subsidies: Direct financial support to students in private institutions or grants to private schools.

2. By Financing Approach

- Private initiatives: Fully funded and delivered by private companies.
- Sponsorships: Private sector funds programs delivered by public institutions.
- Mixed projects: Public funding with delivery by private education providers.

- Government programs: Fully funded and delivered by public entities.

3. By Breadth and Depth of Partnership

- Broad partnerships: Involve multiple companies and government actors, aligning workforce needs with education provision.
- In-depth partnerships: Feature strong, long-term commitment from all parties, including investment of time, resources, and expertise.

4. By Degree of Coordination and Involvement

- Liberal model: Minimal cooperation; employers have limited input into curricula or training methods.
- Solidarity model: High engagement from employers, government, civil society, and educators.
- Paternalistic model: A large company supports a VET institution to meet its own skilled labour needs, often supplying equipment, materials, and employment opportunities.
- Consortium model: Industry groups collaborate regionally to develop standards and offer internships or work-based learning.

Davies and Hentschke (2006) further categorize levels of involvement in PPPs:

- Networking: Minimal, informal cooperation focused on information exchange.
- Coordinating: More formal collaboration with shared access to services or products, but independent operations.
- Cooperating: Formal partnerships with some joint activities while maintaining autonomy.
- Collaborating: Structured partnerships with shared governance, joint activities, and potentially pooled resources.

Tilak (2016) identifies several operational models for PPPs:

- The private sector may build infrastructure and deliver services.
- The government may invest in infrastructure, while the private partner handles operations.
- In some models, the government provides funding on a per-student basis.
- Alternatively, the private sector may fully develop and operate institutions, with the government covering costs for certain groups of students.

PPP involvement in education can extend to virtually every domain: policy-making, planning, implementation, evaluation, management, teacher training, special programs, examinations, support services, and infrastructure (Tilak, 2016).

According to Davies and Hentschke (2006), organizations enter into PPPs for a variety of reasons:

- Improving service quality

- Solving specific organizational problems
- Financial advantages
- Shared professional values
- Reducing uncertainty
- Fulfilling legal requirements
- Gaining political support

PPPs play a crucial role in aligning adult education with evolving labour market needs, which is a core objective of the RESCALE project. By fostering collaboration among education providers, employers, and public authorities, PPPs help ensure that training programs remain relevant, demand-driven, and adaptable to changing skill requirements (Toner, 2011).

- Strietska-Ilina et al. (2011) and Hodgson et al. (2019) highlight how PPPs strengthen institutional responsiveness to labour market shifts.
- Mircea et al. (2018) emphasize that PPPs can improve the quality and societal impact of sustainability-focused education by enabling joint efforts among educators, businesses, and communities.
- The European Centre for the Development of Vocational Training (2014) underscores the importance of PPPs in promoting lifelong learning and career guidance, particularly for adults navigating employment transitions.

Moreover, PPPs contribute to inclusive economic growth, acting as drivers of:

- Job creation
- Skills development
- Dissemination of sustainable practices, especially in the green and digital sectors (Baum et al., 2014)

By combining public oversight, private sector innovation, and educational expertise, PPPs help build dynamic and responsive learning ecosystems. These partnerships are particularly valuable in designing programs for vulnerable populations, ensuring that adult learners are equipped with the skills needed for sustainable, future-oriented employment.

1.3.8 Innovative learning environments

To structure the literature on innovative learning environments for adults, we drew on two primary sources: the research by De Greef and colleagues on learning environments in basic skills programs for vulnerable adults (e.g., De Greef et al., 2012, 2024), and the High Impact Learning that Lasts (HILL) model developed by Dochy and Segers (2018).

This section provides a concise overview of both sources.

Learning environments to support vulnerable adults in the development of basic skills (De Greef et al, 2012, 2024)

According to De Greef et al. (2012, 2024), the learning environment is important in the success of continuing education programs, especially for vulnerable adults. They emphasize that

the learning environment not only supports social inclusion and labour market integration but also facilitates the transfer of skills.

De Greef and Heimens Visser (2020) discerned five critical success factors of a learning environment.

- Foundation (embedding the training in the personal situation of the participant and his/her reintegration process)
- Coaching (an intensive personal face-to-face support to work on the strengths of the participant and help him/her to overcome hurdles)
- Participants (development of their own goals and increasing level of learner agency, being at the steering wheel)
- Learning environment (personalized in terms of being adapted to the needs, goals, and life situation of each participant)
- Transfer (stimulating and scaffolding the use of the developed basic skills in professional and personal life).

The High Impact Learning that Lasts model (Dochy & Segers, 2018)

The following seven building blocks form a framework for creating impactful, lasting, and learner-centred educational experiences (see Figure 2). Together, they contribute to dynamic and engaging learning environments that promote personal growth, adaptability, and meaningful outcomes.

1. Urgency, Hiatus, or Problem as a Trigger

Curiosity is the catalyst for learning. It emerges when learners encounter a question, challenge, or gap in understanding—a moment of cognitive dissonance—that creates a sense of urgency. This "hiatus" drives learners to explore, question, and engage with new ideas, revisiting prior knowledge and seeking solutions. It is this tension that propels the learning journey forward.

2. Learner Agency

In a High Impact Learning that Lasts (HILL) approach, the learner takes the lead. Individuals are most engaged when they pursue personal goals, supported by coaching and feedback. Learning is viewed not as a cost, but as an investment in one's future. Learners act as entrepreneurs of their own development—deciding what, when, and how they learn, while managing their growth like a personal brand or portfolio.

3. Collaboration and Coaching

Learning is social. It flourishes through interaction with others—peers, mentors, coaches, clients, and stakeholders. These relationships foster dialogue, feedback, and reflection. By engaging with diverse perspectives and receiving constructive critique, learners refine their thinking, uncover misconceptions, and build deeper understanding.

4. Hybrid Learning

Modern learning environments are blended by design, combining face-to-face engagement with digital tools, varied teaching strategies, and multimedia content. While fully online formats often face high dropout rates, a well-balanced hybrid model leverages the best of both worlds—enabling flexible, accessible, and engaging learning experiences.

5. Action and Knowledge Sharing

We learn best by doing. Action-based learning, especially in teams, networks, or communities, turns experience into understanding. When learners share insights, perspectives, and skills, they co-create knowledge, deepen their comprehension, and accelerate their development. Collaboration amplifies impact.

6. Flexibility: Formal and Informal Learning

There is no single path to learning. Knowledge can be acquired through formal means—courses, workshops, or training—or informal experiences like peer discussions, online exploration, and real-world problem-solving. Recognizing and combining both forms allows learners to adapt, grow, and thrive in diverse contexts.

