ERASMUS+ PROJECTS FOCUSING ON DIGITAL SKILLS AND ENGAGING YOUNG PEOPLE IN VOCATIONAL EDUCATION AND TRAINING

Analysis of a selection of good practices

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ANALYSIS OF A SELECTION OF GOOD PRACTICES

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Abstract

This report investigates how Erasmus+ projects (2018-2021 KA2 calls) have contributed to enhancing basic and advanced digital skills in initial and continuing vocational education and training (VET) as well as their contribution to improving outreach about learning and career pathways to young persons neither in employment nor education or training (NEETs) and vulnerable groups. The project began with the preparation of an inventory of 100 good practices selected from the Erasmus+ database. On the basis of this inventory, 30 case studies were selected for in-depth analysis.

This report summarises the findings and lessons learned from the selected 30 case studies, with the aim of identifying and highlighting good practices, and key success factors to guide and inspire VET policymakers, education and training practitioners and other relevant actors at different levels of governance in future initiatives.

The project was commissioned by the European Commission and carried out by PPMI (part of Verian Group) between December 2023 and June 2024.

Executive summary

This report reviews the outputs, outcomes and impacts of Erasmus+ projects focusing on (1) the development of basic and advanced digital skills for young people and adults in initial and continuing vocational education and training (VET), and (2) outreach, guidance and awareness measures applied to increase the awareness of young persons neither in employment nor education or training (NEETs) as well as other vulnerable groups about the learning and career pathways offered by VET and apprenticeships. The report summarises the findings and lessons learned from 30 case studies carried out as part of this research, with the aim of identifying and highlighting good practices, and key success factors to inform EU stakeholders.

The project was commissioned by the European Commission and carried out by PPMI (part of Verian Group) between December 2023 and June 2024.

Background and context

The **European Pillar of Social Rights** aims to build a fairer and more inclusive European Union and to better fulfil citizens' rights by building on key principles. These include:

(1) the right to quality and inclusive education, training and lifelong learning to maintain and acquire skills for participation in society and successfully managing transitions in the labour market (Principle 1);

(2) the right to timely and tailor-made assistance to improve employment and self-employment prospects through support for job search, training and re-qualification, and the right to continuing education, apprenticeship traineeship, or a job offer within 4 months of becoming unemployed or leaving education (Principle 4).

The **European Skills Agenda** (2020) and the **Youth Employment Support Package** (2020) aim to improve individual and collective skills to meet the demands of a changing labour market, to generate innovation, to improve the competitiveness of enterprises, and to contribute to sustainable growth. High-quality VET plays a key role in ensuring that people possess the right skills to meet socio-economic challenges and to succeed in their personal and professional lives. The **Council Recommendation on Vocational Education and Training** (2020) underlines the importance of modernising VET systems to ensure they respond effectively to labour market needs while providing high-quality education and training opportunities. This Recommendation is further supported by the **Osnabrück Declaration** (2020), which sets out concrete actions for the period 2021-2025 and highlights VET as an enabler of recovery and a just transition to the green and digital economies.

Methodology

The report aims to explore how Erasmus+ projects contribute to the following two policy priorities:

- **Developing basic and advanced digital skills for young people and adults** in initial and continuing VET. This includes, for example, the development of innovative pedagogies such as work-based learning/apprenticeship opportunities covering digital skills.
- **Outreach, guidance, and awareness to young people**, particularly **NEETs**, with regard to the learning and career pathways **offered by VET and apprenticeships**. In

addition, this policy priority covers **innovative approaches** to engage with **NEETs** and other **vulnerable groups** and provide them with **new skills**.

To achieve this, an inventory of 100 good practices was selected from the Erasmus+ project database to illustrate the diverse applications of good practices and to provide a valuable resource for benchmarking, learning, and inspiration for similar or related projects. From this inventory, 30 cases were selected for in-depth case studies, followed by a cross-case analysis. The main purpose of the cross-case analysis is to identify patterns, trends, and best practices across different projects that have proved to be successful in addressing the policy priorities in focus.

An online stakeholder workshop was organised on 17 April 2024 to validate the preliminary findings.

Lessons learned

The project findings suggest the following lessons learned regarding the effective implementation of projects aiming to achieve the above policy goals (enhancing the digital skills of VET learners; engaging with and promoting upskilling opportunities to NEETs):

Lessons learned with regard to engagement with young persons neither in employment nor education or training (NEETs)

- Implementing *flexible learning schedules and content* that can be tailored to individual life circumstances and learning speeds enhances the accessibility of the learning process, making sure that learners with varying life obstacles have an opportunity to engage with the coursework.
- *The initial research phase* of the project is crucial for tailoring its approach to engaging the NEETs in a specific targeted context, ensuring that upcoming interventions are supported by empirical understanding and piloted across the targeted learning settings.
- *Equipping educators with the skills to support NEETs* effectively is essential to ensuring that learners receive the guidance and motivation needed to succeed in VET programmes.
- *Practical, hands-on learning experiences* are essential, as workshops and real-world scenarios help participants to apply their learning in contexts that relate directly to their lives and aspirations.
- *Integrating digital tools and social media* into traditional educational methods boosts engagement, particularly among younger people who are used to digital tools.
- *Transnational partnerships* enrich projects by facilitating the exchange of ideas and experiences, while making effective communication and coordination mechanisms necessary.

Lessons learned with regard to strengthening digital skills among VET learners

- Personalised learning ensures that digital skills training is adaptable to individual learning styles and needs. This is crucial for adult learners, who need to integrate digital competences into an existing set of knowledge and skills.
- The constant evolution of digital technologies requires *continuous updates to training methods and curricula* to avoid content obsolescence (this is applicable to both basic and advanced levels).
- Fostering *long-term partnerships with tech companies and industry leaders* to ensure educational content is up-to-date and directly linked to labour market needs enhances the employment prospects of learners.

- *Integrating digital tools into the curriculum* enhances both the learning process and learners' digital competences, especially at the basic level.
- *The use of interactive and digital communication* tools fosters collaboration, enhances the learning experience, and proves essential in adapting to new learning environments (through the development of basic digital skills).
- Projects that incorporated real-world (*or real-world inspired*) applications used by the industry stakeholders were effective in making learning relevant. This approach helps to bridge the gap between classroom content and the actual needs of industry. This is especially relevant in relation to advanced digital skills.

Lessons learned with regard to the sustainability of projects

- *Designing adaptive methodologies* ensures that project outputs and outcomes remain relevant and sustainable regardless of external shifts and interruptions.
- Projects should be designed in such a way that their methods, strategies, and successes can be readily adapted and applied *to different educational or national contexts*, spreading the impact and sustainability of the project's results.
- *Continuous updates to and adaptations* of training materials in response to new technological developments, as well as the collection of feedback from users, help to maintain the relevance and effectiveness of educational content.
- The collective effort of diverse and *dedicated partnerships* (including industry partners, local communities and civil society) helps to overcome obstacles and enrich the project's approach through its diverse participants' experiences and perspectives.
- *Empowering educators* by involving them early on in the project and providing necessary training ensures that they are well-prepared to sustain the project's educational initiatives after its formal conclusion.
- *Materials* developed should be easily *understandable and accessible*, thereby reducing barriers to use and facilitating ongoing engagement by the target groups.
- Developing *online platforms* that are intuitive and which support continuous learning can help to sustain a project's results by providing ongoing access to resources and learning opportunities.

Zusammenfassung

Für diesen Bericht wurden die Ergebnisse von Erasmus+-Projekten untersucht, die (1) den Erwerb grundlegender und fortgeschrittener digitaler Kompetenzen in der beruflichen Aus- und Weiterbildung von Jugendlichen und Erwachsenen verbessern oder (2) mit gezielten Informationen, Beratungsangeboten und Aufklärungskampagnen Jugendliche, die weder arbeiten, noch eine Schule besuchen oder eine Ausbildung absolvieren (NEET) und andere gefährdete Gruppen auf die Lern- und Karrieremöglichkeiten in der beruflichen Bildung aufmerksam machen. In dem Bericht werden die Ergebnisse und Lehren aus 30 Fallstudien zusammengefasst, die als Teil dieser Studie untersucht wurden. Das Ziel war es, bewährte Praktiken und wichtige Erfolgsfaktoren zu identifizieren und EU-Interessenträgern eine Faktengrundlage für künftige Entscheidungen bereitzustellen.

Das Projekt wurde von der Europäischen Kommission in Auftrag gegeben und von dem zur Verian Group gehörenden Forschungsinstitut PPMI zwischen Dezember 2023 und Juni 2024 durchgeführt.

Hintergrund und Kontext

Die **europäische Säule sozialer Rechte** soll die Europäische Union fairer und integrativer machen und schreibt dazu wichtige Grundsätze und Rechte für die Bürgerinnen und Bürger fest. Diese besagen unter anderem:

(1) Jede Person hat Recht auf allgemeine und berufliche Bildung und lebenslanges Lernen von hoher Qualität und in inklusiver Form, damit sie Kompetenzen bewahren und erwerben kann, die es ihr ermöglichen, vollständig am gesellschaftlichen Leben teilzuhaben und Übergänge auf dem Arbeitsmarkt erfolgreich zu bewältigen (Grundsatz 1),

(2) Jede Person hat Recht auf frühzeitige und bedarfsgerechte Unterstützung zur Verbesserung der Beschäftigungs- oder Selbstständigkeitsaussichten. Dazu gehört das Recht auf Unterstützung bei der Arbeitssuche, bei Fortbildung und Umschulung. Junge Menschen haben Recht auf eine Weiterbildungsmaßnahme, einen Ausbildungsplatz, einen Praktikumsplatz oder ein Beschäftigungsangebot innerhalb von vier Monaten, nachdem sie arbeitslos geworden sind oder ihre Ausbildung abgeschlossen haben (Grundsatz 4).

Die **Europäische Kompetenzagenda** (2020) und das **Paket zur Förderung der Jugendbeschäftigung** (2020) dienen dem Ziel, die Kompetenzen junger Menschen und der Gesellschaft insgesamt zu verbessern, damit diese Kompetenzen mit einem Arbeitsmarkt im Wandel Schritt halten, Innovationen schaffen, die Wettbewerbsfähigkeit von Unternehmen steigern und zu nachhaltigem Wachstum beitragen. Berufliche Bildung von hoher Qualität ist ein wichtiger Faktor, damit die Bürgerinnen und Bürger über die nötigen Kompetenzen verfügen, um sozioökonomische Herausforderungen zu meistern und ein erfolgreiches (Berufs-)leben zu führen. Demnach wird in der **Empfehlung des Rates zur beruflichen Aus- und Weiterbildung** (2020) betont, dass die Berufsbildungssysteme dringend modernisiert werden müssen, damit sie angemessen auf den Bedarf des Arbeitsmarkts reagieren und hochwertige Bildungsangebote bereitstellen können. Diese Empfehlung wird durch die **Osnabrück-Erklärung** (2020) unterfüttert, die konkrete Maßnahmen für den Zeitraum 20212025 vorsieht und die berufliche Bildung als Wegbereiter für den Aufschwung und den gerechten Übergang zu einer digitalen und grünen Wirtschaft anerkennt.

Methodologie

Für den Bericht wurde untersucht, wie Erasmus+-Projekte zu den folgenden beiden politischen Prioritäten beitragen können:

- **Erwerb grundlegender und fortgeschrittener digitaler Kompetenzen durch Jugendliche und Erwachsene** in der beruflichen Aus- und Weiterbildung. Dazu gehören beispielsweise Projekte, die innovative didaktische Methoden zur Vermittlung digitaler Kompetenzen in der Aus- und Weiterbildung entwickeln, z. B. Angebote zum Lernen am Arbeitsplatz oder Praktika.
- **Einbeziehung, Beratung und Aufklärung junger Menschen** über die Lern- und Karrieremöglichkeiten **durch eine berufliche Bildung oder Lehre**, insbesondere von Jugendlichen, die weder arbeiten, noch eine Schule besuchen oder eine Ausbildung absolvieren (**NEET**). Zu dieser politischen Priorität gehören auch **innovative Ansätze** für die Förderung von NEET und anderen **gefährdeten Gruppen** und der Erwerb **neuer Kompetenzen** durch diese Gruppen.

Für die Studie wurden 100 erfolgreiche Projekte aus der Erasmus+-Projektdatenbank ausgewählt, die ganz unterschiedliche Anwendungen bewährter Praktiken illustrieren und eine wertvolle Ressource bilden, anhand derer ähnliche oder verwandte Projekte ihren Erfolg messen, lernen und sich inspirieren lassen können. Aus diesem Datensatz wurden nochmals 30 Projekte für eine detaillierte Untersuchung und anschließende fallübergreifende Analyse ausgewählt. Wichtigstes Ziel dieser Analyse war es, Muster, Trends und vorbildlichen Verfahren zu identifizieren, die sich in unterschiedlichen Projekten bei der Erreichung der oben genannten politischen Prioritäten bewährt haben.

Am 17. April 2024 fand ein Online-Workshop für Interessenträger statt, in dem die vorläufigen Ergebnisse der Analyse validiert wurden.

Erkenntnisse

Die Projektergebnisse lassen sich zu den folgenden Erkenntnissen über die erfolgreiche Umsetzung von Projekten zusammenfassen, die den oben genannten politischen Zielen dienen (Verbesserung der digitalen Kompetenzen von Lernenden in der beruflichen Aus- und Weiterbildung bzw. Information und Förderung von NEET in Bezug auf Weiterbildungsangebote). Einige dieser bewährten Praktiken wurden von den befragten Interessenträgern vorgeschlagen, andere wurden durch die fallübergreifende Analyse identifiziert.

Erkenntnis zur Förderung von Jugendlichen, die sich weder in Beschäftigung noch in Bildung oder Ausbildung befinden (NEET)

- *Flexible Lernpläne und -inhalte*, die sich an die individuellen Lebensumstände und Lerngeschwindigkeiten anpassen lassen, erleichtern Jugendlichen den Zugang zu Lernangeboten.
- Die *anfängliche Forschungsphase* des Projekts ist äußerst wichtig, um den Ansatz zur Erreichung der NEET-Zielgruppe an den spezifischen Kontext anzupassen. Dadurch wird sichergestellt, dass die geplanten Maßnahmen auf empirischen Daten basieren und in allen vorgesehenen Lernumgebungen erprobt werden.
- Es ist wichtig, dass den *Ausbildern die für die Förderung von NEET nötigen Kompetenzen vermittelt* werden. Dadurch ist gewährleistet, dass alle Lernenden die Förderung und Motivation erhalten, die sie für den erfolgreichen Abschluss der beruflichen Bildung benötigen.

- *Praktische, handlungsorientierte Lernerfahrungen* sind wichtig, weil Workshops und reale Szenarien es den Teilnehmern ermöglichen, ihr Wissen in einem Kontext anzuwenden, der zu ihrem Leben und ihren Zielen passt.
- Die *Einbindung digitaler Hilfsmittel und sozialer Medien* in herkömmliche Unterrichtsmethoden fördert die Beteiligung, insbesondere bei jungen Menschen, die an digitale Interaktion gewöhnt sind.
- *Grenzüberschreitenden Partnerschaften* bereichern jedes Projekt. Sie erfordern zwar effiziente Kommunikations- und Koordinationsmechanismen, ermöglichen aber auch den Austausch von Ideen und Erfahrungen.

Erkenntnisse zur besseren Vermittlung digitaler Kompetenzen in der beruflichen Bildung

- *Personalisiertes Lern*en stellt sicher, dass sich die Weiterbildungsangebote für digitale Kompetenzen an den individuellen Lernstil und -bedarf anpassen lassen. Das ist besonders wichtig bei erwachsenen Lernenden, die neue digitale Kompetenzen in ihre bisherigen Kenntnisse und Fähigkeiten integrieren müssen.
- Da sich die digitalen Technologien ständig weiterentwickeln, müssen auch *Lehrmethoden und Lehrpläne laufend aktualisiert* werden, damit die Lerninhalte nicht schon bei der Vermittlung obsolet sind (das gilt sowohl für Anfänger- als auch für Fortgeschrittenenkurse).
- Durch die Pflege *langfristiger Partnerschaften mit Technologieunternehmen und Branchenführern* kann gewährleistet werden, dass die Bildungsinhalte aktuell und direkt auf die Bedürfnisse des Arbeitsmarkts zugeschnitten sind. Dies verbessert die Beschäftigungsaussichten der Lernenden.
- Die *Integration digitaler Hilfsmittel in den Lehrplan* verbessert sowohl den Lernprozess als auch die digitalen Kompetenzen der Lernenden, insbesondere in Anfängerkursen.
- Der *Einsatz interaktiver und digitaler Kommunikationsmittel* fördert die Zusammenarbeit, verbessert die Lernerfahrung und ist wichtig für die Anpassung an neue Lernumfelder (durch den Erwerb grundlegender digitaler Kompetenzen).
- Wenn Projekte *Anwendungen aus dem echten Leben (oder davon inspirierte Anwendungen*) integrieren, die von der Branche tatsächlich eingesetzt werden, wird die Weiterbildung relevanter. Dieser Ansatz verringert die Kluft zwischen Lehrinhalten und den tatsächlichen Bedürfnissen in den Unternehmen. (Das gilt besonders für fortgeschrittene digitale Kompetenzen).

Erkenntnisse zur Nachhaltigkeit von Projekten

- *Flexible Methodologien* stellen sicher, dass die Projektergebnisse unabhängig von gesellschaftlichen Veränderungen und Störungen relevant und nachhaltig bleiben.
- Projekte sollten so aufgebaut sein, dass ihre Methoden, Strategien und Erfolge *problemlos an andere Bildungssysteme und nationale Besonderheiten angepasst werden können*. Das erhöht die Wirkung und Nachhaltigkeit der Projektergebnisse.
- Wenn die *Unterrichtsmaterialien regelmäßig aktualisiert* und an neue technologische Entwicklungen sowie das Feedback der Nutzer *angepasst* werden, bleiben die Lehrinhalte eher relevant und hilfreich.
- Durch die gemeinsame Anstrengung *ganz unterschiedlicher und engagierter Partner* (aus der Wirtschaft, lokalen Gruppen und der Zivilgesellschaft) können Hindernisse leichter überwunden und Projekte durch die unterschiedlichen Erfahrungen und Perspektiven der jeweiligen Partner bereichert werden.