7. Assessment as Learning

Assessment is not just a measure—it is a part of the learning pro-
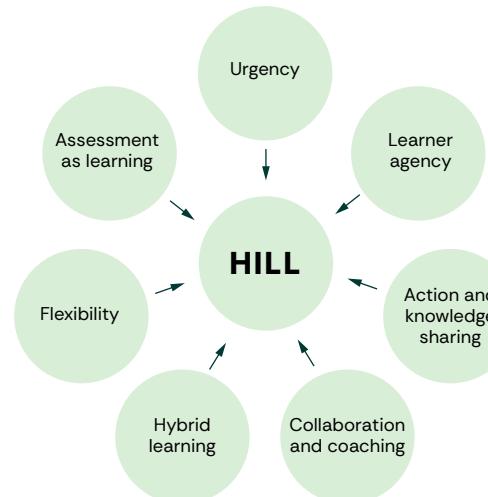
Figure 2: the HILL model

cess itself. In HILL, learners set goals, track progress, and adjust strategies through ongoing reflection and feedback. Assessment is used formatively to support self-awareness, motivation, and continuous improvement. When reframed as a learning opportunity, it becomes a powerful driver of growth, not a source of stress.

1.3.9   Conclusions

Work Package 2 of the RESCALE project lays the foundation for the development of Reskilling Labs, which are designed to foster collaboration between the public and private sectors and promote innovative approaches to teaching and learning. These labs focus on programs, courses, and training initiatives that support

vulnerable adults in acquiring basic skills—including numeracy, literacy, digital skills, and green skills.

To support this objective, we began by clarifying several key concepts that remain contested or evolving in the literature:

- Digital skills
- Green skills
- Public–private collaboration in education
- Innovation in adult learning environments

1.3.10 Development of the Questionnaires

Our analysis of public–private collaboration and the essential components of innovative learning environments informed the design of two questionnaires:

The Country-Level Questionnaire

This questionnaire provides a comparative overview of the adult education landscape across partner countries. It collects data on:

- Providers of adult education
- Objectives of adult education programs
- Average duration of programs/courses/training
- Access and participation rates
- Involved stakeholders
- Funding structures

The Program-Level Questionnaire

The second questionnaire focuses specifically on adult education programs that involve public–private collaboration. It serves two main purposes:

- To identify the characteristics of public–private collaboration
- To examine the features of the learning environments within these programs

Based on this key focus areas will be:

A. Characteristics of Programs/Courses/Training

For each initiative, we collect descriptive information as well as data on:

- Collaboration partners and type of collaboration
- Level and timing of private sector involvement
- Specific collaborative activities (e.g., co-design, co-delivery)
- Recognition and validation of prior learning
- Challenges encountered and strategies to maintain collaboration
- Impact of public–private collaboration on:
  - Learner engagement and program success
  - Program effectiveness
  - Employment outcomes for graduates

B. Features of the Learning Environment

We assess the extent to which the learning environments in these programs reflect the following key elements of high–impact learning:

- Urgency (learning triggered by real problems or needs)
- Learner agency (autonomy and ownership of learning)
- Learning by doing (experiential learning)
- Collaboration and team learning
- Coaching and mentoring
- Hybrid learning (integration of online and offline methods)
- Assessment as learning (formative, reflective, and continuous assessment

2

Part 2: Analysis of AE infrastructure per partner country

2.1   Introduction

The aim of the first questionnaire is to collect for all partners comparable information on the training infrastructure of adult education for vulnerable adults focusing on basic skills.

We have collected information on six topics: the providers of adult education, the objectives of adult education, the average duration of adult education programs/courses/training, partici–pation in adult education, the stakeholders, cooperation between private and public sector.

2.2   Methodology

The questionnaire was available online and on paper. The part–ners of the project as well as a representative of adult education for Iceland, Ireland and Estonia filled in the questionnaire for their country.

2.2.1.   Respondents

Our respondents represented different positions in the field of adult education (see table 1).

Table 1: Position of respondents

Position respondent	n
a decision maker	0
a policy maker	3
a consultant	1
a teacher	1
a manager	3
a researcher	1
A R&D in AE	1
A director of a national literacy programs office	1
administrative referent for international programs	1

The respondents are affiliated at different types of institutions (see table 2).

Table 2: Affiliation of respondents

Institution respondents	N
a school (including an adult education center)	1
a local authority/municipality	0
a regional authority/federal state	1
a provincial authority/province	0
a national authority/ministry	2
a Non-Governmental Organization	2
a welfare Organization	0
an organization for voluntary work	0
a public library	0
an employer (private company) or as an employer	1
State Union	0

2.3 Results

In this section, we present the results of the analysis of the questionnaire providing an overview of some key features of adult education for vulnerable adults per country.

For comparative reasons, in addition to the partner countries, we also add the information for Iceland, Ireland and Malta.

The results are presented in six sections: the providers of adult education, the objectives of adult education, the average duration of adult education programs/courses/training, participation in adult education, the stakeholders, cooperation between private and public sector.

2.3.1 Providers

We have asked the respondents to indicate the providers of adult education programs for vulnerable adults in their country.

Table 1: Providers of Adult Education

Providers of AE	Countries
Public adult education / training institutions	10: Italy, Croatia, Finland, The Netherlands, Hungary, Estonia, Belgium, Ireland, Iceland, Malta:
Private adult education / training providers	6: Croatia, The Netherlands, Hungary, Estonia, Iceland, Malta
NGO's	5: Lithuania, Hungary, Estonia, Iceland, Ireland,
Social enterprises	3: Italy, Hungary, Malta
Employers	1: Malta
Trade unions	1: Malta

Table 1 summarizes the answers. In most countries, public and private adult education or training institutions are the providers. In addition, the most common form of association between providers of adult educations are branch organisations, followed by

employer associations and labour unions (see table 2). Aloo in three countries there is no association between providers.

Table 2: Most common form of association between providers of adult educations

Most common form of association between providers of adult educations	Countries	
Labor unions	3: Estonia, Iceland, Italy	3
Employer associations	4: Malta, Estonia, Lithuania, Croatia	3
Branch organizations	5: Iceland, The Netherlands, Ireland, Croatia, Italy	6
Direct interactions with prominent players within the respective sector	1: Malta	
Regional stakeholders	1: Iceland	
None	3: Belgium, Hungary, Finland,	3

2.3.2 Objectives of adult education for vulnerable adults

For most countries, to improve employability and job readiness is an objective of adult education for vulnerable adults. Also deve–loping digital skills (n countries=9) and basic skills (n countries=7) are objectives in many countries. Developing green skills is indicated as an objective in three countries: Malta, Finland and Croatia. (see table 3)

Table 3: Objectives of Adult Education

Objectives	Countries
Improve employability and job readiness	10: Malta, Estonia, Belgium, Hungary, Iceland, Lithuania, Ireland. Finland, Croatia, Italy
Develop basic skills (literacy and/or numeracy)	7: Belgium, Iceland, The Netherlands, Ireland, Finland, Croatia, Italy
Develop digital skills	9: Malta, Estonia, Belgium, The Netherlands, Lithuania, Ireland, Finland, Croatia, Italy
Develop green skills	3; Malta, Finland, Croatia,
Support career transitions or upskilling	6; Belgium, Iceland, Lithuania, Finland, Croatia, Italy
Promote social inclusion and empowerment	6: Belgium, Iceland, The Netherlands, Lithuania, Ireland, Finland,
Respond to local labor market needs	5: Malta, Estonia, Belgium, Finland, Croatia
Provide formal certification or qualifications	7: Belgium, Hungary, Iceland, The Netherlands, Ireland, Finland, Croatia,

2.3.3 Duration of adult education programs

In most countries, the duration of the programs for vulnerable adults are highly variable, depending on the program Only in Belgium, the typical duration is three to 12 months. In Croatia and Lithuania, the typical duration is less than three months (see table 4).

Table 4: Typical Duration of Programs for Vulnerable Adults

Duration	Countries
Short-term (less than 3 months)	2: Croatia, Lithuania
Medium-term (3 to 12 months)	1: Belgium
Long-term (more than 12 months)	0
Highly variable, depending on the program	8: Malta, Estonia, Hungary, Iceland, The Netherlands, Ireland, Finland, Italy

2.3.4 Participation

With respect to the participation of vulnerable adults in adult education, we questioned five topics: availability of providers and regional differences, accessibility of programs/courses/training, the generally experienced obstacles to participate in programs, support to reduce financial barriers, strategies to encourage participation (beyond financial support). Although programs are available, in most countries they are seen as not always easy to access. However, in most participating countries, there are significant regional differences (see tables 5 and 6).

According to the respondents, the main obstacle to participate in programs/courses/training is the lack of motivation or self-confidence. Next, a lack of awareness of the existence of programs/courses/training is indicated as an obstacle (see table 7).

To reduce financial barriers, in all participating countries, the programs/courses/training are offered free and/or are subsidized (see table 8).

Table 5: Availability of Programs/Courses/Training for Vulnerable Adults

Availability	Countries
Easily to find and access	1: Finland
Generally easy to find and access	2: Croatia, Belgium,
Available, but not always easy to access	8: Malta, Iceland, The Netherlands, Lithuania, Ireland, Croatia, Italy, Estonia
Difficult to find and access	1: Hungary
Rare to find and access	0

Table 6: Regional Differences in Availability

Regional differences	Countries
Yes, significant regional differences	5: Estonia, Hungary, The Netherlands, Lithuania, Italy
Yes, but only minor differences	2: Iceland, Ireland,
No, provision is relatively equal across regions	3: Belgium, Finland, Croatia
Not applicable/don't know	1: Malta

Table 7: Main Obstacles to Participate in Adult Education Programs/Courses/Training

Main obstacles	Countries
Lack of motivation or self-confidence	11: Malta, Estonia, Belgium, Hungary, Iceland, The Netherlands, Lithuania, Ireland, Finland, Croatia, Italy
Language barriers	5: Malta, Lithuania, Ireland, Finland, Italy
Financial barriers	4: Estonia, Belgium, Hungary, Croatia
Lack of for the learner tailor-made learning opportunities	4: Estonia, Iceland, The Netherlands, Croatia
No recognition of prior competencies	0
Limited collaboration with employers	5: Belgium, The Netherlands, Lithuania, Ireland, Croatia
Lack of awareness of 's own needs	4: Malta, Belgium, Finland, Italy
Lack of awareness of the existence of programs/courses/training	8: Malta, Estonia, Iceland, Lithuania, Ireland, Finland, Croatia, The Netherlands
Geographical distance	1: Hungary

Other than financial support, the strategy most used is a collaboration of adult education providers with employers for work-based learning programs and the referral to adult education by social services (see table 9).

Table 8: Type of Support to Reduce Financial Barriers

Support to reduce financial barriers	Countries
Free or subsidized training	11: Malta, Belgium Estonia, Hungary, Iceland, The Netherlands, Lithuania, Ireland, Finland, Croatia, Italy
Reimbursement of transportation costs	4: Malta, Estonia, Hungary, Croatia
Childcare facilities	4: Malta, Hungary, Iceland, Finland
Scholarships or financial allowances	4: Belgium, Hungary, Iceland, Lithuania,
Work-study programs with a salary	4: Belgium, Iceland, Croatia, Italy

2.3.5 Stakeholders

In all participating countries, schools and educational centres are actively involved in shaping or delivering training programs. With respect to the level of interest of the stakeholders in programs/courses/training for vulnerable adults, the results indicate that there are quit some differences between countries (see table 11).

For most of the countries, adult education centres have a strong interest (score 5 on a 5-point scale). Next, the trade unions have an important interest (score 4 on a 5-point scale) (n countries=4).

Table 9: Strategies to Encourage Participation

Strategies to encourage participation	Countries
Use of ambassadors or role models	2: Iceland, The Netherlands,
Public campaigns to increase awareness	5: Malta, Estonia, Belgium, The Netherlands, Finland
Collaboration with employers for work-based learning programs	8: Malta, Belgium, Hungary, Iceland, The Netherlands, Lithuania, Finland, Croatia
Referral by welfare organizations	3: Belgium, Italy, Croatia
Referral by social services	7: Malta, Hungary, Iceland, Ireland, Finland, Croatia, Italy
Referral by communities	2: Ireland, Italy
Offering perspectives on employment	4: Malta, Estonia, Lithuania, Italy
Recommendations and decisions as a result of career counseling	1: Estonia
Career and rehabilitation guidance available, free of charge.	1: Iceland

With respect to the level of influence (see table 12), there are quit some differences between countries. For example, while in most countries the national government have an important influence (score 4 and 5), this influence is rather small in Belgium and Iceland. In addition, adult education centres are influential (10 countries score 4 of 5 on the 5-point scale).