- Wenn man *Ausbilder frühzeitig in das Projekt involviert* und ihnen die notwendige Weiterbildung bietet, sind sie später *besser befähigt*, die Bildungsinitiativen des Projekts auch nach dessen offiziellen Ende weiterzuführen.
- Die entwickelten *Materialien sollten leicht verständlich und zugänglich* sein. Das senkt Barrieren und verbessert die Chance, dass sie die Zielgruppen dauerhaft erreichen.
- *Online-Plattformen*, die intuitiv zu bedienen sind und zum Weiterlernen einladen, sorgen dafür, dass die Ressourcen und Lernmöglichkeiten des Projekts auch später zugänglich bleiben, und machen die Projekterfolge nachhaltiger.

Résumé analytique

Ce rapport examine les résultats des projets Erasmus+ axés sur (1) le développement des compétences numériques de base et avancées pour les jeunes et les adultes dans l'enseignement et la formation professionnels (EFP) initiaux et continus, et (2) les mesures de sensibilisation, d'orientation et d'information appliquées pour sensibiliser les jeunes sans emploi, ne poursuivant pas d'études et ne suivant pas de formation (NEET) et d'autres groupes vulnérables aux parcours d'apprentissage et de carrière offerts par l'EFP et les apprentissages. Le rapport résume les résultats et les enseignements tirés de 30 études de cas réalisées dans le cadre de cette recherche. Il identifie et met en évidence les bonnes pratiques et les facteurs clés de succès afin d'informer les parties prenantes de l'UE.

Le projet a été commandé par la Commission européenne et réalisé par PPMI (qui fait partie de Verian Group) entre décembre 2023 et juin 2024.

Contexte

Le **Socle européen des droits sociaux** vise à construire une Union européenne plus juste et plus inclusive et à mieux satisfaire les droits des citoyens en s'appuyant sur des principes clés, notamment :

(1) le droit à une éducation, une formation et un apprentissage tout au long de la vie de qualité et inclusifs, afin de maintenir et d'acquérir les compétences nécessaires pour participer à la société et gérer avec succès les transitions sur le marché du travail (principe 1) ;

(2) le droit à une assistance rapide et adaptée pour améliorer les perspectives d'emploi et d'activité indépendante par le biais d'un soutien à la recherche d'emploi, à la formation et à la requalification, et le droit à une formation continue, à un stage d'apprentissage ou à une offre d'emploi dans les 4 mois suivant le début du chômage ou l'abandon des études (principe 4).

L'**Agenda européen des compétences** (2020) et le **Paquet de soutien à l'emploi des jeunes** (2020) visent à améliorer les compétences individuelles et collectives afin de répondre aux exigences d'un marché du travail en mutation, de générer de l'innovation, d'améliorer la compétitivité des entreprises et de contribuer à une croissance durable. Un système d'EFP de qualité joue un rôle essentiel en garantissant que les personnes possèdent les compétences adéquates pour relever les défis socio-économiques et réussir leur vie personnelle et professionnelle. La **recommandation du Conseil sur l'enseignement et la formation professionnels** (2020) souligne l'importance de moderniser les systèmes d'EFP pour s'assurer qu'ils répondent efficacement aux besoins du marché du travail tout en offrant des possibilités d'éducation et de formation de haute qualité. Cette recommandation est également soutenue par la **déclaration d'Osnabrück** (2020), qui définit des actions concrètes pour la période 2021-2025 et souligne que l'EFP est un catalyseur de la reprise et d'une transition juste vers les économies verte et numérique.

Méthodologie

L'objectif du rapport est d'explorer la manière dont les projets Erasmus+ contribuent aux deux priorités politiques suivantes :

- **Développer les compétences numériques de base et avancées pour les jeunes et les adultes** dans l'EFP initial et continu. Cela inclut, par exemple, le

développement de pédagogies innovantes telles que des possibilités d'apprentissage en alternance couvrant les compétences numériques dans l'EFP initial et continu.

- **Sensibiliser, orienter et informer les jeunes**, en particulier les **NEET** (jeunes sans emploi, ne poursuivant pas d'études et ne suivant pas de formation), concernant les parcours d'apprentissage et de carrière **offerts par l'EFP et l'apprentissage**. En outre, cette priorité politique couvre des **approches innovantes** pour s'engager auprès des **NEET** et d'autres **groupes vulnérables** et leur fournir de **nouvelles compétences**.

Pour ce faire, un inventaire de 100 bonnes pratiques a été sélectionné dans la base de données des projets Erasmus+ afin d'illustrer les diverses applications des bonnes pratiques et de fournir une ressource précieuse en vue de l'étalonnage, l'apprentissage et l'inspiration pour des projets similaires ou connexes. À partir de cet inventaire, 30 cas ont été sélectionnés pour faire l'objet d'études approfondies, suivies d'une analyse transversale. L'objectif principal de l'analyse transversale est d'identifier les modèles, les tendances et les meilleures pratiques à travers différents projets qui se sont avérés efficaces pour répondre aux priorités politiques en question.

Un atelier en ligne avec les parties prenantes a été organisé le 17 avril 2024 pour valider les résultats préliminaires de la recherche.

Enseignements tirés

Les résultats du projet permettent de tirer les enseignements suivants concernant la mise en œuvre efficace de projets visant à atteindre les objectifs politiques susmentionnés (améliorer les compétences numériques des apprenants de l'EFP ; s'engager auprès des NEET et promouvoir les possibilités de requalification). Certaines de ces bonnes pratiques ont été exprimées directement par les parties prenantes interrogées ; d'autres résultent des conclusions de l'analyse transversale.

Enseignements tirés en matière d'engagement auprès des jeunes sans emploi, ne poursuivant pas d'études et ne suivant pas de formation (NEET)

- La mise en œuvre d'*horaires et de contenus d'apprentissage flexibles* pouvant être adaptés aux circonstances de la vie et aux rythmes d'apprentissage individuels améliore l'accessibilité.
- La *phase de recherche initiale* du projet est cruciale pour adapter son approche à l'engagement de la population NEET dans un contexte ciblé spécifique, en veillant à ce que les interventions à venir soient étayées par une compréhension empirique et pilotées dans les contextes d'apprentissage ciblés.
- Il est essentiel de *doter les éducateurs des compétences nécessaires pour soutenir efficacement les NEET* afin de garantir que ces apprenants reçoivent les conseils et la motivation nécessaires pour réussir dans les programmes d'EFP.
- Les *expériences d'apprentissage pratiques sont essentielles*, car les ateliers et les scénarios basés sur le monde réel aident les participants à appliquer leur apprentissage dans des contextes directement liés à leur vie et à leurs aspirations.
- L'*intégration d'outils numériques et de médias sociaux* dans les méthodes éducatives traditionnelles stimule l'engagement, en particulier chez les jeunes qui sont habitués aux interactions numériques.
- Les *partenariats transnationaux* enrichissent les projets en facilitant l'échange d'idées et d'expériences, tout en rendant nécessaires des mécanismes de communication et de coordination efficaces.

Enseignements tirés en matière de renforcement des compétences numériques des apprenants de l'EFP

- L'*apprentissage personnalisé* garantit que la formation aux compétences numériques s'adapte aux styles et aux besoins d'apprentissage individuels. Ceci est crucial pour les apprenants adultes, qui doivent intégrer les compétences numériques dans un ensemble existant de connaissances et d'aptitudes.
- L'évolution constante des technologies numériques exige une *mise à jour permanente des méthodes de formation et des programmes d'études* afin d'éviter l'obsolescence du contenu (ceci s'applique aussi bien au niveau de base qu'aux niveaux avancés).
- Favoriser les *partenariats à long terme avec les entreprises technologiques et les leaders de l'industrie* pour s'assurer que le contenu de l'enseignement est à jour et directement lié aux besoins du marché du travail, améliore les perspectives d'emploi des apprenants.
- L'*intégration d'outils numériques dans les programmes d'études* améliore à la fois le processus d'apprentissage et les compétences numériques des apprenants, en particulier au niveau de base.
- L'*utilisation d'outils de communication interactifs et numériques* favorise la collaboration, améliore l'expérience d'apprentissage et s'avère essentielle pour s'adapter à de nouveaux environnements d'apprentissage (grâce au développement de compétences numériques de base).
- Les projets qui intègrent des *applications du monde réel (ou inspirées du monde réel)* utilisées par les acteurs de l'industrie sont efficaces pour rendre l'apprentissage pertinent. Cette approche permet de combler le fossé entre le contenu des cours et les besoins réels de l'industrie (particulièrement pertinent concernant les compétences numériques avancées.)

Enseignements tirés en matière de durabilité des projets

- La *conception de méthodologies adaptatives* garantit que les résultats du projet restent pertinents et durables, indépendamment des changements et des interruptions externes.
- Les projets doivent être conçus de manière à ce que leurs méthodes, leurs stratégies et leurs succès puissent être *facilement adaptés et appliqués à différents contextes éducatifs ou nationaux*, ce qui permet d'étendre l'impact et la durabilité des résultats du projet.
- Les *mises à jour et les adaptations continues du matériel de formation* en réponse aux nouveaux développements technologiques, ainsi que la collecte des commentaires des utilisateurs, contribuent à maintenir la pertinence et l'efficacité du contenu éducatif.
- L'effort collectif de *partenariats diversifiés et dédiés* (y compris les partenaires industriels, les communautés locales et la société civile) permet de surmonter les obstacles et d'enrichir l'approche du projet grâce aux diverses expériences et perspectives des participants.
- *Renforcer les éducateurs* en les impliquant dès le début du projet et en leur fournissant la formation nécessaire permet de s'assurer qu'ils sont bien préparés à soutenir les initiatives éducatives du projet après sa conclusion officielle.
- Le *matériel élaboré doit être facilement compréhensible et accessible*, afin de réduire les obstacles à l'utilisation et de faciliter l'engagement continu des groupes cibles.
- Le développement de *plateformes en ligne* intuitives et favorisant l'apprentissage continu peut contribuer à pérenniser les résultats d'un projet en offrant un accès permanent aux ressources et aux possibilités d'apprentissage.

Introduction

1. Introduction

This report examines the outputs, outcomes and impacts of completed Erasmus+ projects from the 2018-2021 KA2 calls that support cooperation among organisations and institutions. For the participating organisations, projects supported under this Key Action are intended to generate innovative educational approaches, enhanced organisational environments, and improved capacities for international cooperation, all while promoting equal opportunities and social inclusion. The projects selected for this report focused specifically on digital skills development, engagement with vulnerable young people or those not in employment, education or training (NEETs), and their participation in upskilling programmes – including those offered by vocational education and training (VET) institutions. The report summarises the findings and lessons learned from 30 selected projects (case studies), with the aim of identifying and highlighting good practices for the purposes of dissemination, and key success factors to inform EU stakeholders implementing such projects.

The project was commissioned by the European Commission and carried out by PPMI (part of Verian Group) between December 2023 and June 2024.

1.1. Policy context

The **European Pillar of Social Rights** aims to build a fairer and more inclusive European Union and to better fulfil citizens' rights by building on key principles. These include:

(1) the right to quality and inclusive education, training and lifelong learning to maintain and acquire skills for participation in society and successfully managing transitions in the labour market (Principle 1);

(2) the right to timely and tailor-made assistance to improve employment and self-employment prospects through support for job search, training and re-qualification, and the right to continuing education, apprenticeship traineeship, or a job offer within 4 months of becoming unemployed or leaving education (Principle 4).

The **European Skills Agenda** (2020) and the **Youth Employment Support Package** (2020) aim to improve individual and collective skills to meet the demands of a changing labour market, to generate innovation, to improve the competitiveness of enterprises, and to contribute to sustainable growth. High-quality VET plays a key role in ensuring that people possess the right skills to meet socio-economic challenges and to succeed in their personal and professional lives. The **Council Recommendation on Vocational Education and Training** (2020) underlines the importance of modernising VET systems to ensure they respond effectively to labour market needs while providing high-quality education and training opportunities. This Recommendation is further supported by the **Osnabrück Declaration** (2020), which sets out concrete actions for the period 2021-2025 and highlights VET as an enabler of recovery and a just transition to the green and digital economies.

1.2. Objectives of this research

The aim of this report is to guide and inspire VET policymakers, education and training practitioners and other relevant actors at various levels of governance in future initiatives. The key outcome of this project is a compilation of inspirational good practice examples and analytical insights drawn from a comparative analysis of the projects implemented in the field of VET and managed by the national Erasmus+ agencies.

The overall objectives of the structured data collection and analysis are to:

- inform policymaking at European and national levels about relevant projects and their results;
- disseminate innovative approaches, working methods and tools developed, as well as results and strategies, that can inspire educational stakeholders throughout Europe;
- showcase how stakeholders can use the Erasmus+ programme to enrich their own practice.

Projects implemented within Erasmus+ KA2 have focused on promoting cooperation among organisations and institutions. This report aims to explore how such projects have contributed to the following two policy priorities:

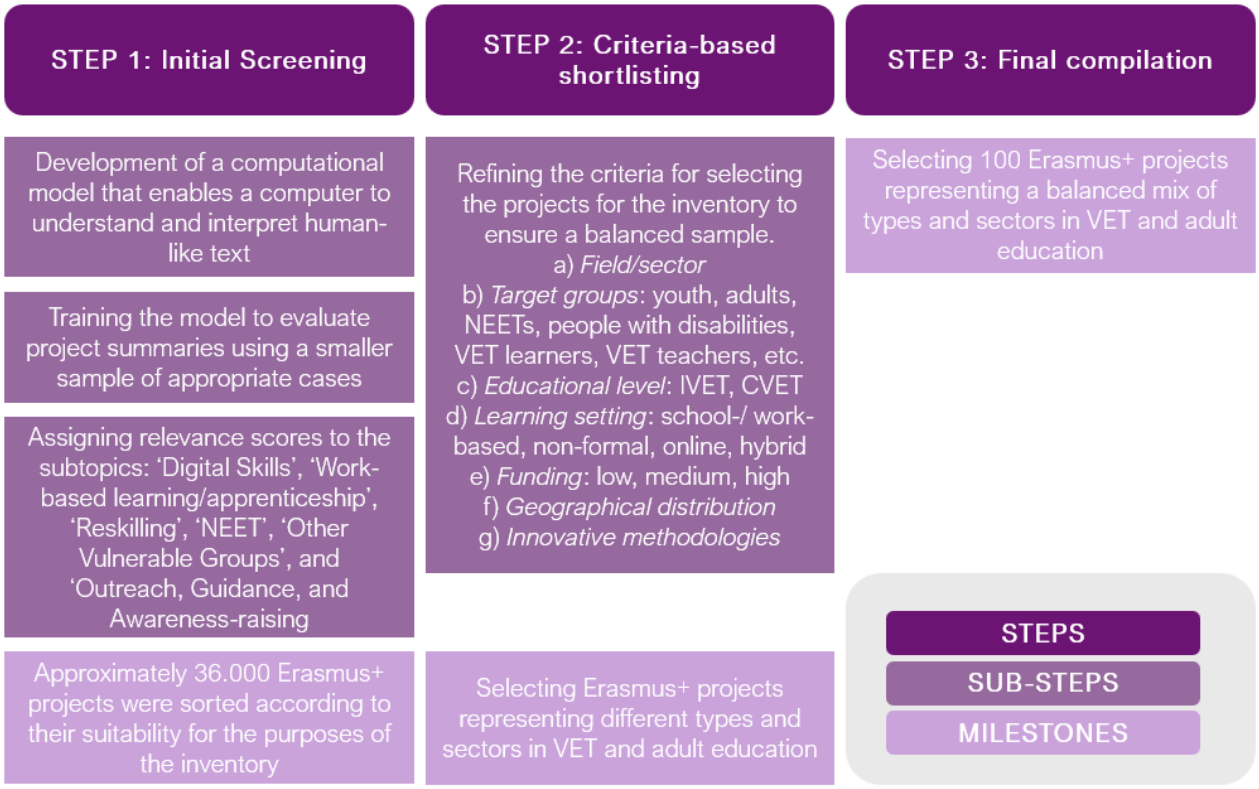
- **Developing basic and advanced digital skills for young people and adults**. This includes, for example, the development of innovative pedagogies, including work-based learning/apprenticeship opportunities, covering digital skills in initial and continuing VET.
- **Outreach, guidance, and awareness to young people, particularly NEETs**, in relation to the learning and career pathways **offered by VET and apprenticeships**. In addition, this policy priority covers **innovative approaches** to engage with **NEETs** and **other vulnerable groups** and provide them with **new skills**.

1.3. Methodology

1.3.1. Inventory of 100 good practices

The purpose of the inventory of 100 good practices is to collect and document a wide range of successful initiatives and methodologies that have been implemented effectively across different sectors and learning settings. This collection serves to illustrate the diverse applications of good practices and provides a valuable resource for benchmarking, learning and inspiration for similar or related projects. From this inventory, 30 cases were selected for in-depth case studies (see selection criteria in Figure 2).

Figure 1. Methodology for the compilation of the inventory



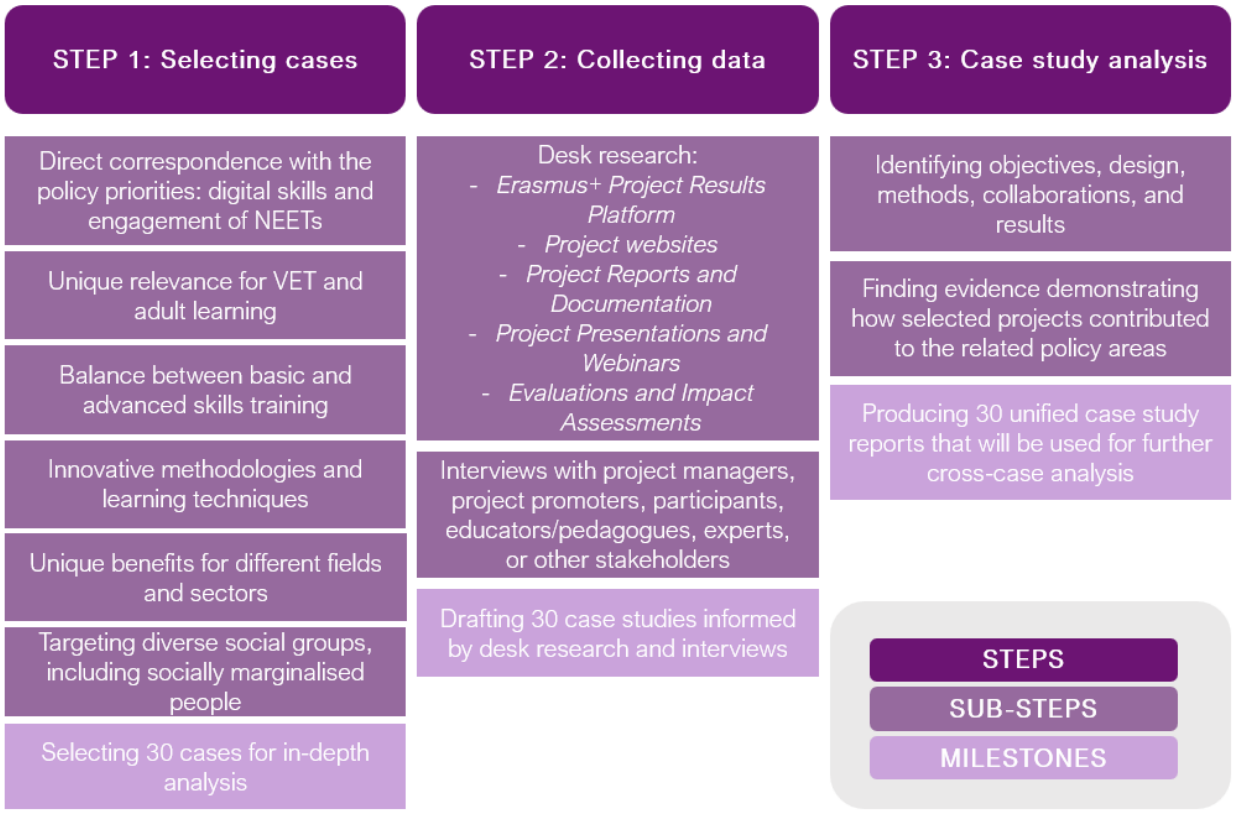
1.3.2. 30 case studies

The aim of the case study analysis is to comprehensively examine and gather lessons from successful KA2 Erasmus+ projects, focusing on the two policy priorities mentioned above.

The main questions underpinning the case study analysis are as follows:

- RQ1: How do Erasmus+ projects under indirect management contribute to the development of basic and advanced digital skills for young people and adults in initial and continuing vocational education and training (VET)?
- RQ2: How are different outreach, guidance, and awareness-raising measures used to increase the awareness of young persons neither in employment nor education or training (NEETs) and other vulnerable groups with regard to the learning and career pathways offered by VET and apprenticeships? How are NEETs and other vulnerable groups engaged via innovative approaches to skills development?

Figure 2. Methodology of case studies selection and analysis



1.3.3 Cross-case analysis

The main purpose of the cross-case analysis is to identify patterns, trends and best practices across different projects that have proved successful in addressing the policy priorities in focus. This has been organised in a manner that most effectively informs users of this brochure about the various methods and interventions that have shown positive results. These lessons can guide the formulation of future policies and initiatives in the VET sector, ensuring a more targeted and effective approach. By presenting real-life examples of successful projects, this report provides tangible evidence of what works in practice. This can stimulate creativity and innovation and invites the readers of this brochure to adapt and implement similar strategies tailored to their own specific contexts.

1.4. Structure of this report

This report comprises the following chapters.

Chapter 2 provides an introduction, covering the policy background and methodology for data analysis.

Chapter 2 describes the key findings of the cross-analysis and comparison of the 30 case studies.

Chapter 3 sets out the lessons learned in relation to the two policy priorities, including lessons on the sustainability of the selected Erasmus+ projects.

Chapters 4 and **5** provide conclusions and recommendations of the report

Annex A includes 30 case studies.

Annex B includes the inventory of 100 Erasmus+ projects selected as good practices.

Cross-case analysis: key findings

2. Cross-case analysis: key findings

2.1. Methods and activities

As indicated above, the case studies have been designed to explore the key methods and activities used to develop the digital skills of learners in VET and to engage NEETs and other vulnerable young people in upskilling. The aim was to identify, at project level, **the most successful approaches** to achieving the policy priorities.

The following three main approaches were identified as successful across the selected cases:

PERSONALISATION OF LEARNING ACTIVITIES

The methods and activities used in the selected projects are designed to tailor learning experiences to individual needs and skills.

- **Assessment of learners' skills and needs** to better align the educational content and objectives.
- Giving learners an opportunity to **make their own educational decisions**, such as selecting project topics that are relevant to their interests and priorities.
- Providing **flexibility in the pace and intensity of learning**, which is particularly beneficial for informal learning environments.
- **Micro-learning modules** and **mobility programmes** offering short, focused segments of content that learners can manage at their convenience, and opportunities to do so in diverse settings.

ENGAGEMENT WITH RELEVANT TECHNOLOGIES

The adoption of advanced digital tools and platforms to enhance both educational delivery and the involvement of hard-to-reach audiences.

- The **development of online platforms** for collaborative learning, which became especially prominent due to the COVID-19 pandemic.
- The creation of **massive open online courses (MOOCs)** and other **pre-recorded online sessions**, facilitating accessible and flexible learning opportunities.
- The application of the latest technologies, such as **artificial intelligence (AI)**, **virtual reality (VR)**, **augmented reality (AR)** and **robotics**.

ENHANCING THE COMPETENCES OF TEACHERS AND TRAINERS

Empowering educators by providing them with the necessary training and resources to effectively facilitate learning.

- **Planning of training sessions for teachers at the beginning of the project** to ensure that they are well prepared and equipped with the necessary skills to feel confident and engaged in the course of the project.
- Designing **comprehensive handbooks** or **guidelines** for teachers.
- Ensuring **teachers' involvement** and encouraging their **participation in scaling activities** to broaden the impact of educational initiatives and create the room for post-project continuation of using good practices.
- **Mobility programmes for teachers** creating opportunities for professional development of educators through exposure to different educational settings and practices.

2.2 Outputs, outcomes, impacts

In evaluating the educational initiatives, it is crucial to distinguish between outputs, outcomes and impacts in order to understand the effectiveness and long-term effects of the initiatives.

Figure 3. Conceptual distinction between outputs, outcomes, and impacts

Outputs

refer to the immediate products or services created in the course of the project activities. These are the tangible deliverables produced as a direct result of project inputs, such as curricula, toolkits, online platforms, workshops, promotion materials, etc.

Outcomes

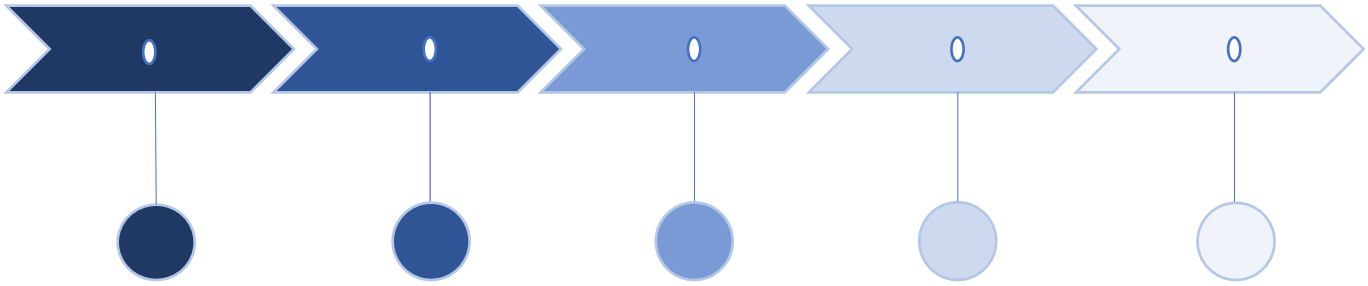
represent the changes or benefits that occur as a result of the outputs - these can be changes in behaviour, skills, knowledge of the target groups. For example, as a result of implementation of curricula (output), learners' transversal competences are enhanced (outcome).

Impacts

are the broader, long-term effects of the project on the community or society, often aligned with strategic goals or objectives.

The main outputs of the selected projects are mainly instructional materials, such as **course curricula**, **learning modules**, **lesson plans**, **toolkits**, **handbooks**, and **guidelines**. In order to *increase the availability* of the materials, as well as to *create spaces for online collaboration and exchange*, particularly relevant during the COVID-pandemic, the creation of **learning platforms** is very common. A separate block of outputs is dedicated to *knowledge exchange* and *increasing the visibility and outreach* of the projects. These outputs include **workshops**, **conferences**, **multiplier events**, and **promotional materials**, such as **flyers**, **posters**, **Facebook** or **Instagram pages**.

Figure 4. Main types of outputs produced in selected projects



Toolkits
Beyond NEET(D)S
DEEP
CORE
Digi4Health
Accessible Work for All
SAE
STONE
REGROW
WeAR
Stop Being a Couch Potato!

Guidelines
DigiCon
DEEP
EDU-VET
EvolYou
WORKGUIDANCE
Becoming a Woman Coder
SAE
We Are at Work Too
LOG-IN
TAACTIC

Handbooks
Beyond NEET(D)S
WORKGUIDANCE
EDU-VET
Accessible Work for All
REGROW
WOODigital
CORE
EvolYou
VRAR
Stop Being a Couch Potato!

Learning modules
REGROW, WOODigital, E365
Becoming a Woman Coder,
Accessible Work for All, STONE, EDU-VET, WeAR, DIGIAGRIMARK, CASINO
CultApp, We Are at Work Too,
Introducing Artificial Intelligence to Vocational Schools in Europe, VRAR, LOG-IN

Course curricular
DEEP
WOODigital
EDU-VET
CORE
Digi4Health
allCUTE
DIGIAGRIMARK

The outcomes generated by these outputs include the **enhancement of digital literacy** (on all levels from basic to advanced), **industry-specific skills** and **transversal competences** (such as creativity, adaptability, problem-solving) among learners, thereby increasing their competences and **readiness for the labour market**. Notably, selected initiatives have also led to the creation of **cooperation networks** and **partnerships** that *strengthen educational and professional ecosystems*. Moreover, these efforts have been instrumental in **increasing the accessibility** of adult education and thereby *supporting continuing learning across diverse populations*.

Figure 5. Competence development in selected Erasmus+ projects

In terms of impact, selected Erasmus+ projects promote a **collaborative approach between educational and non-educational institutions across Europe**, cross-fertilising educational practices and ensuring that they are leveraging the best available expertise and resources. The selected projects not only *contribute to the modernisation of VET and adult learning,* but also ensure *responsiveness to the needs of the labour market*. Projects focused on engagement with NEETs and **support of the disadvantaged youth** by enhancing their skills and creating opportunities for them, thereby *facilitating their integration into the workforce* and potentially *reducing economic disparity*. The projects targeting digital readiness **bridge the gap between classroom content and industry needs** and increase the opportunities for VET graduates and adult learners to **keep pace with technological advancements** and the evolving demands of the digital economy. Additionally, selected initiatives **align with the European Agenda for Adult Learning**, advocating for *continuing professional and personal development*. This alignment ensures that European youth is adapted to **build resilience against labour market transformations and changing job requirements**.

2.3. Challenges and barriers

Despite the uniqueness of the selected Erasmus+ projects and the innovative solutions they propose, there are common obstacles that project consortia face at the stage of implementation. By categorising and grouping these challenges, this section aims to highlight the key issues that project managers and stakeholders might have to navigate. Understanding these challenges is crucial for developing more resilient and adaptable project strategies in the future to ensure that educational objectives are met despite unpredictable and often challenging circumstances (such as COVID-19).

Figure 6. Categorisation of challenges and barriers

COVID-19 Pandemic

The pandemic significantly disrupted project activities and required a shift from in-person to online formats, impacting the delivery and effectiveness of training and collaboration. It also forced adaptations in project management and delivery, testing the resilience and flexibility of organisations

Cultural and contextual differences

Projects operating across different regions faced challenges due to cultural and contextual variations. These differences necessitated adaptations in training content and delivery methods to suit local needs, preferences, and existing infrastructure, which sometimes led to complexities in implementation and inconsistencies in outcomes.

Adaptation to technology

Adaptation to digital platforms and integration of new technologies is a serious challenge for implementation. The shift to online learning required rapid upskilling in digital competences for both educators and learners, and revealed varying levels of digital readiness, which affected the engagement and effectiveness of the learning processes.

Resource and infrastructure constraints

Several case studies highlighted limitations related to resources and infrastructure, particularly in terms of access to necessary technologies and equipment. Financial constraints also impacted the ability to ensure sustainability of results by keeping websites and learning platforms active after the end of the project.

Engagement and participation

Engaging target groups such as NEETs or low-skilled workers proved difficult, with issues in maintaining interest and participation over the course of the projects. The diversity of participants' backgrounds and needs required more tailored and accessible content, as well as innovative outreach strategies to ensure sustained involvement.

Administrative burden

Administrative workload and coordination among multiple partners, especially in international projects, posed significant challenges. Managing logistics, synchronising activities, and ensuring effective communication required substantial effort and occasionally detracted from focusing on the core objectives of the projects

2.4. Transferability conditions

While the analysed projects were implemented in specific settings, their outcomes could be adapted to different learning settings and sectors. By examining the conditions that facilitate such adaptability, we identified key methodologies and collaborative frameworks that are essential for extending the impact of the projects beyond their initial focus.

TRANSFERABILITY CONDITION	EXPLANATION	EXAMPLE
Strengthening teachers' capacity	By providing teachers with updated training and resources, projects can ensure that education innovations are effectively implemented and sustained in different settings.	The **WORKGUIDANCE** Erasmus+ project aimed to enhance the practical application of work guidance, particularly for low-skilled workers facing potential job loss due to structural changes. The primary target group includes teachers and trainers seeking to improve their coaching skills in providing work guidance for individuals with low basic skills or those at risk of exiting the workforce.
Methodological adaptability	Methods and activities that can be easily adapted to different learning settings and target groups. These include career guidance, digital literacy, developing a sense of ownership of one's own future.	The **BEYOND NEET(D)S** project focused on examining and bridging gaps in child and youth welfare systems and active labour market policies. The main goal of this project was to promote career guidance for disadvantaged youth. As the project did not focus on a particular sector but rather transversal skills, its deliverables are transferable and can be methodologically adapted to various topics, learning settings and target groups.
Accessibility and ease of navigation of project resources	Ensuring the accessibility of learning materials in multiple languages and formats is crucial, particularly for projects targeting people with disabilities or those who do not speak English.	The **DIGIAGRIMARK** project aimed to enhance the digital marketing skills of farmers, emphasising safety and security and contributing to the digitalisation of agriculture. Project outputs include a curriculum/course on safe digital marketing, a training book, a trainer handbook, and YouTube summary videos to improve the skills of agripreneurs in the agricultural and digital sectors. All outputs are translated to 5 partner languages (EL, ES, IT, PT, TR) to ensure the accessibility of results.
Use of digital platforms and tools	Digital tools, platforms, and content that are not only relevant to their initial target groups but also have the potential for wider application if adapted to other contexts.	The **SAE** project became an opportunity for educators, operators and teachers to enhance their digital skills in order to evaluate, plan and manage new and effective interventions aimed at bridging the relational and social gap imposed by the regulations. The key method that the project used for the development of digital skills of adult educators was digital learning via web app (SAE WebApp Digital Platform). It also used an E-assessment toolkit that allows to measure skills and competences possessed by disadvantaged adults.

Continued collaboration with project partners	Continued collaborations ensure an ongoing exchange of ideas, resources, and good practices. Additionally, strong partnerships can leverage collective expertise and insights, essential for navigating the complexities of implementing projects in diverse settings.	The **CORE** project focused on the challenge of youth unemployment in Balkan countries. The project developed user-friendly tools like ProfilPASS Kickstart Your Career!, empowering NEETs for societal and employment integration. Successful partnerships between partners lead to continued collaboration on other projects. For example, partners from Slovenia (Andragoski zavod Ljudska univerza Velenje), together with Serbian partners (Laris) joined together the consortium working on the project HOPE – "Helping Women Gain Power in Their Lives".
Involvement of relevant external stakeholders	Effective transferability often relies on the establishment of robust support systems and collaborations with stakeholders like industry partners, educational institutions, and local communities. This ensures that the projects are engaging and meet the specific needs of different target groups.	The **LOG-IN** project aimed at bringing innovation to the pedagogy in the logistics sector to meet the evolving digital demands of the industry. A digital warehouse connected to a digital inventory management system was set up as a real-world application of digital logistics concepts. Further integration in the industry was facilitated by extensive networking with stakeholders in the logistics sector who were very supportive of the project.
Sustainability and funding	The transferability of projects depends on the availability of ongoing funding and resources to sustain project results and platforms after their initial implementation phase.	**Introducing Artificial Intelligence to Vocational Schools in Europe** project aimed to address the increasing demand for Artificial Intelligence skills in the European labour market, particularly within VET sector through development of innovative study materials for an Introduction to Artificial Intelligence course. The project outputs can be re-used and adapted due to continuous availability of the course on the platform of the Project Coordinator.

Lessons learned

3. Lessons learned

The subsections that follow provide an overview of the key areas in terms of lessons learned across the case studies. This section will go on to discuss these lessons learned, presenting selected examples from the case studies to demonstrate exactly how good practices were implemented in relation to the policy priorities. The figures in each section summarise in what ways the methods concerned align with each of the priorities and how they can be employed in relevant activities.

3.1. Tailoring learning to individual needs

Figure 8. Personalisation: method and activities for achieving objectives under the specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS	ENGAGEMENT OF VULNERABLE YOUTH
POLICY ALIGNMENT	***POLICY ALIGNMENT***
Personalised learning ensures that digital skills training is adaptable to individual learning styles and needs, which is crucial for adult learners and VET students who may have diverse educational and professional backgrounds.	Personalising learning pathways is crucial for engaging NEETs, who may have diverse backgrounds and complex barriers to education and employment.
IMPLEMENTATION INSIGHT	***IMPLEMENTATION INSIGHT***
Use assessments to identify individual skill gaps and tailor learning modules accordingly. This customisation facilitates deeper understanding and more effective skill development in digital technologies.	Implement flexible learning schedules and content that can be tailored to individual life circumstances and learning speeds to enhance accessibility. Translation of the materials to national languages is also a step towards reaching individual learners.