Table 10: Stakeholders Actively Involved in Shaping or Delivering Training Programs

Stakeholders actively involved	Countries
Schools and educational centers	11: Malta, Belgium, Estonia, Hungary, Iceland, The Netherlands, Lithuania, Ireland, Finland Croatia, Italy
Employers	6: Belgium, Hungary, Iceland, The Netherlands, Lithuania, Croatia
Trade unions	5: Malta, Finland, Iceland, Lithuania, Italy
Local/regional authorities	3: The Netherlands, Finland, Italy
National government	5: Malta, Belgium, Iceland, Ireland, Croatia
NGO's	7: Estonia, Hungary, Iceland, Ireland, Finland, Croatia, Italy
Chambers of Commerce	3: Lithuania, Finland, Croatia

Table 11: Level of Interest of Stakeholders in Adult Education for Vulnerable adults

Stakeholders/level of interest	1	2	3	4	5
Employers	0	4 Estonia, The Netherlands, Ireland, Croatia	4 Malta, Belgium, Iceland, Finland	1 Lithuania	2 Hungary, Italy
Trade Union	3 Belgium, Hungary, The Netherlands	2 Estonia, Croatia	1 Finland	5 Malta, Iceland. Lithuania, Ireland, Italy	0
Local/regional authorities	1 Belgium,	4 Malta, Hungary, Iceland, Croatia	3 Estonia, Lithuania, Ireland	1 Italy	2 The Netherlands, Finland
National government	1 Estonia	1 Belgium	3 Iceland, The Netherlands, Lithuania,	3 Ireland, Finland,Italy	3 Malta, Croatia
NGO's	2 Belgium The Netherlands,	1 Italy	2 Malta, Croatia	4 Estonia, Iceland. Lithuania, Finland,	2 Hungary, Ireland,
Chambers of Commerce	2 Belgium, The Netherlands	3 Estonialceland, Ireland	2 Hungary, Finland	4 Malta, Lithuania, Croatia, Italy	0
Adult Education Centers					11 Malta, Estonia, Belgium, Hungary, Iceland, The Netherlands, Lithuania, Ireland, Finland, Croatia, Italy
1=Low, 5= High					

Table 12: Level of Influence of Stakeholders in Adult Education

Stakeholders/level of interest	1	2	3	4	5
Employers	1	1 Italy	4 Belgium, Hungary, Finland, Croatia	3 Malta, Estonia, Ireland,	2 Iceland, The Netherlands, Lithuania,
Trade unions	3 Belgium, Hungary, The Netherlands	2 Ireland, Croatia	2 Estonia, Finland,	4 Malta, Iceland, Lithuania, Italy	0
Local/regional authorities	2 Hungary,The Netherlands	4 Malta, Belgium, Iceland, Croatia	1 Ireland	3 Estonia, Lithuania, Italy	2 Finland
National government	0	1 Belgium	1 Iceland	1 Estonia	8 Malta, Hungary, The Netherlands, Lithuania, Ireland, Finland, Croatia, Italy
NGO's	2 Belgium, The Netherlands	3 Malta, Finland, Italy	3 Estonia, Iceland, Croatia	3 Hungary, Lithuania, Ireland,	0
Chambers of Commerce	3 Belgium, Hungary, The Netherlands	1 Finland	2 Estonia, Ireland	4 Malta, Iceland, Croatia, Italy	Lithuania
Adult Education Centres	0	0	1 The Netherlands	3 Malta, Ireland, Finland	7 Estonia, Belgium, Hungary, Iceland, Lithuania, Croatia, Italy

1=Low, 5= High

Concerning the support or resources needed, for all participating countries, government funding (national or regional) is indicated as needed. Next, for eight of the participating countries, European subsidies or programs are needed (see table 13).

In addition, the respondents of many of the participating countries added (see table 14) that a multi-faceted approach is needed. Different respondents refer to the importance of raising awareness for the importance of adult education for vulnerable adults, sustainable financial incentives, programs which are tailor-made for participants and answer the demands of the employers.

Table 13: support or resources needed from stakeholders

Support or resources needed	Countries
Government funding (national or regional)	10: Malta, Estonia, Belgium, Hungary, Iceland, The Netherlands, Lithuania, Finland, Croatia, Italy
European subsidies or programs	8; Malta, Estonia, Belgium, Hungary, Lithuania, Finland, Croatia, Italy
Business investments	2; Ireland, Croatia
Public–private partnerships	2; The Netherlands, Croatia
Philanthropic funds or NGO's	1: Ireland
Participant contributions (tuition fees)	5: Malta, Estonia, Belgium, Iceland, Croatia

Table 14: Other support or resources needed to enhance training in the area of basic skills

Countries	Other support or resources needed
Malta	More public awareness of adult training offers and supporting schemes; skills assessment and skills gap analysis; improve financial incentives
Estonia	Free participation opportunities, useful programs designed to meet the needs of learners, grants, understanding attitude of employers
Belgium	Awareness on the complexity of low literacy and guidance towards formal education initiatives
Hungary	Predictable learning opportunities, sustainable programs that are available on the long term. Awareness raising of the population on the importance of lifelong learning, restore trust in training.
Iceland	Transfer of competence/knowledge between training and job clear, VPL available, labour market related measures and tailor made (needs).
The Netherlands	Longitudinal funding; support by a sustainable infrastructure; employers need to tailor–made training which sometimes is too difficult to offer by the adult education centres
Lithuania	To enhance basic skills training for vulnerable adults in Lithuania, a multi–faceted approach is needed. This includes increased funding, legislative updates, targeted program development, stronger stakeholder collaboration, improved access and outreach, and a focus on quality and educator support.
Ireland	Recognition of the value of basic skills, including as central to broader skills/competitiveness discussion

Finland	financing, predictability
Croatia	Relevant and up to date data about the market needs which is easily accessible and transparent for all the stakeholders. Projection for the future trends. Network of all included stakeholders on national level.
Italy	From policymakers: the specific regulation; from industries: financial support; from stakeholders: the demand of programmes

Comparing which stakeholders are actively involved, the stakeholders 'level of interest and their level of influence, the results indicate that in most of the participating countries adult education centres are highly involved, influential as well as having a high level of interest.

2.3.6   Cooperation between private and public sector in adult education for vulnerable adult

In terms of the frequency of collaboration, for 5 of the 11 participating countries the respondents indicate that although cooperation exists, it is only in specific cases or sectors (see table 15). Only in Iceland, there is a frequent and well-established cooperation between private and public sector.

Governmental funding is indicated as the main source of funding for collaborative public-private adult education programs/courses/trainings for many participating countries. Next, European subsidies and programs are seen as main sources of funding (see table 16).

Table 15: Frequency of cooperation between adult education, training institutions and the private sector

Frequency cooperation	Countries
Yes, frequent and well-established	1: Iceland
Yes, usually	2: Estonia, Lithuania,
Yes, but only in specific cases/sectors	5;: Malta, The Netherlands, Ireland, Croatia, Italy
Yes, but limited and inconsistent	3; Belgium, Hungary, Finland,
No cooperation	0

Table 16: Main sources of funding for collaborative private-public programs

Main sources of funding for collaborative private-public programs	countries
Government funding (national or regional)	10: Malta, Estonia, Belgium, Hungary, Iceland, The Netherlands, Lithuania, Finland,
Croatia, Italy	2: Estonia, Lithuania,
European subsidies or programs	8; Malta, Estonia, Belgium, Hungary, Lithuania, Finland, Croatia, Italy
Business investments	3: The Netherlands, Lithuania, Ireland
Public-private partnerships	2: Croatia, The Netherlands
Philanthropic funds or NGO's	1 Ireland
Participant contributions (tuition fees)	5; Malta, Estonia, Belgium, Iceland, Croatia

The use of company facilities is for most countries indicated as a way in which companies contribute financially or in kind to collaborative public–private adult education programs/courses/trainings. Next, paid work–based learning placements and engagement of employees as trainers or mentors are indicated as concrete contributions by companies (see table 17).