"Beyond NEET(D)s - Integrated Guidance and Support for Vocational Education Pathways for Highly Disadvantaged Youth Beyond the Status of NEET"

The project "Beyond NEET(D)s" was designed to address the challenges faced by NEETs trying to re-integrate to the labour market. Focused on reducing dropout rates and creating an **integrated guidance model**, this project developed a flexible personal integration card and fostered the exchange of good practices across regional, national, and European levels. A crucial part of this initiative involved the creation of a **"personal integration map"** that facilitated tailored guidance and support, adapting to each participant's unique circumstances. The value of personalisation in this project was substantial. It enabled a mentor-mentee relationship that supported the development of a personalised progress path tailored to each individual's situation. This approach helped to address the specific needs and barriers faced by each participant, making the intervention more effective and increasing the likelihood of successful reintegration into education or the workforce. Personalisation ensured that the support provided was relevant and directly impacted the mentees' career and personal development pathways, enhancing their engagement and the overall effectiveness of the programme.

Source: *https://www.findyourtrack.eu/*

3.2. Engagement with relevant technologies

Figure 9. Engagement with technologies: method and activities for achieving objectives under the specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS	ENGAGEMENT OF VULNERABLE YOUTH
POLICY ALIGNMENT	**POLICY ALIGNMENT**
Integrating advanced digital tools and platforms provides learners with state-of-the-art resources that prepare them for the digital demands of the modern workforce.	Leveraging technology provides NEETs with flexible and innovative learning options that can be accessed remotely, supporting inclusion regardless of geographical or socio-economic constraints.
IMPLEMENTATION INSIGHT	**IMPLEMENTATION INSIGHT**
Incorporate AI, VR, and AR to create immersive and interactive learning experiences that go beyond traditional classroom settings, making learning engaging and applicable to real-world scenarios.	Use digital platforms and tools to create engaging and interactive learning environments that cater to young people's familiarity with technology increasing their engagement and sustained participation in VET programmes.

"Learn and Work Easy in Virtual and Augmented Reality" (VRAR)

VRAR aimed to integrate modern technologies into VET, focusing on career guidance for individuals changing professions or re-entering the job market. By leveraging virtual reality (VR) and augmented reality (AR), the project sought to make VET more engaging and to align with the needs of modern industries, thereby enhancing the digital skills of its participants.

By creating a **VR and AR handbook** and producing training video tutorials, the project provided practical, accessible learning materials for acquiring complex skills in an interactive and immersive environment. This approach not only enhances the digital literacy of VET students and teachers but also ensures learning is directly applicable to the job market, increasing employability and adaptability to digital transformation.

The project's scope included enhancing individual competences and transforming VET curricula to incorporate these advanced digital tools. The integration of VR and AR into VET in the project goes beyond skill enhancement, fostering a more dynamic and inclusive educational environment through hands-on learning and accessible digital content for learners with varying educational needs.

Source: *http://vrarproject.eu/*

3.3 Enhancing the competences of teachers and trainers

Figure 10. Educator training: method and activities for reaching the objectives under specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS	ENGAGEMENT OF VULNERABLE YOUTH
POLICY ALIGNMENT	***POLICY ALIGNMENT***
Empowering educators with the necessary digital skills and teaching methods is foundational for the successful implementation of policies aimed at enhancing digital literacy across VET and adult education.	Equipping educators with the skills to support NEETs effectively is essential for ensuring that these learners receive the tailored guidance and motivation needed to succeed on the upskilling path.
IMPLEMENTATION INSIGHT	***IMPLEMENTATION INSIGHT***
Develop comprehensive training programs and resources for educators to ensure they are well-prepared to teach digital skills effectively.	Provide specific training on the challenges faced by NEETs and effective strategies for engagement, such as mentorship programs and motivational coaching.

"Strengthen the skills of NEETs" (STONE)

The STONE project aimed to enhance educators' competences in assisting vulnerable adults and NEETs in overcoming the skills gaps that affect their participation in the job market.

Training the educators played a pivotal role in the success of this project. By equipping educators and facilitators with specialised training and comprehensive resources, the project ensured that these key personnel were thoroughly prepared to effectively support and guide NEETs. This training encompassed not only the delivery of educational content but also the development of engaging and empathetic teaching techniques tailored to the unique needs of the NEET population. This emphasis on training the educators aimed to create a sustainable and replicable model, enabling the project's impact to extend beyond its direct beneficiaries and contribute to broader societal change in the integration of NEETs into the workforce and educational systems.

Source: *https://stone-project.eu/index.html*

3.4. Strong partnership and collaboration

Figure 11. Strong collaboration: success factors in achieving objectives under the specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS

POLICY ALIGNMENT

Effective collaborations among educational institutions, industry partners, and technology providers ensure that digital skill training is relevant and up-to-date, supporting the policy objective of maintaining a skilled and competitive workforce.

IMPLEMENTATION INSIGHT

Foster long-term partnerships with tech companies and industry leaders to keep educational content current and directly linked to market needs, enhancing the employment prospects of learners

ENGAGEMENT OF VULNERABLE YOUTH

POLICY ALIGNMENT

Collaborations between VET providers, social services, and community organisations are key to creating a supportive ecosystem that fosters the re-engagement of NEETs.

IMPLEMENTATION INSIGHT

Develop multi-stakeholder initiatives that offer comprehensive support services, including career counselling, job placement, and follow-up services to ensure sustained engagement.

"Active Learning Community for Upskilling Technicians and Engineers"

The "Active Learning Community for Upskilling Technicians and Engineers" project targeted the professional growth and enhancing the digital skills of technicians and engineers in the fields of machine building and mechatronics.

The project successfully **integrated industry partners** to ensure the practical relevance of its curriculum and learning activities. These partners played a crucial role in the project, participating in the project survey to identify specific training needs and skills deficits within the sector. Based on this collaborative groundwork, a curriculum and online courses were developed that were tailored to the realities of the modern industrial workplace, ensuring that learners acquired up-to-date skills that were directly applicable to their professional environments.

Industry involvement did more than just inform the project's educational content; it also impacted project's strategic activities. The Chamber of Commerce in Gabrovo (BG) and industry associations contributed to the development of the curriculum and also facilitated access to the necessary technical environments for practical training. This direct industry participation ensured that the educational offerings were not only theoretically sound but also rich in practical applicability, enhancing the employability of participants and the overall sustainability of the project's outcomes.

Source: *https://allcute.eu/en/*

3.5 Real-world industry relevance

Figure 12. Industry relevance: success factors in achieving objectives under the specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS	ENGAGEMENT OF VULNERABLE YOUTH
POLICY ALIGNMENT	**POLICY ALIGNMENT**
Projects that integrate real-world applications of digital technology ensure that learners acquire skills that are directly applicable in the workplace, supporting policy objectives aimed at economic development and job readiness.	Integrating practical, industry-relevant skills training ensures that NEETs gain the competencies required for employment, aligning with policy goals of reducing unemployment and enhancing workforce readiness.
IMPLEMENTATION INSIGHT	**IMPLEMENTATION INSIGHT**
Collaborate with industry stakeholders to include practical, industry-specific projects in the curriculum, providing students with hands-on experience and a better understanding of how digital skills apply in their future careers.	Collaborate with local businesses and industries to provide practical training and apprenticeship opportunities, making the learning experience directly applicable and highly relevant to the job market.

"Entrepreneurship in 365 days" (E365)

The 'E365' project focused on enhancing the entrepreneurial competences of unemployed adults across Europe, inspired by the **EntreComp framework***. The project's primary method involved a structured, self-directed learning platform, which delivered weekly training resources, daily entrepreneurial challenges, and monthly success stories to cultivate a supportive entrepreneurial culture and foster skills development among participants.

The **real-world relevance** of this project is evident in its structured approach to entrepreneurial training. The project engaged participants through 'E365 – Everyday Challenges', designed to apply entrepreneurial concepts in practical, real-world contexts. These challenges not only make the learning process more engaging and relevant but also ensure that the skills developed are immediately applicable, enhancing the employability and real-world problem-solving abilities of the learners.

***Source**: https://e365-project.eu/*

3.6 Targeted outreach and engagement strategies

Figure 13. Targeted outreach: success factor in achieving objectives under the specific policy priorities

ENHANCEMENT OF DIGITAL SKILLS

POLICY ALIGNMENT

Understanding the specific barriers and motivations of NEETs is critical for designing outreach and engagement strategies that effectively draw them into VET programs.

IMPLEMENTATION INSIGHT

Conduct targeted outreach campaigns that use appropriate communication channels and messages tailored to resonate with NEETs, emphasising the immediate benefits and achievable outcomes of participation.

"Assessing Competences for REintegration" (CORE)

The CORE project focused on addressing youth unemployment in the Balkan countries by designing and implementing the **ProfilPASS competence assessment tool** adapted for disadvantaged adults. In addition to this tool, a comprehensive **toolkit for counsellors** was designed to empower vulnerable young adults to identify and showcase their competences, thereby facilitating their integration into society and employment.

The project's outreach methods were particularly innovative in leveraging youth associations and offices to engage NEETs. By collaborating closely with these organisations, the project was able to tailor its outreach and ensure that the tools developed were both accessible and effectively used. This strategic partnership enabled the project to reach its target audience more effectively, making it a critical component of the project's sustainability.

Source: *https://core.profilpass-international.eu/*

3.7. Lessons learned on sustainability of projects

Among the lessons learned from cross-case analysis studies is the essential nature of building strategies that ensure projects not only meet their immediate goals but also continue to have a lasting impact. The following points summarise these key lessons, providing a list of ideas for sustaining the benefits of educational projects over time.

- Resilient methodologies, adaptable to changing circumstances ensures that project outcomes remain relevant and sustainable regardless of external changes
- Designing projects with transferability in mind allows methods and successes to be replicated and scaled to other contexts and regions, spreading the impact and sustainability of the project results
- Continuous updates and adaptations of training materials in response to new technological developments, collection of feedback from users to help maintain the relevance and effectiveness of educational content

- The collective effort of diverse and dedicated partnerships (with industry partners, local communities, civil society) helps to overcome obstacles and enrich the project's approach with participants' experiences and perspectives.
- Empowering educators by involving them early in the project and providing necessary training ensures that they are well-prepared to sustain the project's educational initiatives after its formal conclusion
- Materials developed should be easily understandable and accessible, reducing barriers for use and facilitating ongoing engagement from target groups
- Developing online platforms that are intuitive and which support continuous learning can help to sustain the project's results by providing ongoing access to resources and learning opportunities

"European Senior Volunteering Through Mentoring for the Social Inclusion of Young People in Difficulties" (EvolYou)

EvolYou focused on (1) enhancing the key competences and employability skills of disadvantaged young people through an intergenerational mentoring programme involving senior expert volunteers, and (2) promoting active aging by encouraging social engagement among the senior population. The project catered to varying target groups across the partner countries, such as young migrants in Italy, VET students with special needs or economic challenges in Spain, apprentices and VET students at risk of dropping out in France, and migrants and low qualified apprentices in Finland, demonstrating the adaptability and responsiveness of the project to diverse learner needs.

EvolYou replicated and adapted the mentoring model from the German VerA initiative to various national contexts and target groups, engaging and consulting with vocational education institutions at local level. One of the key pillars of the project's sustainability was the development of a **resilient mentoring methodology** that could be **adapted across various socio-economic contexts**, ensuring its relevance and applicability long after the project's end. By empowering and continuously training the senior mentors (who had previous professional, but not teaching experience), the project invested in human resources that could perpetuate its benefits, offering ongoing support to new participants.

Through its dedicated training courses, Living Labs, and extensive dissemination activities, EvolYou aimed to create a lasting impact which was sustained through **three follow-up projects** (Mentoring Across Borders (MAB), Objectif Réussir Apprentissage (ORA), European Senior Together (EST)).

Source:*https://erasmus-plus.ec.europa.eu/projects/search/details/2019-1-IT01-KA202*

Conclusions

4. Conclusions

The Erasmus+ projects focused on enhancing basic and advanced digital skills in initial and continuing vocational education and training (VET) and increasing outreach to young persons neither in employment nor education or training (NEET) and vulnerable groups have demonstrated positive effects on their target groups. The integration of innovative approaches, including *personalisation of learning activities* (e.g. skills assessment, micro-learning, mobility programmes), *engagement with relevant technologies* (e.g. creation of MOOCs, using AI, VR, AR) and *enhancement of educators' competences* have contributed to the improvement of the skill sets of learners, aligning VET more closely with labour market needs. *Tailoring learning to individual needs* and *incorporating real-world applications of digital tools* have facilitated practical, hands-on learning experiences that are engaging and relevant.

The implementation of Erasmus+ projects faced several challenges, primarily related to adapting to rapidly changing technological landscapes (including fast-paced digital transition during the COVID pandemic) and meeting the learners' diverse needs. Further, engaging participants with different national, socio-economic and disciplinary backgrounds and maintaining their interest posed difficulties, especially in areas with low digital literacy. Additionally, integrating innovative educational technologies into traditional VET systems often required significant changes in teaching methodologies, which some educators found difficult to adopt. Resistance to change among staff, coupled with the administrative burden of coordinating across multiple countries and partners, also presented substantial barriers that needed careful management.

The projects underscored the importance of *flexible and adaptable learning environments* resistant to external (COVID-19) or internal (reluctance of participants, cultural differences) challenges. Tailoring educational content to specific target audiences not only helped address the diverse capabilities of both teachers and learners but also enhanced their engagement and retention. The use of advanced digital tools and technologies proved crucial in modernising educational offerings and making them relevant to current industry standards. Furthermore, strong collaborations between educational institutions, industry, and community partners were vital in aligning VET programs with real-world job markets and ensuring the practical applicability of the skills taught. The partnerships that were developed in the course of the projects facilitated the exchange of knowledge and good practices, enhancing the overall quality and impact of the educational programmes.

Recommendations

5. Recommendations

1. Expand Personalised Learning Approaches

Encourage the adoption of flexible, personalised learning frameworks that adapt to the pace and style of individual learners, particularly in non-formal environments. This approach should be supported by continuous assessment of progress towards the intended learning outcomes and adaptive learning pathways. Personalised approaches are especially important when trying to engage NEETs and other vulnerable groups and can contribute to their better inclusion in education and training.

2. Enhance Educator Training

Implement comprehensive, continuous professional development for VET teachers and trainers to ensure they are well equipped to deliver new curricula and use new technologies effectively. Training should include practical applications and pedagogical strategies that can be applied in digital learning environments. Projects aimed at educators should also seek to pilot the newly developed skills of educators in real classrooms and other learning environments in order to multiply the impact achieved.

3. Increase Use of Advanced Digital Tools

Continue to integrate cutting-edge technologies such as AI, VR, AR, and robotics into VET curricula to enrich the learning experience and ensure that programmes keep pace with technological advances. Projects focusing on such advanced digital tools should ensure that learning through such tools is linked to real working conditions (e.g. by focusing on actual tasks that learners would perform in the workplace). This would help to ensure complementarity between the skills developed and the needs of the labour market.

4. Strengthen and Expand Partnerships

Develop and maintain strong partnerships with industry leaders, enterprises and other educational institutions (e.g. higher education institutions, general education schools) to ensure the relevance of training programmes and to increase the visibility of VET. These partnerships should focus on both curriculum development and the provision of practical training opportunities for learners. Projects carried out by VET institutions in cooperation with enterprises can be crucial to ensure the relevance of the skills developed in the labour market (both for VET learners and educators).

5. Promote Scalability and Transferability

Design projects with scalability and transferability in mind, allowing successful initiatives to be adapted and replicated in different regions and educational contexts. This involves creating modular learning materials that can be adapted to different learning needs, using cloud-based technologies (such as learning management systems, virtual classrooms, cloud storage and file sharing) and learning platforms for easy access, and fostering strong transnational partnerships to facilitate knowledge exchange and peer learning. Thus, VET programmes can ensure that successful initiatives are not only replicated in new contexts, but also maintain their effectiveness and relevance, thereby increasing the overall impact of Erasmus+ projects.

6. Foster Sustainable Project Designs

Ensure that projects are designed to be sustainable beyond initial funding periods by incorporating strategies for long-term funding, stakeholder engagement, and updates of educational content to adapt to changing technological landscapes. Continued dissemination of the materials developed to practitioners can be a useful tool for supporting sustainability of project results.

European Commission

ERASMUS+ PROJECTS FOCUSING ON DIGITAL SKILLS AND ENGAGING YOUNG PEOPLE IN VOCATIONAL EDUCATION AND TRAINING

Annex A: Case studies

Introduction

This deliverable looks into the outcomes of Erasmus+ (Key Action 2 – KA2) projects that focused on the development of digital skills and engaging young people in vocational education and training (VET). In the context of this project, KA2 projects (managed by national Erasmus+ agencies) have examined in order to understand how such projects contribute to the two policy priorities identified in the technical specifications:

- **Developing basic and advanced digital skills for young people and adults**; and
- Providing **outreach, guidance, and awareness to young people**, particularly **NEETs**, in relation to the learning and career pathways **offered by VET and apprenticeships**, as well as **exploring innovative approaches** to the way **NEETs** (young persons not in employment, education or training) and **other vulnerable groups** are engaged and **provided with new skills**.

The present deliverable presents an in-depth analysis of 30 selected projects. These projects were selected from the inventory of 100 projects delivered in the first stage of this project. The selection of projects was made in cooperation with DG EMPL. The selected case studies were analysed via desk research, supported by interviews.

A list of case studies

Digital skills	• DIGITAL CONSTRUCTION FOR EUROPE: TECHNOLOGIES ON THE CONSTRUCTION SITE OF TOMORROW IN THE VOCATIONAL TRAINING OF TODAY (DIGICON) • DIGITAL ENTREPRENEURSHIP FOR EMPLOYABILITY PATHS (DEEP) • DUAL LEARNING FOR IMPROVING DIGITAL SKILLS OF YOUNG WOODWORKERS (WOODIGITAL) • E-LEARNING, DIGITISATION AND UNITS FOR LEARNING AT VET SCHOOLS – CREATING ONLINE LEARNING ENVIRONMENTS IN TECHNICAL EDUCATION FOR EUROPEAN METAL INDUSTRY (EDU-VET) • ACTIVE LEARNING COMMUNITY FOR UPSKILLING TECHNICIANS AND ENGINEERS (allCUTE) • DIGITAL PACKAGE FOR AUTONOMOUS SYSTEMS AND SELF-DRIVING VECHICLES • A DIGITAL VET TOOLKIT FOR PROMOTING THE 4TH INDUSTRIAL REVOLUTION IN THE EUROPEAN HEALTH SECTOR (DIGI4HEALTH) • RECRUITING THE YOUNG GENERATION WORKFORCE: INNOVATIVE HR MANAGEMENT (REGROW) • SAFE DIGITAL MARKETING FOR AGRIPRENEURS (DIGIAGRIMARK) • EXPERIENCING AUGMENTED REALITY ON CULTURAL HERITAGE APPLICATIONS IN IVET (CULTAPP) • INTRODUCING ARTIFICIAL INTELLIGENCE TO VOCATIONAL SCHOOLS IN EUROPE • LOG-IN: LOGISTICS VET GOES INTERNATIONAL

Outreach, guidance, and awareness to young people, particularly NEETs	• BEYOND NEET(D)S – INTEGRATED GUIDANCE AND SUPPORT FOR VOCATIONAL EDUCATION PATHWAYS FOR HIGHLY DISADVANTAGED YOUTH BEYOND THE STATUS OF NEET • CAREER GUIDANCE IN A CHANGING LABOUR MARKET (WORKGUIDANCE) • ASSESSING COMPETENCES FOR REINTEGRATION (CORE) • ACCESSIBLE WORK FOR ALL • STRENGTHEN THE SKILLS OF NEETS (STONE) • RE-ENGAGING YOUNG OFFENDERS WITH EDUCATION AND LEARNING (RENYO) • WE ARE AT WORK TOO • ENTREPRENEURSHIP IN 365 DAYS (E365) • EUROPEAN SENIOR VOLUNTEERING THROUGH MENTORING FOR THE SOCIAL INCLUSION OF YOUNG PEOPLE IN DIFFICULTIES (EvolYou) • STOP BEING COUCH POTATOES! DEVELOPING SOCIAL AND ENTREPRENEURIAL SKILLS FOR NEETS
Both priorities	• BECOMING A WOMAN CODER • PROMOTING RESILIENCE OF REFUGEES BY DEVELOPING THEIR DIGITAL MARKETING SKILLS • PROMOTING FINANCIAL, DIGITAL AND ENTREPRENEURIAL COMPETENCES FOR VULNERABLE ADULTS (WOMEN) WITH RESTRICTED ACCESS TO THE DIGITALISED MARKET (HOME BASED) – FINE2WORK • SMART ADULT EDUCATION (SAE) • WE ARE REALITY (WeAR) • THE VET-IFICATION OF ONLINE GAMING THROUGH INNOVATIVE CHALLENGE BASED LEARNING (CASINO) • LEARN AND WORK EASY IN VIRTUAL AND AUGMENTED REALITY (VRAR) • SUPPORTING TECHNIQUES FOR THE ACQUISITION OF ICT COMPETENCES (TAACTIC)

Case study 1

BEYOND NEET(D)S – INTEGRATED GUIDANCE AND SUPPORT FOR VOCATIONAL EDUCATION PATHWAYS FOR HIGHLY DISADVANTAGED YOUTH BEYOND THE STATUS OF NEET

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-AT01-KA202-077952
- **Duration (start date, end date)**
  01 October 2020 to 28 February 2023
- **Field/sector**
  Transversal, suitable for many sectors
- **Target group(s)**
  Young people, NEETs
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 255,304.57 (high)
- **Geographical scope**
  Austria, Cyprus, Czech Republic, Ireland, Italy, Portugal
- **Project coordinator**
  Jugend am Werk Steiermark GmbH, Austria (school/institute/educational centre – vocational training, secondary level)
- **Key partners involved (with clarification of type)**
  - AKLUB Centrum vzdělávání a poradenství, Czechia (non-governmental organisation/association/social enterprise)
  - Co&So Consorzio per la Cooperazione e la Solidarietà'-Consorzio di Cooperative Sociali-Società Cooperativa Sociale, Italy (non-governmental organisation/association/social enterprise)
  - CSI Center for Social Inclusion (Ltd), Cyprus (research institute/centre)
  - Enter GmbH, Austria (small/medium sized enterprise)
  - Factor Social – Consultoría Em Psico-Sociologia e Ambiente Lda, Portugal (non-governmental organisation/association/social enterprise)
  - Meath Community Rural and Social Development Partnership Company Limited, Ireland (non-governmental organisation/association/social enterprise)

Brief description of the project

The 'Beyond NEET(D)s' project focused on examining and bridging gaps in child and youth welfare systems and active labour market policies. Key objectives included reducing drop-out rates, developing an integrated guidance model, creating a flexible personal integration card, and fostering the transnational exchange of good practices. The project's implementation involved various activities, including transnational meetings, an online platform pilot, and multiplier events. Its results encompass a research report, an integrated guidance model, a personal integration map, and a magazine, *Synergy Accelerator*, providing political insights and recommendations at regional, national and European levels.

Relationship to policy priorities

The main goal of this project was to promote career guidance for disadvantaged youth with the status of NEETs. Through the development of an integrated guidance model, mentors were introduced to the topics required for working with vulnerable youth. Preparation of a personal integration map fostered a relationship between mentor and mentee and provided an opportunity to develop a personalised progress path adapted to the situation of every individual.

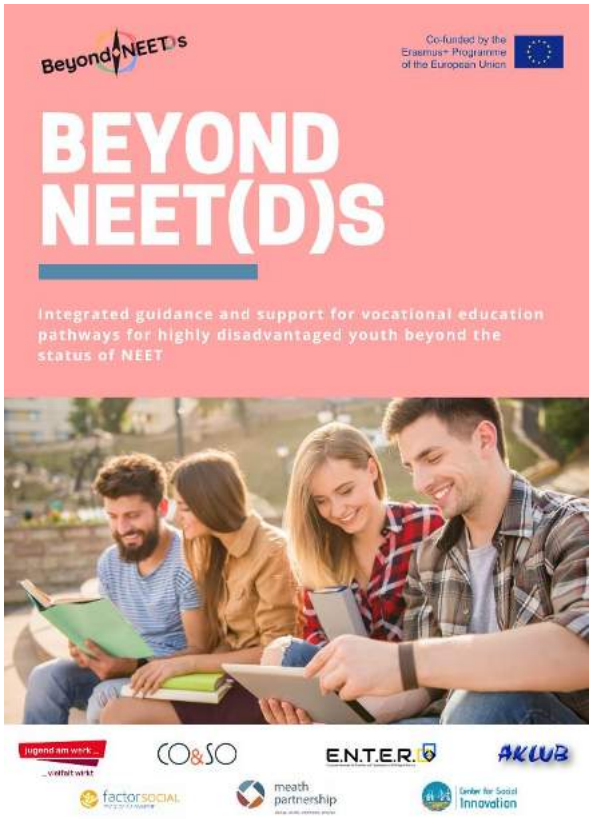
Specific objectives covered

- Examining gaps in the field of labour market and VET integration services, defining action positions and raising awareness by informing about the needs of the most disconnected, unreachable and "forgotten" NEETs.
- Reducing drop-out and segregation rates among young people at risk of social marginalisation and segregation by reducing inequalities in access to and use of VET opportunities.
- Developing an integrated guidance model for the target group by providing flexible and modern guidance on the labour market and VET opportunities.
- Steering the policy discussion to increase the visibility of these marginalised groups, and promoting the transnational exchange of good practices on the social inclusion of the most vulnerable NEET groups.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The 'Beyond NEET(D)s' project was a strategic partnership initiative under Erasmus+, aimed at vocational education and training (VET) institutions and focusing on guidance for vulnerable youth. Reacting to a high demand for tools for involving youth with the status of NEETs (not in employment, education or training), this project aimed to create a guidance and support model for NEETs and to facilitate their transition into the labour market. The project offered innovation by introducing individualised learning and career support.



Project poster. Source: project website

Methods and key activities

The aim of the project was to provide a career guidance model applicable to the needs of vulnerable youth. In response to this need, the partners developed an **integrated guidance model and toolkit**, which introduced all of the useful topics required by mentors when working with mentees from disadvantaged groups. These include an integrated guidance approach, a trauma-informed perspective, building and maintaining a social support network, communication and dialogue, applying integrated guidance in work-based learning settings and recognition of prior learning.

The first crucial steps in the project were to **assess the existing needs and conditions of NEETs** with regard to guidance and support and to **examine skills possessed by VET professionals** for providing the necessary guidance. This began with an analysis of every participating country's background, followed by opinion polls and surveys conducted with learners and interviews with VET providers to determine the gap. This research informed the preparation of the project's outputs, including the toolkit, integration map and sustainability strategy.

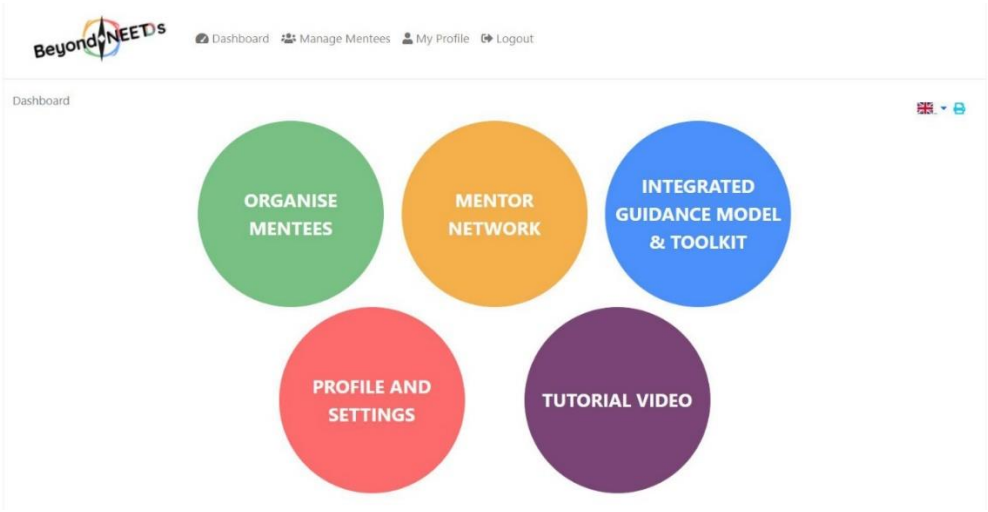
Results of the initiative

Outputs

The **research report** was a starting point for the project, as it determined the needs of the target groups. This report was based on surveys, opinion polls and interviews with VET professionals, carried out in every participating country. The analysis focused on countries with medium and low performance in the acquisition of digital skills and support for digital entrepreneurship competences. This initial research helped to refine the discourse on the most efficient ways of engaging with disadvantaged youth, and further developed intellectual outputs.

In response to a major gap in career guidance for NEETs, several outputs were developed. The main output of the project is an **integrated guidance model and toolkit**. This model contains descriptions of guidance and development approaches and techniques needed for career support. It is based in an online environment established for the project and used to store its materials.

For individualised mentorship, a **personal integration map (PIM)** was developed. This helps mentors to set up individual career paths with every mentee and to define unique milestones and tasks suited for each student. After completing this roadmap, every participant receives a badge indicating their progress.



The Beyond NEET(D)s Online Platform. Source: website of the project

Furthermore, **Synergy Accelerator magazine** presented an overview of the current political framework with regard to career guidance in every participating country, and provided recommendations at regional, national and European levels. By the end of the project, the partners had prepared a **sustainability strategy** to guide the intellectual outputs for future use. During the project, **eight project meetings** were organised to discuss progress in the project's implementation and to plan project activities. Due to the COVID-19 pandemic, most of these meetings were held online. A series of **multiplier events** were organised to disseminate the project's outputs and share its good practices.

Outcomes

The project team sought to **redefine learning vocabulary** in order to make it more sensitive to the target group and empowering for vulnerable learners. According to the representative from the coordinating organisation, after reviewing the survey results at the beginning of the project's implementation, the project team decided to change "success" to "progress" in order to place emphasis on the process rather than the end goal. In this way, the team aimed to create opportunities for wider inclusion.

The project opened up opportunities for learners to **seek jobs and apprenticeships**. There are a few success stories of project alumni successfully applying for vacancies due to their participation in the project. As reported by the representative of the coordinating organisation, one learner became an apprentice immediately after participating in the project, and another found a job immediately. According to these learners, the project helped them to define their milestones and track personal progress, which led to successful employment.

Moreover, project activities helped to **improve collaboration between mentors and mentees**, who worked together on an individual level, thereby improving face-to-face communication. The teams developed guidance maps tailored to learners' individual needs, helping to foster these relationships. In addition, the **mentors' skills for working with mentees were enhanced**. They were trained prior to starting work with their mentees, and continued to improve while working together.

Lastly, **project materials continued to be used beyond the project timeline**. For instance, the integrated guidance model was used by the partner organisations in other projects. Because of its transversal nature, it can be highly applicable to other projects and various VET sectors. The online platform will continue to run for a few years after the end of the project; this way, it can be used as an inspiration and a blueprint for other platforms.

Impacts

The organisations involved in the project built **strong partnerships**, which led to continued collaboration and future joint projects. During interviews, the partners indicated their previous experience of cooperation and continued connections after this project (a consortium with a very similar composition is now working on another Erasmus+ project), which illustrates the sustainability of these contacts. Over time, the partners developed trusting and supportive relationships and discovered each other's strengths, which also facilitated preparation for future projects.

Moreover, the project contributed significantly to **enhancing the sustainability of support systems for disadvantaged youth**. Through the adoption and integration of project materials and techniques, it offered a new approach to supporting vulnerable youth. The project introduced awareness-raising terminology and provided students with opportunities to engage in attentive and individualised partnerships with their mentors.

Addressing challenges such as the COVID-19 pandemic by adapting project activities and finding innovative solutions laid the foundations for **greater resilience when addressing future challenges**. Although the partners named pandemic restrictions as the most prominent challenge affecting the project, the lessons learned can be applied in future projects. Furthermore, by searching for ways to cope with the various obstacles imposed by this situation, the project team enhanced their creativity, project management skills and other competences.

Success factors

Representatives from coordinating and partner organisations named the **strong and trusting partnership** as a key success factor. Successful project planning and implementation are inseparable from a tight consortium partnership and the well thought-out distribution of tasks and roles. Moreover, all partners in a project must have a good and synchronised understanding of the project's purpose and goals. They must be equally dedicated to contributing to its results and have a clear, shared vision. According to the representative from the coordinating organisation, all of the partner organisations were engaged in the project's activities and committed to its goals.

Another crucial success factor is the **low threshold for the beneficiaries and experts involved**. Key to this, according to representatives from the partner organisations, is well-developed and comprehensive yet not overburdening content tailored to specific target groups involved. This approach facilitated beneficiaries' engagement with the target groups in project's activities, and provided them with materials that could be used first-hand.

Challenges and barriers

Due to its unforeseen nature, the **COVID-19 pandemic** had the potential to severely affect the planned project activities, and created obstacles to the dissemination of its results. However, representatives from the organisations involved agreed that these circumstances did not pose a vital threat to the project, and even opened some opportunities. Because there were no exchange or mobility programmes planned, pandemic restrictions did not greatly alter the project's activities. Project activities and meetings were quickly adjusted to the new reality without causing a great deal of inconvenience. Furthermore, the COVID-19 pandemic boosted the relevance of the project.

Another challenge arose from **the need to adapt existing content** and **create new materials** that would be suitable for the hybrid learning method and accessible to vulnerable target groups. The shift to home-based theoretical learning with limited access to practical training stimulated a need to create learning materials that were clear and easily accessible for teachers but, most importantly, intuitive and engaging for learners. This required a thoughtful approach when creating these materials to ensure their educational effectiveness and inclusivity for vulnerable groups.

Lessons learned

The most outstanding lesson from the project is the **development of a project methodology that is sustainable** by design, resilient to changing circumstances, and applicable to various sectors and fields. A representative from the partner organisation noted that it is essential to reflect on the whole process from inception to dissemination and to identify what techniques can work in different settings.

Furthermore, the project demonstrated its enduring value and resilience due to its **committed and diverse partnership**. The dedication and collective effort of the partners in overcoming obstacles demonstrated the importance of collaboration, and fostered mutual support which led to the achievement of the project's objectives. Moreover, the experience brought by the partners enriched the holistic approach that the project aimed to apply.

Conditions for transferability

Because the project did not focus on a particular sector, but rather on the **transversal skills of NEETs**, its outputs can be methodologically adapted to various topics, learning settings and target groups. The handbook and toolkit introduce topics such as an integrated guidance approach and a trauma-informed perspective, which can be used by teachers of various disciplines who work with vulnerable groups.

Sources

Desk research

- 'Beyond NEET(D)s - Integrated guidance and support for vocational education pathways for highly disadvantaged youth beyond the status of NEET' on Erasmus+ website
- 'Beyond NEET(D)s' website

Interviews

- Interview with a representative from the coordinating organisation (18 March 2024).
- Interview with a representative from a partner organisation (18 March 2024).
- Interview with a representative from a partner organisation (18 March 2024).

Case study 2

CAREER GUIDANCE IN A CHANGING LABOUR MARKET (WORKGUIDANCE)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2018-1-NO01-KA204-038870
- **Duration (start date, end date)**
  01 October 2018 to 31 January 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Primary: teachers/trainers (coaches)
  Secondary: employees with low basic skills, employees in danger of falling out of working life due to structural changes; new job seekers
- **Educational level(s)**
  CVET
- **Learning settings (e.g. school-based, work-based, non-formal etc.)**
  Non-formal, hybrid
- **Funding arrangement**
  EUR 154,757.60 (high)
- **Geographical scope**
  Denmark, Ireland, Norway, Portugal, Slovenia
- **Project coordinator**
  Fønix AS, Norway
  (school/institute/educational centre – adult education)
- **Key partners involved (with clarification of type)**
  - Centro Tecnológico das Industrias Têxtil e do Vestuário de Portugal, Portugal (research institute/centre)
  - Galway and Roscommon Education & Training Board, Ireland (national public body)
  - Ljudska univerza Ptuj, Slovenia (school/institute/educational centre – adult education)
  - STEP Institut, zavod za psihologijo dela in podjetnistvo, Slovenia (non-governmental organisation/association/social enterprise)
  - VUC Storstrøm, Denmark (school/institute/educational centre – adult education)

Brief description of the project

The WORKGUIDANCE project aimed to enhance the practical application of work guidance for low-skilled workers facing potential job loss due to structural changes. The primary target group were teachers and trainers seeking to improve their coaching skills in providing work guidance for economically vulnerable learners. The project focused on the exchange of good practices, re-designing existing tools, and validating methodologies to create a guidance manual with practical outcomes.

Relationship to policy priorities

The project addressed the priority relating to the engagement with vulnerable youth by designing an upgrade to career guidance for low-skilled workers in order to personalise their job search and reskilling strategies.