Table 17: Way in which companies contribute financially or in kind to collaborative public-private adult education programs/courses/trainings.

Contribution companies	countries
Direct financial contributions	2: Malta, The Netherlands
Paid work–based learning placements	6; Malta, Belgium, Hungary, Iceland, Lithuania, Croatia,
Use of company facilities (e.g., locations, equipment)	7: Malta, Hungary, The Netherlands, Lithuania, Finland, Croatia, Italy
Engagement of employees as trainers or mentors	5: Iceland, The Netherlands, Ireland, Croatia, Italy
No contribution from companies	0
According to the law, they must allow study leave (under certain conditions), flexible work schedules to participate in studies	1: Estonia
Educational funds available for people on the labor market.	1: Iceland
Small scale philanthropic	1: Ireland

2.4   Conclusions

With the first questionnaire, we aimed to collect information on the infrastructure of adult education for vulnerable adults in the partner countries. Three other countries (Ireland, Iceland, Malta) requested to participate in the data collection so the information of these three countries was presented too.

The data analyses showed that there were differences and similarities between the countries for the aspects of the infrastructure of adult education questioned.

There were important similarities between the countries.

1. The providers of adult education are mainly public adult education/training institutes.
2. The main objective of adult education for vulnerable adults is to improve employability and job readiness.
3. The duration of the programs is highly variable.
4. Programs/courses/training are available however not always easy to access.
5. The most important obstacle to participate in adult education is a lack of motivation or self–confidence.
6. Free or subsidized training is the most common type of support to reduce financial barriers.
7. Collaboration with employers for work–based learning programs and referral by social partners are the most common strategies to encourage participation in adult education.

8. Schools or educational institutions and NGO's are the most common stakeholders actively involved in shaping or delivering training programs.
9. For most countries, adult education centres have the highest level of interest in adult education however their level of influence experienced as lower. Especially the government (national/regional) has an important level of influence.
10. The main sources for funding of collaborative initiatives between the private and public sector in adult education are the government (national/regional) and European subsidies/programs.
11. The most common support needed is governmental funding (national/regional).

Beside the similarities, the involved countries differ in the most common form of associations between providers of adult education, if there are regional differences in availability of programs, the frequency of cooperation between public and private sector and the ways in which companies contribute financially or in kind to collaborations between public and private sector.

3

Part 3: Analysis of public-private collaborative programs/courses/training per country

3.1   Introduction

This section of the report presents an overview of the characteristics of basic skills programs, courses, and training initiatives for vulnerable adults, with a particular focus on collaborations between the public and private sectors.

We have organized the data reporting according to four outcome measures, each corresponding to one of the four items in Questionnaire 2, which was administered to program managers:

1. Engagement and success: To what extent does private investment influence the engagement and success of the CPP program/course/training?
2. Effectiveness: To what extent does the collaboration between private and public sector, enhances the effectiveness of the CPP program/course/training?
3. Hiring opportunities: Do you think there is a relation between employer involvement and hiring opportunities for the training graduates?
4. Employment opportunities: For adults completing the CPP program/course/training, how would you describe their post-training employment opportunities?

In the technical report (which is an addendum of this report), you will find more detailed findings organized into two subsections. The first provides a general description of the various aspects of public–private collaboration within these programs and outlines key features of their learning environments. The second subsection offers a comparative analysis across the seven partner countries, focusing on both the nature of the collaboration and the learning environments.

3.2   Methodology

Each representative of the seven partner countries selected three programs, one on numeracy and literacy, one on digital skills and one on green skills. The program had to meet the following inclusion criteria:

- they involve a cooperation between public and private sector stakeholders.
- they support adults in the development of basic skills.
- the participants of the programs/courses/training are vulnerable adults.
- the number of participants per program/course/training is min. 30 per cohort.
- the programs/courses/training are offered in an urban setting.

The questionnaire was available online and on paper. Each representative contacted the manager of the selected programs and filled in the questionnaire in dialogue with the manager.

Table 18: Types of programs included in the data analysis

Type programs	N
Focusing on literacy and/or numeracy	10
Focusing on digital skills	8
Focusing on green skills	8
Focusing on a combination of basic skills	12

We included programs on numeracy and literacy, digital skills and green skills. The majority of the programs included in our analysis are focusing on a combination of basic skills (numeracy, literacy, digital skills, green skills) and programs addressing numeracy and literacy. Table 18 shows across all countries the type of programs involved. In table 19, the type of programs included per participating country are displayed.

3.2.1. Sample of programs/courses/training

Table 19: Type of Programs per Participating Country.

Kind of CPP program/course/training	Belgium	Hungary	Croatia	Finland	Italy	Lithuania	The Netherlands	Malta	Grand Total
Focusing on a combination of basic and/or digital and/or green skills	1	3	3	1	1	1	2		12
Focusing on basic skills (literacy and/or numeracy)	1	1	3	1	2	1	1	1	11
Focusing on digital skills	1		4	1	1	1		1	9
Focussing on green skills	2		3	1		1	1	1	9
Grand Total	5	4	13	4	4	4	4	3	41

Table 20 shows the broad range of target groups of the programs involved. Some programs have a very specific target group (for example for employees of one specific company or of SME's), other have a broad target group (low-educated/skilled). Some programs specifically address vulnerable adults (such as financially vulnerable) and some programs target people who are employed: in-transition workers, employees that need to be rescaled or upskilled. Finally, programs specifically targeting migrants are included.

Table 20: Target Groups for the Programs/Courses/Training involved.

Target group	Hungary	Croatia	Italy	Finland	Lithuania	The Netherlands	Belgium
NEET	NEET's (Not in Education, Employment or Training) aged 25–29						
In transition	In transition workers	In transition workers (2 programs)					
Low–educated/ skilled					Low–skilled workers		
	Low educated, inactive or unemployed	Low educated adults (8 programs)		Adults who are lacking skills to attend upper secondary qualification studies.	Vulnerable adults lacking secondary education, aged 18-65; Adults with lower secondary education seeking to acquire vocational qualifications.		
Upgrading or rescaling				Adults who are in work life, but need to upgrade their digital skills			Employees who want to be rescaled to another function

Target group	Hungary	Croatia	Italy	Finland	Lithuania	The Netherlands	Belgium
Vulnerable adults			Vulnerable youth and adults: Workers receiving social safety nets or other income support, vulnerable workers (young people, women in particularly disadvantaged situations, people with disabilities, those over 55), the working poor, and unemployed individuals without income support.				Unemployed and some inhabitants with special needs (in care, participation and education)
migrants			Vulnerable third–country nationals and vulnerable individuals; Foreign citizens from third countries			Migrants (status holders)	
Narrowly defined target groups	Low skilled SME workers					Adults with a distance to the labour market, who get funding from the Dutch law called: "Participatiewet"	

Target group	Hungary	Croatia	Italy	Finland	Lithuania	The Netherlands	Belgium
						Unemployed and some inhabitants with special needs (in care, participation and education)	Low-skilled employees of local communities and inhabitants who did not use ICT in function of their job
							Second language learners with a distance to labour-market
NOT low-skilled				Vocational students between 16–65 years			
				Upper secondary vocational education students/ preparatory training students			

Target group	Hungary	Croatia	Italy	Finland	Lithuania	The Netherlands	Belgium
					Adults seeking to become accountants with no prior accounting education or who are re– entering the labor market		

As the figures in table 21 show, most of the programs included are small-scale, having less than 50 participants.

Table 21: Number of Participants in the Programs/Courses/ Training.

Number of participants	Number of programs
>1000	4
500-1000	2
100-500	3
50-100	5
<50	23

3.2.2 Analysis

We took the four outcome measures measured each by a questionnaire item as the starting point for the analysis. For each of the four questionnaire items, we have composed two groups: the group of program managers answering positive to the items and a group answering neutral to negative. Next, for each of both groups, we looked at how they responded to the questionnaire items concerning the partnership and those concerning the learning environment.

3.3 Results

In this section, we present findings related to the characteristics of the partnership and the learning environment, organized according to four outcome measures: engagement and success, effectiveness, hiring opportunities, and employment opportunities. Given the large volume of data and to enhance readability, we focus on the characteristics of the partnership and learning environment that differentiate more impactful programs from less impactful ones. For each characteristic, we report the three most frequently mentioned aspects (with 1 as the most mentioned aspect) . In the technical report (addendum of this report), you find all results in more detail.

Table 22: Key success factors for positive and no impact programs

No Influence (N=12)	Somewhat positive/very positive impact on engagement and success (N=29)
1) Complementary strengths 2) Shared strategic goals and mutual long-term benefits 3) Clear roles and responsibilities, governance structures 4) Multi-stakeholder collaboration 5) Willingness to collaborate and co-invest	1) Focus on workforce readiness (green and digital skills) 2) Shared strategic goals and mutual long-term benefits 3) Regular communication and info sharing

3.3.1   Engagement and success: To what extent does private investment influence the engagement and success of the CPP program/course/training?

Table 23: Characteristics of the partnerships differentiating between programs with a positive and no/negative impact

	No Influence (N=12)	Somewhat positive/ very positive impact on engagement and success (N=29)
Level	1) Regional level 2) Local level	1) National level 2) Local level
Type of partnership	1) Cooperating 2) coordinating	1) coordinating 2) cooperating 3) networking
Level involvement	1) minimal to moderate 2) high–very high	1) moderate 2) high 3) very high
Type collaboration activities	1) labour market needs analysis 2) candidate selection 3) training development consultation	1) training design consultation 2) labour market needs analysis 3) co-design and candidate selection
Stage of involvement	1) initial analysis labour market 2) post-training evaluation and feedback 3) Training design and delivery training	1) training design and content development 2) implementation and delivery training 2) analysis labour market 2) Post-training evaluation and feedback

Table 22 shows that for programs with a positive impact on engagement and success, most program managers indicate that focus on workforce readiness in terms of green and digital skills is a key success factor. In addition, they focus on the importance of regular communication and information sharing.

According to the analysis there are different characteristics of the partnership which have an influence on the impact of the program (see table 23).

Table 24: Difference in the validation of Prior Knowledge between programs with a positive impact and those with no or negative impact.

	No Influence (N=12)	Somewhat positive/ very positive impact on engagement and success (N=29)
Validation	1) No 2) Yes, no official certificate	1) No 2) Yes, official certificate

Besides according to table 24 it seems that certification of validation of prior knowledge seems to influence the success rate.

But also different characteristics of the learning environment (agency, coaching, collaboration and knowledge sharing and employment support) seem to influence the success of the program (see table 25).

Table 25: Differences between programs with a positive impact and those with no or negative impact in terms of characteristics of the learning environment.

	No Influence (N=12)	Somewhat positive/ very positive impact on engagement and success(N=29)
Agency	1) Highly flexible 6) 2) Partially flexible 5)	1) Partially flexible (19) 2) Highly flexible 6)
Coaching Yes/no	1) No 2) Yes for all learners	1) Yes for all learners 2) Yes, for special groups 3) No
Collaboration and knowledge sharing	1) Regularly 2) Rarely	1) Regularly 2) Continuously
Type of employment support	1) career counselling 1) Resumé and interview training	1) career counselling 2) mentorship programs 3) job placement assistance

3.3.2   Impact on effectiveness: To what extent does the collaboration between private and public sector, enhances the effectiveness of the CPP program/course/training?

1.   Organisation of the programs

First, table 26 and 27 give an overview of the duration and level of organisation of the programs, which seem to vary a lot.

Second, according to table 28 three different success factors can be discerned.

Table 26: Duration of the programs

Duration	
Long-term (more than 12 months)	4
Medium-term (3 to 12 months)	17
Short-term (less than 3 months)	13

Table 27: Level on which the programs are offered

Level program offered	
Local level	11
National curriculum, local implementation	1
National level	14
Other (please specify):	2
Regional level	7

2. Cooperation in the partnership

First, it becomes clear that there are different type of partners involved, that coordinating and cooperating seems to be most common wat of working and there is a moderate involvement of the partners and effective communication is essential (see table 29, 30, 31 and 32).

Second, it seems that partners are involved at different stages throughout the partnership and realise different activities to-gether (see table 33 and 34).