Specific objectives covered

- Enhancing the utilisation and effectiveness of job guidance, encouraging low-skilled workers to proactively seek assistance as a preventive measure in the face of potential job loss due to structural changes in the workplace.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The WORKGUIDANCE project is a strategic partnership initiative under Erasmus+ aimed at adult education – in particular, upskilling and re-integration into the labour market. The project aimed to create a model for careers guidance (facilitated by teachers and trainers) and support for employees with low basic skills and new job seekers, and to foster change in careers counselling practices in the participating countries.

Methods and key activities

The WORKGUIDANCE project integrated the exchange of best practices, the redesign and validation of existing tools, and the adaptation of established methodologies (for careers guidance) to new contexts. Key activities included conducting a qualitative study to identify effective factors in work guidance; developing and testing a guidance manual across partner countries through training sessions and workshops; and continuously evaluating these methods using feedback from participants and managers. The project emphasised the wide dissemination of its results and their exploitation across Europe to enhance work guidance for low-skilled workers facing job market challenges. This holistic strategy aimed to improve the practical support provided to this vulnerable group, thereby increasing their employment stability and integration into the workforce.

Results of the initiative

Outputs

A **comparative study of guidance tools** and **three pilot research reports** (for **Slovenia**, **Norway** and **Ireland**) were drafted as a starting point, to determine the target groups' need for career guidance support. Each country report contained a description of the legislative framework, structures and key documents regulating the provision of career guidance in that country, as well as the main providers of guidance. In each country, the partner organisations recruited between 10 and 15 representatives of the target group to gather their opinions on group and individual counselling. This initial research helped to explore the career guidance situation in each participating country, to acknowledge the needs and to define the project's goals.

The main output of the project is a practical handbook for work guidance, "**Career Guidance in a Changing Labour Market**" which contains methodologies and best practices for personalised career guidance. The manual involves theoretical support, examples of good individual and group working practices, and the necessary perspectives of employers with regard to the skills required from today's workers.

Outcomes

Prior to the project, there were insufficient **data on the challenges low-skilled adults face** when considering a career change or seeking to reskill or upskill. The project team filled this gap by determining the drivers for change and the barriers along the way. This analysis also enhanced **awareness of the limitations and gaps in existing counselling services**, particularly in terms of their independence and comprehensive support. It served to emphasise the need for independent and more accessible career guidance for adults outside of education.

In addition, **the role of guidance counsellors** or support personnel in assisting the target group was more comprehensively **defined**. During the focus group with the target group, participants defined an idea for the career counsellor that would fulfil their needs. Participants mentioned that they would expect the counsellor to be able to advise them economically, legally and even morally, to support them, and to have sufficient knowledge about the educational system and the labour market situation.

Impacts

By identifying the limitations of existing services and defining the requirements for adequate guidance, the project had the potential to **lay the groundwork for the establishment of a reinvigorated career counsellor institution**. It contributed to emphasising and advocating for the need for comprehensive support. Moreover, during the project, the participating organisations enhanced their networking and created **foundations for future collaboration**, leading to continued partnership and future joint projects. The partners not only explored other organisations' fields of expertise, but were also able to discover their own strengths. According to representatives from a partner organisation, the consortium partners have continued to work and collaborate on Erasmus+ projects.

Success factors

The diverse backgrounds of the participating countries inspired the consortium to experiment with new practices. According to representatives of a partner organisation, this exploration of differences was as valuable as discovering synergies. In this way, the project was able to create know-how for each organisation that was later brought to its learners. This also led to a better understanding of the topic and the various means to apply new methodologies and approaches.

A comprehensive understanding of the target group's needs was gained through thorough analysis and consultation with representatives of the target group, as well as with the main stakeholders. This proved to be valuable and considerably informed the project's implementation and expected results. In this way, the project successfully addressed the needs of the target group and laid the foundations for discussions on the changes required at policy level.

Challenges and barriers

One such challenge arises from the requirement that the **learning model must be flexible and adaptable** to different sectors and contexts. While country differences were able to feed and enrich the deliverables, it was a concern that there might not be a format that fits every participating country. Local peculiarities require different approaches to the issues, which makes one universal format for learning infeasible. Financial constraints constitute an additional obstacle to updates and customisations.

Furthermore, while the project contributed significantly to identifying the needs of low-skilled workers, according to the representatives from a partner organisation, the project **partners might have benefited more than the end-users**, at least in the short-term. The partners gained more information regarding the situation and collected the needs of the vulnerable group, which enriched their knowledge of the topic. Mapping the target group's expectations regarding career counselling was an essential step towards more engaging support. However, **tangible changes might be visible only in the long run**.

Lessons learned

During the project, the importance of a **personalised and skills-centred focus** was recognised. Institutionally practised career counselling emphasises the search for job positions rather than opportunities for the reskilling and upskilling of a particular worker. Career guidance must be better customised to each individual worker, and should seek not only to find a job position but also to help the worker find their own career path and to supply them with transversal and widely applicable skills.

In addition, the project team learned about the **importance and enduring value of dedicated and diverse partnerships**. The commitment of project partners and their collective effort to overcome obstacles underlined the significance of collaboration and fostered mutual support, which led to the smooth implementation of the project's activities. Furthermore, regional context and varying methodological approaches brought by the different partners enriched the project deliverables.

Conditions for transferability

The project was designed to **enhance the overall career guidance process** rather than targeting a specific sector. This broad focus ensured that the deliverables are highly transferable. The tools, methods, and strategies developed can be **adapted to various target groups**, including new job seekers, and those who is employed but has low basic skills or is in danger of falling out of working life due to structural changes. Additionally, the flexibility of the project's approach allows it to be customised to **fit the unique needs of different national contexts**, making it a resource for career guidance practitioners worldwide.

Sources

Desk research

- 'Career Guidance in a Changing Labour Market Save this project in my Booklet' on Erasmus+ website

Interviews

- Interview with two representatives from a partner organisation (07 March 2024).

Case study 3

DIGITAL CONSTRUCTION FOR EUROPE: TECHNOLOGIES ON THE CONSTRUCTION SITE OF TOMORROW IN THE VOCATIONAL TRAINING OF TODAY (DIGICON)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-DE02-KA202-007604
- **Duration (start date, end date)**
  01 November 2020 to 30 November 2022
- **Field/sector**
  Construction sector
- **Target group(s)**
  Construction trainees, VET teachers
- **Educational level(s)**
  IVET
- **Learning settings (e.g. school-based, work-based, non-formal etc.)**
  Non-formal, hybrid
- **Funding arrangement**
  EUR 207,133.92 (high)
- **Geographical scope**
  Belgium, Germany, Poland
- **Project coordinator**
  BGZ Berliner Gesellschaft für internationale Zusammenarbeit mbH, Germany (on-governmental organisation/association/social enterprise)
- **Key partners involved (with clarification of type)**
  - Berufsförderungswerk e.V. des Bauindustrieverbandes Berlin-Brandenburg e.V., Germany (school/institute/educational centre – vocational training, secondary level)
  - Hochschule für Technik und Wirtschaft Berlin, Germany (higher education institution, tertiary level)
  - Politechnika Poznańska, Poland (higher education institution, tertiary level)
  - Zentrum für Aus- und Weiterbildung des Mittelstandes, Belgium (school/institute/educational centre – vocational training, secondary level)
  - Zespol Szkol Budownictwa Nr 1, Poland (school/institute/educational centre – vocational training, secondary level)

Brief description of the project

The DigiCon project was initiated to enhance digital competences in vocational education and training (VET) in the construction sector by developing learning scenarios, digital tools and capacity-building strategies. The project created actionable learning scenarios that reflect real construction processes, integrating advanced digital tools such as 3D modelling and online learning platforms. This comprehensive approach not only modernised curricula, but also fostered closer ties between VET institutions and the construction industry.

Relationship to policy priorities

The main goal of this project was to enhance the digital skills of VET learners and teachers in relation to the construction sector. Through the development and testing of a series of learning scenarios, both students and teachers gained knowledge and skills in the latest digitalised construction industry tools.

Specific objectives covered

- Developing comprehensive digital learning content (a set of learning scenarios that map the entire construction process in a digital format, from order acceptance to project documentation, tailored specifically to Construction Site 4.0)
- Building the capacity of educators in the field of construction, by strengthening teachers' and trainers' digital competences
- Equipping learners with industry-relevant competences for the digitalised construction sector
- Providing vocational schools with the latest digital tools and applications necessary for teaching modern construction processes
- Strengthening the cooperation of VET institutions with industry and research centres to ensure cutting-edge, industry-relevant content.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The DigiCon project was a strategic partnership initiative under Erasmus+, targeting VET institutions in the construction sector. It primarily focused on entry-level VET students aged 15 to 17, along with their teachers, aiming to modernise and enhance curricula and teaching methodologies to meet the demands of 'Construction Site 4.0'. The project involved developing and disseminating digital learning content, implementing innovative teaching tools, and fostering partnerships between educational institutions and the construction industry.

Methods and key activities

The aim of the project was to enhance the digital competences of trainees and teachers in relation to emerging digital skills and to foster cooperation between educational institutions and construction sector companies. To support the development of students' skills, the project team created **action and learning scenarios** that presented typical work situations, which were pilot tested in VET schools. Students also tested **digital applications and tools** in the classroom, ensuring these tools were user-friendly and professionally relevant.

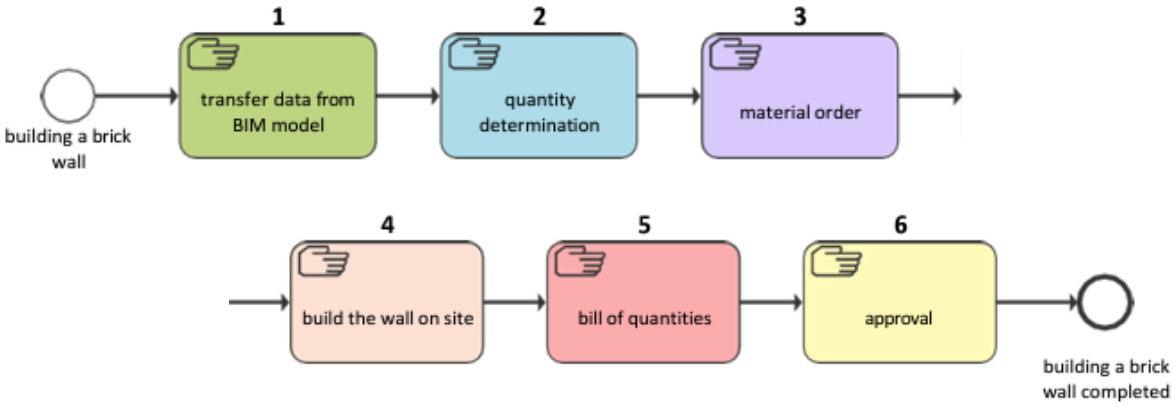
An **online learning platform** was established to support and store the project's intellectual outputs. The platform included **action** and **learning** scenarios, **references to digital construction applications and tools**, **solution approaches and a manual for handling the learning materials and designing e-learning systems**. The project aimed to integrate practical tasks and situations into school-based learning to help students and teachers quickly grasp digital innovations and increase their competences, theeby opening new job opportunities. **Supporting materials** were drafted to facilitate the implementation of digital tasks in a curricula, encouraging educational authorities to update their curricula in line with the latest digital developments. Moreover, **digitalisation strategy for VET institutions** was drafted, proposing guidance for changes at institutional level.

The exchange of ideas and discussions was a significant part of the project's activities. The project team organised **exchange sessions** between project partners through workshops held either face-to-face or virtually. The team also invoked the **expertise of stakeholders** from education, science, economy and politics to support the development and implementation of the project's intellectual outputs. A series of **multiplier events**, various presentations and publications were dedicated to disseminating the project outputs and to sharing its good practices. The **workshops** served as a dissemination practice dedicated to sharing the project's results and receiving feedback for the improvement of results.

Results of the initiative

Outputs

One of the main outputs of the DigiCon project was a set of **digital construction applications and tools for use in vocational training**. After comprehensive research, the project team developed digital applications for practicing various construction tasks within learning scenarios, mapping out all functionalities of a construction file. These applications included **action scenarios on the Construction Site 4.0**, illustrated by videos for a more engaging learning experience. In addition, **learning scenarios** representing typical digital processes in construction were developed for trainees to practice using digital applications and devices.



"Bulding a mansory wall" scenario. Source: Action scenarios on the construction site 4.0 for the use in vocational training

To support these tools and scenarios, the project team created **solution approaches and a manual for handling learning materials and designing e-learning systems**. These guidelines serve as a user manual for VET institutions, developers, and resources to inform the regulatory level. The **concept of implementing digital tasks into a curricula** introduced the basis for reorganising vocational school regulations to include digitisation strategies. An

interactive grid for good practice accommodates quality indicators for learning materials and instruments, essentail for determining capacity-building criteria and ensuring success. The project team also developed a **digitisation strategy and capacity-building guidelines for VET institutions** to promote digitalisation in VET.

Outcomes

First, **teachers' confidence in using and working with digital tools was boosted significantly**. Teachers became acquainted with new digital tools and best practices developed through the partnership, adapting them to their everyday work. This increased their confidence in employing new methods, which they successfully transferred to their students enhancing both groups' capabilities in handling learning materials and designing e-learning systems.

Trainees were introduced to and learned to work with **new digital skills for the construction sector**. The rapidly development of digitalised tools in the construction sector requires workers to swiftly adapt their skills. During the project, participants gained skills in working with 3D models and 3D and BIM models on tablets. By using diverse digital learning tools and navigating different online environments, participants also improved their general **digital competence**. They learned to operate in a digital environment and communicate with colleagues, teachers and companies' representatives within it.

Furthermore, the project brought **increased capacity and readiness for digitisation to VET institutions**. To enable this, VET institutions need to rethink their role in and reassess their capacity for technological change. The project promoted pathways of change by developing a digitisation strategy and capacity-building guidelines for VET institutions. Thus, the project's activities were able to promote the digitisation of educational institutions.

Moreover, the project **strengthened cooperation between educational institutions and companies**. Usually, a gap exists between education and the industrial sector, leading to skills mismatches and preventing learners from applying their skills directly in the labour market. Close cooperation with companies in the construction sector led to the prioritising of skills that would match and address labour market needs. This, in turn, enhanced the job prospects of students and helped to integrate together theoretical and practical knowledge.

The project also facilitated the integration of interdisciplinary materials and skills. The **development of a model for the transfer of digital competences within complex workflows** was the result of linking skills and competences required by the construction sector and the competences needed for increased digitalisation. This model serves as a blueprint for combining real work processes with theoretical knowledge. The model comprised a set of action and learning scenarios, digital applications and tools that develop interdisciplinary skills and competences.

Impacts

The project fostered several long-term impacts. First, students gained **diverse digital skills, providing a comprehensive learning experience**. They learned to manage new digital tools, browse and search for information and extract necessary information from digital media. According to the representative from the coordinating organisation, learners practically implemented the tasks and documented the results during the project. This well-rounded involvement in these activities led to their increased effectiveness at performing various digitalised tasks and activities.

Thanks to the project's activities, learners **improved their self-study skills** using structured learning content. Learning units supported by videos on practical activities enabled independent learning. Besides enhancing their skills in using digital devices and media in standard construction site situations, students learned to manage their own learning process and gained general skills needed for any workplace.

The project **improved trainees' career prospects** by collaborating with construction companies to understand the field's requirements. This informed the project's goals and skills focus, helping students bridge the gap between educational institutions' offerings and labour market demands. As a result, students reduced the mismatch between acquired and needed skills, opening up job opportunities and equipping students with the desired skill set.

Additionally, the project **improved cooperation between various educational and non-educational institutions involved in training**. The composition of the consortium partners reinforced collaboration between VET and higher education institutions. The gap between competences acquired in different institutions is narrowing, facilitating the transfer and application of learning strategies and approaches. By incorporating decision-makers and industry stakeholders, the project also strengthened their involvement in supporting digital initiatives.

Success factors

The greatest success factor of the project was the **composition of consortium partners**. According to the representative from the coordinating organisation, the partners selected were genuinely committed to improving education quality and modernising their facilities. This motivation, combined with early involvement allowed smooth implementation and success of the project's activities. A well-organised division of labour within the partnership also facilitated the efficient achievement of project outputs.

Pooling expertise from educational and business sectors was another key success factor. The strong expert base provided essential information and knowledge for designing the project, setting the goals, and aligning activities.

Recruiting decision-makers from educational policy and regulatory authorities helped address regional peculiarities and build strategies for required skills in each participating country.

To grasp what is required from the construction worker, the project team conducted **detailed research** on the status of digitalisation in the partner countries and the EU. This research helped to set project goals and provided a shared understanding of the sector and its needs, effectively supporting learners. Trainees and students were also involved in the development of the learning materials to ensure skills alignment.

Lastly, te project's simple approach and **focus on essential content** contributed considerably to the project's success. Due to its focus on younger cohorts aged 15 to 17 years, it was crucial for the project to develop comprehensive yet easily accessible learning materials. The use of simple wording to present various topics as well as different learning approaches while integrating best practices from across Europe enabled the project's materials and course to be engaging.

Challenges and barriers

One of the main challenges faced by the project was the **COVID-19 pandemic**. According to the representative of the coordinating organisation, restrictions imposed during the pandemic significantly altered the project's planned activities for almost all of its duration. However, these circumstances also presented opportunities, such as a quick transition to an online environment, with new digital formats being invoked where feasible.

Another obstacle was the **varying levels of digital experience** among partner organisations. Different partners adjusted to the new circumstances at different paces, causing delays in the proposed timeline and requiring rapid enhancement of necessary skills. Setting up and hosting digital formats demanded additional effort from these organisations, both technically and personnel-wise. This transition was further complicated by the fact that the target groups were not yet familiar with many of these digital applications.

Conditions for transferability

The thematic outputs of the project, initially tailored to the construction sector, possess great potential for transferability to other sectors. According to the representative of the coordinating organisation, the system for presenting digital processes and identifying relevant topics could be applied to other occupational fields. The learning materials developed during the project are also relevant for learners in the same industry across different countries. Additionally, the **working methods, solution approaches and model examples** used in the project have broader applicability across various VET sectors and educational levels.

Lessons learned

According to the representative of the coordinating organisation, the project provided grounds for numerical experiments in the classroom, and facilitated the implementation of **changes to the curriculum in order to incorporate advances in digital technology**. The project therefore laid the basis for the further digitalisation of training by introducing learners to digitalisation methods, digital tools and the necessary hardware in the preparation and implementation of training.