Table 28: Success factors of programs where the collaboration between the public and private sector enhances the effectiveness of the program

Success Factors	n
Focus on workforce readiness (green skills and adaptability)	16
Open, regular communication and information sharing	12
Shared strategic goals and mutual long-term benefits	14

Table 29: Partnership partners

Employers	15
Local employment and training agencies	23
Local VET schools	11

3. Characteristics of the learning environment

According to the analysis it seems that most of the programs

Table 30: Most common way of working together

Most common way of cooperation	
Collaborating (formal, with direction provided by an inter-organizational governing group, joint endeavours; may be co-mingling of funds)	3
Cooperating (formal, with some integration of work, but organizations remain autonomous)	10
Coordinating (more formal, organizations still work independently)	17
Networking (informal, minimal)	4

Table 31: Level of involvement of the partners

Level of involvement	
High	10
Moderate	15

Table 32: Strategies for involving partners

Strategies for involvement	
Effective communication	25
Regular meetings	11
Reminding direct benefits to their company workforce	11

Table 33: Stage of involvement of the partners

Stage involvement	
Initial analysis of labour demand	16
Post-training evaluation and feedback	13
Training design and content development	14

Table 34: Activities in the partnership

Activities	
Conducting labor market needs assessments	17
Consulting employers on training development	14
Facilitating employer involvement in candidate selection	11

have no system for validation of prior acquired competencies, integrate real-life experiences in the program and have different types of learning activities to enhance urgency (see table 35, 36 and 37).

Furthermore, it seems that de learner agency is most of the time partially flexible, one works in teams and share knowledge regularly and that not all programs provide coaching (see table 38, 39, 40 and 41).

Table 35: System for validating previously acquired competences

System for validating previously acquired competencies	
No	19
Yes, but without official certification	6
Yes, with official certification	9

Table 36: Real life experiences integrated in the program

Real life experiences	
No, work experience is not included	2
None of the above	5
Yes, mandatory for all learners	22
Yes, optional for learners	5

Table 37: Type of learning activities to enhance urgency

Types of learning opportunities	
Apprenticeships	14
Volunteering opportunities	8
Workplace simulations	12
Structured internships/apprenticeships integrated into the curriculum	12
Workplace simulations and hands-on training	15

Table 38: Programs/courses/training tailored to the individual learning needs

Agency: CPP program/course/training tailored to individual learning needs	
Highly flexible (customized for each participant)	10
Not flexible (standardized program)	5
Partially flexible (adjustments within specific tracks)	19

Table 39: Number of programs where learners work in teams and share knowledge

Team learning Knowledge sharing	
Consistently	6
Never	1
Rarely	4
Regularly	23

Table 40: Availability of coaching

One-on-one coaching available to support learners	
No coaching is provided	10
No, but group coaching is available	3
Yes, for all learners	12
Yes, for specific groups (e.g., those at risk of dropping out)	9

Table 41: Frequency of coaching

Frequency coaching	
As needed	17
Monthly	1
No formal coaching structure	9
Weekly	7

According to the analysis it seems that the programs vary based on focus area, way of learning and assessment. These programs focus on different areas and that the programs have been realised face-to-face and blended and have certification, feedback or assessments to evaluate the learning results (see table 42, 43 and 44). Besides, career counselling seems to be most offered as employability support (see table 45).

Table 42: Focus area of coaching

Focus area of coaching	
Combinations	10
Basic skills development	6
Career planning and job search support	6
Confidence-building and motivation	7
Not applicable	3
Other (please specify)	14
Soft skills (e.g., communication, teamwork)	1

Table 43: Number of blended learning programs and in-person only

Hybrid learning	How is your CPP program/course/ training typically delivered?
Blended (online and in-person)	14
In-person only	15

Table 44: Modes of assessment

Assessment of student learning	N
Certification or competency-based evaluations	15
Feedback from employers/supervisors	21
Performance assessments in real-world tasks	11

Tabel 45: Number of programs offering employability and vocational support.

Employability and vocational support	N
Career counselling	14
Job placement assistance	8
Mentorship programs	8
Resume/interview coaching	8

3.3.3   Impact on hiring opportunities: Do you think there is a relation between employer involvement and hiring opportunities for the training graduates?

Based on the results it seems that there are different success factors on hiring opportunities (see table 47). Furthermore it was possible to discern a top three of success factors per type of partner(ship) of strategy of involvement (see table 48).

Table 47: Three most important success factors for programs with and without impact on hiring opportunities

Most important success factors	No, Unsure, no data (n=10)	Yes, impact on hiring opportunities (n=31)
	1) Focus on workflow readiness (green and digital skills) 2) Complementary strengths 2) Open, regular communication 2) Willingness to collaborate	1) Shared strategic goals and mutual long–term benefits 2) Focus on workflow readiness 3) capacity to implement and manage the partnership 3) Complementary strengths 3) high levels of trust and mutual respect

Table 48: Top three of the Characteristics of the partnership for impactful programs and those where the impact is low or (still) unsure

Top Three most important factors	No, Unsure, no data(n=10)	Yes, impact on hiring opportunities(n=31)
Cooperation partners	1) local employers and training centra 2) employer associations 2) employers	1) local employers and training centra 2) employers 3) local VET schools
Type of partnership	1) Coordinating 2) Cooperating	1) coordinating 2) cooperating 3) networking
Strategies for involvement	1) effective communication 2) Reminding of direct benefits	1) effective communication 2) regular meetings 3) Reminding of direct benefits

Besides, on program level it seems that coaching, blended and in person learning besides career counselling and mentorship seems to have an impact on hiring opportunities (see table 49).

Table 49: Top three of the characteristics in which impactful programs differ mor programs where the impact is low or (still) unsure

Top Three most important factors	No, Unsure, no data(n=10)	Yes, impact on hiring opportunities(n=31)
CoachingYes/no Goal	1) no 2) yes, for all learners 1) other 2) confidence building	1) yes, for all learners 2) yes, for special groups 3) no 1) many different goals 2) career placement and job search support 3) basic skills development
Hybrid	1) in-person only 2) blended 2) fully online	1) blended 2) in-person only
Type of employment support	1) career counselling 2) job placement assistance 3) resume/interview coaching	1) career counselling 2) resume/interview coaching 3) mentorship programs

Table 50: Characteristics of the program in which high and low impact programs differ (employment opportunities)

Moderate employment opportunities (n=15)	Good employment opportunities (n=23)
1) national 2) local	1) regional 2) Local 2) national

Table 51: Top three success factors for high and low impact programs

Moderate employment opportunities (n=15)	Good employment opportunities (n=23)
1)Focus on workforce readiness (green and digital skills) 2) High levels of trust and mutual respect 3) Shared strategic goals and mutual long-term benefits	1) Shared strategic goals and mutual long-term benefits 2) Complementary strengths 2) Focus on workforce readiness (green and digital skills) 2) Open and regular communication and information sharing

3.3.4   Impact on employment opportunities

According to the impact on employment opportunities especially regional programs seem to have an impact (see table 49) and different success factors seem to influence this impact (see table 50).

Furthermore, especially partnerships focussing on cooperation and coordination seems to have an impact on good employment opportunities and especially labor market needs analysis, consulting on the training development, candidate selection and co-design of training programs besides post-training evaluation and feedback seem to be important tasks to optimize success (see table 51).