Moreover, **interactive learning methods** were found to be effective in organising trainees' learning processes and fostering collaboration among them. The shift from face-to-face to online learning, brought about by the COVID-19 pandemic, highlighted the need for educational content and methodologies to be adaptable to various circumstances. Digital communication tools helped to develop competences for shared work and collaborative learning experiences.

Continuous learning and adaptative material proved essential, as digitalisation and technological advances necessitated the ongoing updating of training methods and curriculum content. Training materials must be updated every few years, which can cause information overload: while the timeframe of training remains the same, there is an accumulation in the amount of content that must be covered. Collaboration among vocational and higher education institutions can help to facilitate the necessary knowledge exchange and skill development.

Sources

Desk research

- 'Digital Construction for Europe: Technologies on the construction site of tomorrow in the vocational training of today' on Erasmus+ website
- DigiCon website

Interview

- Interview with a representative from the coordinating organisation (26 March 2024).

CASE STUDY 4

DIGITAL ENTREPRENEURSHIP FOR EMPLOYABILITY PATHS (DEEP)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-PL01-KA202-065880
- **Duration (start date, end date)**
  01 November 2019 to 31 October 2021
- **Field/sector**
  Entrepreneurship
- **Target group(s)**
  VET students
- **Educational level(s)**
  IVET
- **Learning settings**
  School-based
- **Funding arrangement**
  EUR 255,704.00 (high)
- **Geographical scope**
  Belgium, Bulgaria, Italy, Poland, Portugal, Spain
- **Project coordinator**
  CASE – Centrum Analiz Społeczno-Ekonomicznych – Fundacja Naukowa, Poland (non-governmental organisation/association/social enterprise)
- **Key partners involved (with clarification of type)**
  - CTS Customised Training Solutions Sp. z o.o., Poland (small/medium-sized enterprise)
  - IDP SAS Di Giancarlo Costantino (Italian Development Partners), Italy (small/medium-sized enterprise)
  - Institut de Haute Formation aux Politiques Communautaires, Belgium (non-governmental organisation/association/social enterprise)
  - Internet Web Solutions SL, Spain (small/medium-sized enterprise)
  - Mindshift Talent Advisory lda, Portugal (small/medium-sized enterprise)
  - Pravo i Internet Foundation, Bulgaria (Non-governmental organisation/association/social enterprise)

Brief description of the project

The DEEP project focused on enhancing entrepreneurship as a crucial skill in VET to stimulate economic growth and job creation. DEEP integrates entrepreneurship and digital skills in an interdisciplinary manner, aiming to improve the chances of professional success for VET students from diverse backgrounds. As a transnational EU project, DEEP seeks to address challenges such as the gap between VET and digital entrepreneurship by identifying and implementing best practices through international collaboration, emphasising the holistic vision required to tackle EU-wide issues and foster entrepreneurship across the continent.

Relationship to policy priorities

The main goal of this project was to combine digital and entrepreneurial skills to provide VET teachers and students with a package of interdisciplinary skills and competences that correspond to the latest ned of the labour market. Through online courses for both students and teachers, the target groups gained the knowledge and skills required to work and teach digital business development and management.

Specific objectives covered

- Improving the chance of professional success for VET students with different backgrounds by developing their entrepreneurship skills, focusing especially on their digital skills.

Type and scope of the project, methods used, and key activities

Type and scope of the project

DEEP was a strategic partnership initiative under Erasmus+, aimed at VET institutions and focusing on digital entrepreneurship skills. The project targeted both VET teachers and learners, and introduced innovation by combining digital and entrepreneurial skills into a single curriculum. The project aimed to integrate theoretical material into practical assignments and to prepare learners for the needs of the labour market through targeted online courses, learning modules and materials.

Methods and key activities

The aim of the project was to provide VET teachers and students with a new methodological approach combining both entrepreneurial and digital skills, and thus addressing gaps in the labour market. To respond to this need, the partners established an **online platform** that served as an e-learning environment and peer-learning community, connecting students, teachers and companies into a single learning experience. The project's first, crucial step in the was to **assess existing skills and identify labour market needs.** These later informed the learning materials of the project.

Results of the initiative

Outputs

A **digital entrepreneurship dynamics research report and toolkit** were introduced in order to share best practices among the partners' countries. This analysis focused on countries with medium and low performance in the acquisition of digital skills and support for digital entrepreneurship competences. The dynamic between digital and entrepreneurial skills had rarely been investigated before, meaning that the project explored new grounds for further research.

Reacting to a major gap in digital and entrepreneurial skills in all of the partners' countries, several outputs were developed to respond to their needs. The main output of the project is an **online platform for open education resources** (no longer accessible). This platform was created for VET teachers and trainers, as well as VET students. It hosted tools and training, learning materials and the collected knowledge and findings on the topic gathered throughout the project period. Another important deliverable was comprehensive **online courses** (accessible through project's page). These courses included seven various topics crucial for digital entrepreneurship: branding for digital entrepreneurship; IT and digital solutions for digital entrepreneurship; competences and skills for entrepreneurship in the digital environment; digital communication; boosting and nurturing digital culture in the development of entrepreneurship; and the basics of digital entrepreneurship for business competitiveness. Some of these courses were structured in order to cater to varying levels of expertise. In addition, the project produced detailed **guidelines for future training**, including an **inventory of best practices**, 'DEEP Test and validation with 200 students'.

Outcomes

During the project, learners successfully **improved their digital and entrepreneurial competences**. They became familiar with how to start a business in a digital setting, how to create and manage digital material, as well as important rules of netiquette (etiquette in digital space). The learning process enabled the students to develop their own digital business and seek opportunities in self-employment.

The project **increased awareness among VET teachers and trainers** regarding digital entrepreneurship. Teachers and trainers were introduced to the importance of integrating digital and entrepreneurial skills into the curriculum and education more generally. They were given teaching materials and provided with methodological support that enabled them to develop professionally and to include these skills and competences into students' learning materials.

Enhanced cooperation and networking among the project partners and VET institutions through the project led to the establishment of a stable network among the partner organisations. The trusting partnership between the project organisations significantly aided the implementation of project's activities, and created opportunities for future projects.

The research carried out during the very early stages of the project helped to identify gaps between the skills and competences acquired through educational curricula and the demands of the labour market. The project resulted in **better alignment between the skills offered and demanded**. Students were empowered not only to assess their current skills and seek job vacancies, but also to open up new job opportunities themselves by creating their own businesses.

Impacts

As a result of the smooth cooperation during the project, a robust foundation for future collaborative projects was built, leading **to continued partnership and future joint projects**. According to the representative of the coordinating organisation, some partners had not been involved in K2 Erasmus+ projects before, so involvement in the project gave them practical knowledge and new experience. A similar consortium of partners has been involved in other Erasmus+ projects that have applied the lessons learned and built upon the good practices of the earlier project.

The project also contributed greatly to **sustainable changes in education systems and practices**. It served as a blueprint for other projects aiming to combine digital and entrepreneurial skills in VET. Furthermore, VET teachers and trainers were equipped with new knowledge and methodological approaches that will be echoed in the skills and competences gained by future students.

In addition, the project provided increased **opportunities for young people to succeed in the digital economy and business management**. Digital economic literacy is a much-demanded competence in the labour market in the age of digitalised goods and services. Professionals with this package of competences are expected to contribute significantly to economic growth and innovation.

Success factors

Simple yet comprehensive methodological approach. The project's methodology emphasised simplicity and clarity. Each step built solidly on the previous one, ensuring a clear understanding among organisations and facilitating the achievement of common goals. At the end of each stage, all organizations gathered to discuss lessons learned and integrated these reflections into future planning.

Focus on transversal activities. Quality assurance, promotion, valorisation, and project management were transversal activities crucial for smooth implementation. A concise and comprehensive strategy, settled in time and supported by easy-to-use tools, was necessary to ensure these activities were effectively executed.

Work breakdown structure. Each implementation phase was linked to a formal workstream and specific objectives, requiring well-coordinated efforts focused on the needs of target groups. A clear structure allowed the project team to efficiently complete specific objectives and achieve their goals.

Stable and productive consortium partnership. The project benefited from a stable consortium with a good distribution of tasks and roles. Partner organizations were committed to the project's goals, applying their unique experiences and understanding their specific roles. In the DEEP project, task distribution aligned with each organization's focus, reinforcing partnerships and ensuring effective collaboration.

Challenges of and barriers

The **COVID-19 pandemic** strongly affected the project's workflow. However, according to the representative of the coordinating organisation, these circumstances also created opportunities for the consortium to boost the project's relevance due to the transition online.

Difficulties with engaging learners to participate in the project. Due in part to the COVID-19 pandemic, conventional engagement techniques such as personal contact could not be used. Online platforms do not always work when reaching out to potential learners. Moreover, these circumstances also affected engagement and communication among the partner organisations.

Distrust from trainers in relation to the methodological support offered by the project team. On receiving additional material and methodological support, some trainers disregarded these new working methods. This inability to value feedback and apply new methods affected the positive impact the project aimed to produce.

Lessons learned

The most significant lesson of the project is the **development of the online platform** and the adaptation of learning units to the digital environment. The platform proved to be an essential tool for the development of learners' digital and entrepreneurial skills. Furthermore, it enhanced the competences of partners involved in creating and implementing the digital material.

The project also laid the groundwork for discussions on certain **policy implications, such as advocating for more equitable budget allocations and flexibility over project management** in order to address various challenges. For instance, significant differences arose among country partners regarding the fees paid to researchers, which led to issues when allocating the budget. However, the flexibility over budget provided by national Erasmus+ agencies in reaction to COVID-19 created new opportunities for smoother project management. At present time, the budget arrangements of the Erasmus+ system have already changed and new projects can proceed with greater flexibility in terms of changes to their budgets.

Conditions for transferability

The **online platform's approach** to accessibility is inspiring, and may be highly transferable to other projects and VET sectors. The online platform was available in different languages and forms, including being adjusted for people with disabilities. However, while the project's results and outcomes could be highly transferable both within the sector and beyond, the online platform is no longer available. Due to a lack of resources, it could not be maintained. According to a representative of the coordinating organisation, if funding were restored, it would be possible to revive the platform with all its materials.

Regardless, the project's methodological approach and intellectual outcomes can be transferred to other sectors and inspire the deliverables of other projects. Its systematic approach can inform and promote the development of deliverables in other VET sectors, demonstrating the project's wider influence and inspiring potential for cross-sectoral application.

Sources

Desk research

- Digital Entrepreneurship for Employability Paths on Erasmus+ website on Erasmus+ website

Interviews

- Interview with a representative from the coordinating organisation (27 February 2024).
- Interview with a representative from a partner organisation (13 March 2024).
- Interview with a representative from a partner organisation (21 March 2024).

Case study 5

DUAL LEARNING FOR IMPROVING DIGITAL SKILLS OF YOUNG WOODWORKERS (WOODIGITAL)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-FR01-KA202-080104
- **Duration (start date, end date)**
  01 October 2020 to 30 September 2022
- **Field/sector**
  Woodworking industry
- **Target group(s)**
  Young woodworkers, VET teachers
- **Educational level(s)**
  CVET
- **Learning settings (e.g. school-based, work-based, non-formal etc.)**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 289,411.90 (high)
- **Geographical scope**
  France, Hungary, Ireland, Italy, Spain
- **Project coordinator**
  Interprofessionnelle Auvergne Rhône Alpes, France (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
- **Key partners involved (with clarification of type)**
  - Centre de Difusió Tecnològica Fusta i Moble de Catalunya, Spain (foundation)
  - Consorzio Del Mobile SCPA, Italy (Research Institute/Centre)
  - Federazione Italiana delle Industrie del Legno, del Sughero, del Mobile e dell'Arredamento, Italy (non-governmental organisation/association/ social enterprise)
  - Galway-Mayo Institute of Technology, Ireland (higher education institution, tertiary level)
  - Magyar Bútor és Faipari Szövetség, Hungary (non-governmental organisation/ association/social enterprise)

Brief description of the project

The WOODigital project aimed to enhance essential skills, innovation and digital knowledge in the woodworking sector, fostering partnerships with industry representatives and promoting a dual learning system. Its implementation involved focus groups, virtual and physical mobilities, and multiplier events, resulting in the creation of a professional profile for a digitally competent woodworker, a digital platform for online learning, and a training package including materials on Industry 4.0, software, machinery, manufacturing management, and the circular economy.

Relationship to policy priorities

The main goal of the project was to promote digital skills related to the woodworking industry, with a special focus on young people working in the field, and on VET teachers. Through online courses, both students and teachers gained the knowledge and skills required to work and teach using Industry 4.0-inspired industry tools. By cooperating with leading companies in the sector from all over Europe, students and teachers were able to gather good practices and later apply their skills practically.

Specific objectives covered

- Creating a learning system for learners and teachers to promote innovation in the sector, while reinforcing the digital skills and employability of young woodworkers and helping them to seize the opportunities presented by Industry 4.0 at a European level (big data and IoT, new materials, the circular economy).
- Supporting the dissemination of innovative teaching approaches.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The WOODigital project is a strategic partnership initiative under Erasmus+ aimed at VET institutions, particularly those focusing on the woodworking sector. The project's results include the development of an online platform and digital community, online courses, learning modules and materials, and teaching resources. It targets both students and teachers within the VET system, with a specific focus on enhancing the digital skills of the woodworking industry. During the implementation of the project, organisations collaborated closely with companies, with a specific focus on Industry 4.0 technologies. This facilitated the integration of theoretical material into practical assignments and introduced learners to labour market trends.

Methods and key activities

The aim of the project was to create a learning environment tailored to the needs of young woodworkers and teachers working in the field. Digital learning is a powerful method for engaging young people in learning; moreover, it can help in introducing the latest technologies under the Industry 4.0 transformation. To cater to this need, the partners established an **online platform**, which served as an e-learning environment and peer-learning community connecting students, teachers and companies in a single learning experience. The development of this platform required the gathering of diverse skillsets and experience – a process to which the diverse natures of the partner organisations were perfectly suited.

The platform included **online courses** in which students were provided with four learning units. Within each learning unit, students were given various training materials such as interactive PowerPoint presentations, recorded interviews with experts in the field, case studies based on good practices from other European countries, and self-assessment techniques. They were also provided with the opportunity to use some of these assessment techniques within their own work or school. At the end of the module, students were given certificates indicating the completion of the course, which could be used as a part of their accreditation.

Visit to Biesse Pesaro Campus. Source: provided by interviewee

The **mobility programme** can be seen as an exclusive strength of the project, representing a good practice and an inspiration for other projects. This consisted of three parts, involving virtual mobility, physical mobility for trainers, and physical mobility for students. During these activities, learners from both target groups were introduced to leading companies in the field and received the opportunity to observe the work of these companies first-hand while working with the latest Industry 4.0-inspired technology. While participating in the programme abroad, learners were able to grasp regional specificities and apply diverse practices in their school or work.

To enhance the project's outputs, two **focus groups** were organised in each participating country. These focus groups were assembled from representatives of the target groups and associated partners, with the aim of adapting the project's results to professional needs. Five **multiplier events** were organised with the aim of promoting the learning platform and gathering important information that would help to improve the platform and its content, as well as ensuring the transferability and sustainability of the project.

Results of the initiative

Outputs

The **report on professional profiles** can be distinguished as one of the main outputs of the project. During the first phases of implementation, the project partners carried out thorough research on the situation in the labour market, and drew up a comprehensive report defining the role, necessary skills and competences of a digitally qualified young woodworker. At the same time, the partners sought to integrate both digital and green skills, thereby creating the profile of a worker who possessed an awareness of the connection between the digital and green transitions. In this way, they aspired to define the results expected after the training programme.

Following on from this, the partners established an **online platform** to serve as an e-learning environment and peer learning community connecting students, teachers and companies in a single learning experience. On this platform, learners were able to access **online learning courses** divided into five **learning modules** (accessible through the courses page): Industry 4.0, Software 4.0, Machinery 4.0, and Manufacturing Management 4.0 and the Circular Economy. Furthermore, learners were provided with a **training package** containing learning and teaching materials, a curriculum, a handbook and orientation materials.

Outcomes

The outcomes of the project surpassed the foreseen outputs resulting in several additional benefits. Participants demonstrated **increased digital skills and competences** encompassing both sector-specific and general digital skills developed through the use of diverse digital learning tools and navigating online environments. These general skills are transferable to other sectors and various tasks and projects. This outcome is also linked to the **improved access to digital learning** prompted by the COVID-19 pandemic. While the pandemic introduced new and unforeseen challenges, it also created a need to integrate digital learning across all educational systems making it accessible to many groups of learners and providing assistance to socially disadvantaged students.

Students using 3D printers during physical mobility.
Source: provided by interviewee

Moreover, the project **enhanced participants' knowledge of Industry 4.0 concepts**. Through a work-integrated learning approach, emphasis was placed on terminology relating to the Fourth Industrial Revolution, introducing students and teachers to new digital tools and working methods. Students were therefore able to apply new theoretical material to their working environment.

The formation of partnerships through the project led to the creation of a **strong network among the partners involved**. Although the partnership was newly formed, the organisations brought with them an excellent work ethic and determination. Trust between project organisations notably facilitated the smooth implementation of project activities and created a means for joint future projects. The remarkable partnership among the consortium organisations led to a new project, WOODCircle, in which they applied the good practices gained from the previous project. Moreover, WOODCircle also facilitates the dissemination of WOODigital's results and outcomes.

Source: provided by interviewee

Furthermore, **project outcomes were integrated into the higher education curriculum**, indicating the sustainability and scalability of the initiative. Partners from various institutions such as non-governmental organisations and higher education institutions brought different perspectives which enriched the project's approach and activities. Partners from higher education institutions were inspired to adapt to their learning practices by some of the learning materials and methodologies targeted at the VET sector.

Impacts

The project promoted several long-term impacts. The **acquisition and development of digital skills** empowered students and young workforce in the furniture industry by contributing to their career development and adaptability. The enhancement of digital competences they had already acquired, together with the introduction of new digital skills, opened up opportunities for young people to fulfil the latest labour market needs and seek higher, better-paid job roles.

While engaging in efforts into developing digital skills, a link between digital and green skills in the sector was identified. On the one hand, digitalising the woodworking sector involves looking for ways to make it more eco-friendly and sustainable. On the other hand, digital tools require energy resources that might not be extracted in an environmentally friendly manner. Thus, implementation of the project activated **awareness of sustainability and circular economy practices** within the sector.