Table 52: Top three of the characteristics of the partnership for high and low impact programs (employment opportunities)

	Moderate employment opportunities (n=15)	Good employment opportunities (n=23)
Type of partnership	1) coordinating 2) cooperating 3) collaborating	1) cooperating 2) coordinating 3) networking
Type collaboration activities	1) labor market needs analysis 2) consulting on training development 3) candidate selection	1) labor market needs analysis 2) consulting on training development 3) candidate selection 3) co-design of training programs
Stage involvement	1) labor market needs analysis 2) candidate recruitment 2) implementation and delivery training 2) post-training evaluation and feedback 3) training design and content development	1) labor market needs analysis 2) training design and content development 3) post-training evaluation and feedback

Table 53: Top three characteristics of the learning environment of high and low impact programs (employment opportunities)

	Moderate employment opportunities (n=15)	Good employment opportunities (n=23)
Urgency Activities	1) apprenticeships 2) workplace simulations 3) internships 4) employer-led workshops	1) volunteering opportunities 2) workplace simulations 3) apprenticeships 3) internships
Coaching Focus coaching	1) Other 2) confidence building 3) career planning and job search support	1) other 2) basic skills development 2) career planning and job search support
Type of employment support	1) career counselling 2) mentoring programs 3) job placement assessment	1) career counselling 2) resume/interview coaching 3) job placement assessment

Finally, different activities relating to transfer the learned competencies into practice, coaching related to different basic skills and career planning and job support in addition to career counselling, interview coaching and job placement assessment seem to influence good employment opportunities (see table 52).

3.4   Conclusion

Program managers of high-impact initiatives identified six key factors that contribute to the success of programs built on collaboration between the public and private sectors:

- Focus on workforce readiness, including green skills and adaptability
- Open and regular communication and consistent information sharing
- Shared strategic goals and mutual, long-term benefits
- Capacity to implement and manage the partnership effectively
- Complementary strengths between partners
- High levels of trust and mutual respect

These findings suggest that effective interaction—both formal and informal—is critical to partnership success. While structural elements such as a clear link to workforce needs, strategic alignment, and management capacity are essential, the quality of communication and collaboration between partners often determines the program's impact.

Program managers emphasized the importance of networking, coordinating, and cooperating, based on the framework by Davies and Hentschke (2006):

- Networking: Informal collaboration focused primarily on exchanging information
- Coordinating: More structured collaboration where partners share access to services or resources but continue to operate independently
- Cooperating: Formal partnerships involving some shared activities, while maintaining organizational autonomy

Notably, none of the program managers described partnerships that fit the definition of collaborating—that is, deeply integrated partnerships with shared governance structures, joint operations, and pooled resources.

Program managers of successful programs frequently cited the following collaborative activities:

- Labour market needs analysis
- Consultation and co-design of training content and structure
- Post-training evaluation and feedback loops
- Employer involvement in candidate selection processes

These activities reflect active employer engagement throughout the program lifecycle—from design to delivery and evaluation. The main distinction between high-impact and low-impact programs lies in the presence of coaching during the learning process.

High-impact programs consistently offer:

- Ongoing coaching during training
- Employability and vocational support, including:
  - Career counselling
  - Mentorship programs
  - Job placement assistance
  - CV and interview preparation

These features not only enhance learner outcomes but also support smoother transitions into the workforce—particularly for vulnerable adults navigating labour market changes.

4

Part 4: General conclusion

General conclusion

The report belongs to Work Package 2 of the RESCALE project, which examines adult education (AE) infrastructure in partner countries, with a focus on reskilling vulnerable adults for the green and digital economy. It highlights public–private partnerships (PPPs) as a mechanism for designing and delivering relevant, inclusive training through Reskilling Labs.

Two questionnaires were created to collect comparable data:

1. Country–Level Questionnaire
    · Maps national AE systems targeting vulnerable adults.
    · Covers providers, objectives, program duration, participation, stakeholders, and PPP cooperation.
2. Program–Level Questionnaire
    · Focuses on specific basic–skills programs featuring public–private collaboration.
    · Explores partnership structure, learning environment, and outcomes.

The questionnaire development process included first a literature review on digital and green skills, PPPs in AE, and innovative learning environments. This was followed by a process of iterative drafting and partner feedback for validity.

Conceptual foundations emphasize:

- Digital skills as critical for employability and inclusion.
- Green (transversal) skills as essential for sustainable development.
- PPPs as key to aligning education with labor market demands.
- Effective learning environments stress learner agency, urgency, coaching, collaboration, hybrid learning, assessment as learning (based on the HILL model) and employability support.

The analysis of the AE Infrastructure per Country (data of questionnaire 1) covers data from 11 countries, including partner and observer nations (e.g., Iceland, Ireland, Malta).

The key findings are:

- AE providers are mainly public training institutions; NGOs and private providers play supporting roles.
- Main goals: employability, job readiness, and basic skills; fewer focus on green skills.
- Duration of programs varies widely (mostly short to medium term).
- Barriers: low motivation/confidence, lack of awareness, limited access, and financial constraints.
- Support: most programs are free/subsidized; some offer childcare or transportation reimbursement.
- Stakeholders: adult education centres and NGOs are most active; governments have highest influence.

- Funding mainly from government and EU programs.
- Public–private cooperation exists in most countries but is often limited to specific sectors.

Next, for the analysis of Public–Private Collaborative Programs selected by the partners. Data were gathered on 41 programs across countries (literacy, digital, green, and mixed–skill focus).

Key characteristics are:

- Target groups: low–skilled, unemployed, in–transition workers, migrants, or vulnerable adults.
- Most programs are small–scale (<50 participants).
- Impactful collaborations feature:
    · Clear shared goals and mutual benefits.
    · Regular communication.
    · Focus on workforce readiness (digital and green skills)
    · Joint design and delivery.
- Successful initiatives share clear goals, trust–based communication, joint design and delivery, and a focus on workforce readiness in green and digital sectors. Impactful programs feature urgency, agency, hybrid learning, team collaboration, employability support. One of the most striking characteristics of the learning environment differentiating between more and less impactful programs, is the existence of coaching
- Challenges: maintaining employer engagement, balancing diverse employer needs, ensuring long–term funding

The RESCALE project successfully mapped adult education infrastructures and identified key enablers for effective reskilling of vulnerable adults. The findings inform the design of Reskilling Labs, which aim to create inclusive, demand–driven models for lifelong learning. More concretely, the Reskilling Labs will focus on implementing and optimizing coaching in the programs selected as Reskilling Lab with a focus on learning urgency, learner agency, hybrid learning, team collaboration and employability support.

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