Participation in the courses contributed to an **improvement in English language capabilities among students**. By using English as a main language for the project's activities and learning materials, participants from non-English speaking countries were able to develop their English language skills.

As a result of smooth cooperation during the WOODigital project, as well as findings relating to close links between digital and green skills, the **consortium partners initiated a new project**, WOODCircle, which focused on the circular economy. Applying lessons learned and building on the good practices of the previous project, the new project aims to facilitate the transition to a circular economy by applying the same training model used in WOODigital.

Experience gained through the project provided insights into the **enhancement of teaching methodologies**. While preparing for the new project, the organisations were able to revise their teaching and learning approaches. By incorporating feedback from participants, the project team could refine the course materials to ensure better effectiveness and student engagement.

Success factors

The **mobility programme** was unanimously named as the greatest success factor of the project. It consisted of both online and physical mobility. Prior to the physical mobility, learners were able to interact with the online platform. During the physical mobility part, 24 students from five participating countries, as well as teachers, had a chance to travel to one of the partner countries, where they received a tour of the leading companies in the sector working with Industry 4.0 tools. Learners had the chance to use 3D printers, CAD technology applications and other tools. This gave them a chance to grasp regional particularities and apply diverse practices back in their home countries.

Another facilitator of the project's success was the **diverse skillsets and experience of the partner organisations**. The project involved non-governmental organisations, social partners and higher education institutions, each of them bringing diverse experience in methodological approaches as well as different management techniques. Some of the participating organisations have ties with companies engaged in the woodworking industry. This resulted in an enriched understanding of the topic, provided means to apply new methodologies, and introduced companies working in the field.

Meeting of the project team in Barcelona. Source: provided by interviewee

Lastly, the project's **simple approach** and **accessible content** also contributed to its success. By exercising Level 4 of the European Qualifications Framework (EQF), the project team aimed to provide a course that would be accessible to learners of different ages and levels. Using simple wording to present topics and employing different learning approaches while integrating best practices from across Europe enabled the materials and the course to be engaging.

Challenges and barriers

One of the most prominent challenges to the project was **the COVID-19 pandemic**. This affected project activities such as learners' physical mobility. However, according to the representative of the partner organisation, these circumstances also opened up certain opportunities. For instance, the situation required the accessibility of online learning to be enhanced, which led to more integrated project results. Moreover, some teachers and students were more comfortable experimenting with new material online.

At the beginning of the project, some **time was lost due to the need to synchronise** between organisations. As new partners, organisations had to learn about each other's working methods and what approaches they applied, and to integrate together the gathered knowledge of each organisation.

One barrier in related to the implementation of the project was in **integrating practical aspects into the online platform**. In other words, the issue of how to integrate practical learning into an online environment. The pandemic situation not only threatened to disrupt physical mobility, but also reduced opportunities to reach out to local companies, requiring the project partners to find ways to integrate all of the planned activities online.

Furthermore, what emerged in most projects were issues relating to **engaging students and persuading them to take the course**. Additional effort had to be put not only into developing intellectual outputs but also making them attractive to potential beneficiaries, as well into advertising the idea of the project.

Lastly, **administrative burden** posed another barrier to the implementation of the project. At the time, project management required much higher administrative maintenance, which interfered with the project's activities. According to the representative of the partner organisation, coordinators would have been much more willing to dedicate their time and effort to tasks that were more impactful to the project than administrative work.

Lessons learned

The most prominent lesson learned from the project is the **development process involved in the online platform and the adaptation of learning units to the digital environment**. The platform proved to be an essential tool for the development of learners' digital skills. Moreover, it fostered the participating organisations' competences in creating and implementing digital material.

Another significant lesson from the project was the need to **reduce the length of the mobility programme**. According to representatives from participating organisations, the 10-day duration of the physical mobility part proved to be too long for participants – they became tired, which inevitably led to a lost of interest. Bearing that in mind, the duration of the physical mobility was reduced to five days in the consortium's later project.

Furthermore, by the end of the project partners reflected that they did not pay sufficient **attention to including companies in the training course**. It was considered useful to have a representative from the company introduce the situation in the labour market and explain their company's working models. This would contribute to bringing theory closer to real-life practice and re-shaping theoretical knowledge.

Conditions for transferability

The project's results and outcomes are highly transferable, both within the sector and beyond it. The platform is infused with case studies and best practices from different countries, all the material is available in five different languages, which guarantees its accessibility across the woodworking sector. However, the representative from the coordinating organisation discerned a limited capacity to control the results. It is somewhat impossible to gather official feedback from the users after the end of the project, leading to a lack of opportunity to enhance the outputs later.

Nevertheless, the project's methodological approach and intellectual outcomes may be transferred to other sectors and can inspire the deliverables of other projects. For instance, as noted by the representative of a partner organisation, learning units were adopted in the construction sector. This explicitly shows the project's cross-sectoral applicability and transferability.

Sources

Desk research

- 'Dual Learning for Improving Digital Skills of Young Woodworkers' on Erasmus+ website
- 'WOODDigital' website
- WOODCircle

Interviews

- Interview with a representative from a partner organisation (29 February 2024).
- Interview with a representative from a partner organisation (05 March 2024).
- Interview with a representative from the coordinating organisation (08 March 2024).
- Interview with a representative from partner organisation (12 March 2024).

Case study 6

E-LEARNING, DIGITISATION AND UNITS FOR LEARNING AT VET SCHOOLS – CREATING ONLINE LEARNING ENVIRONMENTS IN TECHNICAL EDUCATION FOR EUROPEAN METAL INDUSTRY (EDU-VET)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-DE02-KA202-006068
- **Duration**
  01 September 2019 to 31 March 2022
- **Field/sector**
  Metalworking industry
- **Target group(s)**
  VET learners and teachers
- **Educational level(s)**
  IVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 255,721.00 (high)
- **Geographical scope**
  Germany, Netherlands, Spain, United Kingdom
- **Project coordinator**
  Paderborn University, Germany (higher education institution, tertiary level)
- **Key partners involved**
  - Berufskolleg Bocholt-West, Germany (school/institute/educational centre – vocational training, secondary level)
  - Centro Integrado de Formación Profesional Someso, Spain (school/institute/educational centre – vocational training, secondary level)
  - Ingenious Knowledge GmbH, Germany (small/medium-sized enterprise)
  - Lancaster and Morecambe College, United Kingdom (school/institute/educational centre – vocational training, secondary level)
  - Stichting BVE Oost-Gelderland, Netherlands (school/institute/educational centre – vocational training, secondary level)

Brief description of the project

The EDU-VET project focused on the creation of innovative teaching and learning environments in VET, focusing on the metalworking sector. The project involves the development of an EDU-Curriculum and online courses on a learning platform, as well as an online showroom providing insights into real companies in the metalworking industry. In addition, EDU-VET provides a handbook and guidelines for teachers, supporting them with pedagogical hints, background information and resources for online and blended learning scenarios, contributing to the digitisation and sustainability of VET in the metalworking industry.

Relationship to policy priorities

The main goal of the project was to promote digital skills relating to the metalworking industry for various levels of VET learners and teachers. Through online courses, both students and teachers gained knowledge and skills required to work and teach with digitalised metalworking industry tools. Through cooperation with companies representing the sector, students were able to apply their skills practically.

Specific objectives covered

- Developing and implementing an innovative curriculum and online courses specifically designed for initial vocational education and training (IVET) in the metalworking sector.
- Enhancing digital literacy and the use of technology among VET teachers and learners, particularly in the application of e-learning and online resources.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The EDU-VET project was a strategic partnership initiative under Erasmus+, aimed at vocational education and training (VET) institutions, particularly those focusing on the metalworking industry. The project encompasses the development of digital curricula, online learning environments and teaching resources. It targets both educators and students within the VET

system, with a specific focus on enhancing digital skills and understanding of the metalworking sector. This development of these curricula was a collaborative effort bringing together educational experts, industry professionals and digital learning specialists to ensure the curricula not only met the specific needs of VET learners but also aligned with current industry standards. Since most of the working tools in the sector are being increasingly digitalised, there is a demand to integrate digital learning into all levels of VET relating to the metalworking sector. The project therefore covered three levels of learners: beginners, advanced learners, and experts.

Methods and key activities

The aim of the EDU-VET project was to create a new digital learning environment for metalworking industry students and teachers working in the field. The project started with comprehensive research on best practices in VET e-learning and in the metal sector, identifying key areas for improvement. Following the results of this study, an innovative EDU-Curriculum with detailed learning outcome matrices was developed and placed on a user-friendly e-learning platform. A modular approach was employed to create customisable online courses, hosted on an advanced learning platform, ensuring easy access and adaptability to various learning contexts. To provide authentic learning experiences, an online showroom was established to showcase real-world company insights through multimedia resources, including texts, photos, videos, and audios. Additionally, the project produced a detailed handbook and guidelines for teachers, which included pedagogical strategies, background information, and instructions for integrating online courses into blended learning scenarios. These methods collectively aimed at reducing barriers to education, enhancing the quality of VET, and supporting both teachers and learners in the transition to digital learning environments.

Results of the initiative

Outputs

One of the main outputs of the EDU-VET project was the development of comprehensive **online courses** segmented into nine modules, focusing on the development of specific skills such as drilling, milling and turning. These courses were structured to cater to varying levels of expertise: the entry level was designed to teach each skill set separately, while the advanced and expert levels offered combined courses to challenge and enhance learner proficiency. Each course included learning units comprising scenarios illustrated by video materials, facilitating a more engaging and effective learning experience. In addition, the project produced a detailed curriculum and **teaching resources for educators**, designed to assist them in integrating these new tools into their teaching practice. The support extended beyond mere technical training, and encompassed a range of pedagogical strategies tailored to blended and online learning scenarios.

To support the delivery of the **EDU-VET curriculum**, the project team created a robust **e-learning platform**, serving as a dynamic online environment in which learners could access courses and engage with interactive materials. An **online showroom was** established, providing virtual insights into the metalworking industry, allowing students to explore real-life scenarios, processes and best practices. The development of high-quality **didactic materials** complemented these efforts, and was designed to enhance the overall learning experience and support learners' educational journeys.

Lastly, the project incorporated **feedback mechanisms** to ensure the continuous improvement and relevance of the educational content and methodologies. By actively soliciting input from both teachers and learners, the EDU-VET team aimed to regularly refine and update the curriculum, teaching methods and online platform.

By embracing a hybrid learning approach, the project ensured that all deliverables, particularly the online courses, were accessible both in school environments and at home, facilitating a flexible and inclusive learning experience. This approach was reinforced through key joint activities, including **five conference-workshops** at which partners collaborated on the outlines for deliverables and monitored the project's progress.

Outcomes

The outcomes of the EDU-VET project extended beyond the immediate realm of the metalworking industry, enhancing both specific and general digital competences among the participants. The formation of **partnerships** via the project led to the creation of a robust **network among the involved schools**, significantly facilitating the smooth implementation of various activities. This collaboration not only fostered the development of **industry-specific digital skills** but also broadened the **digital literacy** of all participants as they engaged with the e-learning platform and online courses.

By interacting with diverse digital learning tools and navigating different online environments, participants enhanced their general **digital competence**. Furthermore, the project's educational framework promoted **holistic development**, with students acquiring personal, social and 'learning-to-learn' skills. This comprehensive learning experience took place across various settings, including schools, homes and real-world companies, encouraging students to adapt to different learning contexts.

The **collaborative aspect** of the project was highlighted in particular, as students and teachers worked together in teams, sharing experiences and discussing outcomes. This interactive and cooperative approach not only strengthened the learning process but also fostered **a sense of community among participants**, leading to a richer, more diversified educational experience.

Moreover, the project's website was visited at least 2,000 times, according to the data provided by the partner organisation. In addition, the project's website and social media channels reached at least a few dozen users per article or post. There were at least hundred participants at every conference organised by the project team.

Impacts

The legacy of the EDU-VET project relates mostly to the establishment of an innovative e-platform filled with comprehensive learning modules, which remains an active and vital resource for ongoing student education. The e-platform continues to be accessible online, providing **ongoing educational support for new cohorts** of students. This enduring resource represents a tangible legacy of the project, contributing to the continuing enhancement of vocational education.

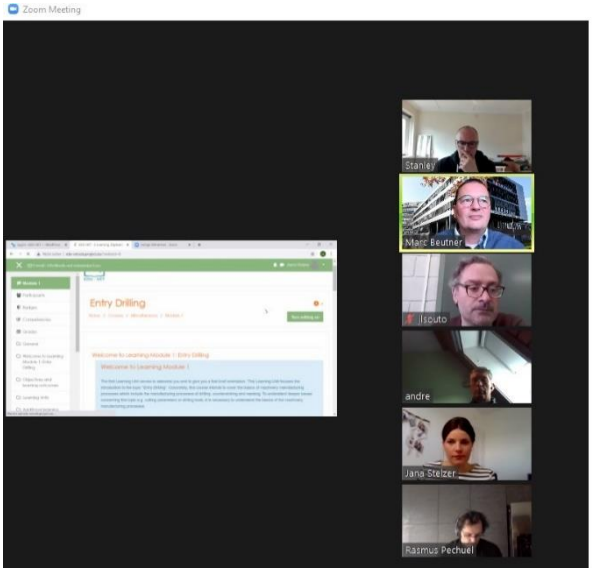
The introduction of an online showroom exemplifies an innovative model for promoting collaboration between educational institutions and industry companies. This model, which has proven effective within the EDU-VET framework, offers a **blueprint that can be replicated across other sectors within VET**, enhancing the way educational institutions engage with industry partners.

The network of schools that emerged from this project constitutes a robust **foundation for future collaborative projects**, facilitating the development of new partnerships and initiatives. This network not only enhances the collective capacity for innovation and development within the VET community, but also serves as a conduit for the continuous exchange of good practices and resources.

Moreover, the participating schools have become **ambassadors of EDU-VET's achievements**, actively disseminating their experiences and successes to other educational institutions. This ripple effect ensures that the benefits of the project are shared widely, amplifying its impact and embedding its innovations within the broader educational framework. Through these channels, the EDU-VET project continues to influence the **evolution of VET**, promoting a **more integrated, digital-savvy and collaborative approach to vocational education across Europe** and potentially globally.

Success factors

Cooperation between educational institutions and companies was the key factor in the project's success. Typically, a gap exists between education and the industrial sector, leading to skills mismatches and preventing learners from applying their skills directly in the labour market. The creation of an online showroom addressed this issue effectively by introducing teachers and learners to leading companies within the sector and providing them with the opportunity for direct contact.



A **hybrid learning approach** played a crucial role in the successful implementation of project activities. This method allowed students to learn both in school and at home, fostering a continuous learning experience. In addition, it aided the development of general digital skills such as managing data, information and digital content, as well as interacting through digital technologies. Most importantly, the hybrid learning model was especially relevant during the pandemic, aligning with the educational needs of that time.

The project's **committed partnership** was another crucial factor in its successful implementation during the global pandemic. The project partners demonstrated a deep dedication to the topic, which was instrumental in overcoming various challenges and ensuring the timely delivery of the project's outcomes.

Partner meeting under COVID-19 restrictions. Source: provided by interviewee

According to the representative of the project coordinator, the **sustainability of the project's results** is a factor that has contributed to long-term success of the project. Almost all of its results are still available on the project page. Notably, these results are self-explanatory and could continue to be beneficial for students who did not participate in the original project, underlining the enduring impact and value of the project's deliverables.

Challenges and barriers

The primary challenge encountered during the project was the **COVID-19 pandemic** and its associated complications. The unexpected nature of the pandemic meant that all face-to-face activities initially planned for the project had to be shifted to online platforms. This abrupt transition raised concerns over a potential decline in the quality of deliverables and the risk of losing valuable connections with partners and target groups. In addition, pandemic-related restrictions hampered communication with certain companies, thereby hindering students' opportunities for workplace learning.

Another challenge arose from the need to **adapt the existing content and create new materials that would be suitable for the hybrid learning method**. With the shift to predominantly home-based theoretical learning, it became crucial to devise learning units that were not only intuitive and engaging for learners at home, but also clear and easily accessible for teachers, notwithstanding language barriers. This necessitated a thoughtful approach to the creation of materials, to ensure their educational effectiveness and inclusivity.

Conditions for transferability

The learning materials developed during the project, although initially shared among the country partners, also hold relevance for learners within the same industry across different countries. The tangible results and thematic outputs of the project possess high potential for transferability, and the working methods and systematic approaches employed in the project offer broader applicability across various VET sectors. The project's coordinator emphasised that the methodologies used in designing the online platform and curriculum serve as a valuable model. This systematic approach could inspire and inform the development of deliverables in other VET sectors, demonstrating the project's wider educational influence and its potential for cross-sectoral application.

Lessons learned

According to the project coordinator, the main lesson of the project was **discovering the convenience of the online platform**, which proved to be an essential tool in facilitating the development of both general and specific skills and competences. It offered a unique opportunity to blend multiple thematic areas, allowing students, particularly at the advanced and expert levels, to learn various subjects concurrently while acquiring the necessary competences for each. This approach not only enhanced the learning process but also fostered a more integrated and holistic educational experience.

The project also underscored the **importance of flexibility and adaptability** in educational settings. The shift from face-to-face to online learning necessitated by the COVID-19 pandemic, highlighted the need for educational content and methodologies to be adaptable to varying circumstances.

Another significant lesson learned was the **importance of clear and intuitive learning materials**. Because the transition to home-based learning presented challenges in maintaining engagement and clarity, the project revealed the critical need for learning units to be intuitively understandable and attractive to learners, irrespective of their location. Moreover, the necessity to ensure that content was accessible and comprehensible to teachers, despite potential language barriers, emerged as a crucial aspect of effective educational delivery.

Lastly, the project demonstrated the **enduring value of committed partnerships** and the resilience required to navigate unforeseen challenges such as a global pandemic. The dedication of project partners and the collective efforts made to overcome obstacles underlined the importance of collaboration and mutual support in achieving the project's objectives and ensuring its long-term success.

Sources

Desk research

- 'E-Learning, Digitisation and Units for Learning at VET schools – Creating online Learning Environments in Technical Education for European metal industry' on Erasmus+ website
- EDU-VET project website

Interviews

- Interview with a representative of the coordinating organisation (22 February 2024).
- Interview with a representative of a partner organisation (05 March 2024).

CASE STUDY 7

ASSESSING COMPETENCES FOR REINTEGRATION (CORE)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2019-1-DE02-KA204-006193
- **Duration**
  01 October 2019 to 31 December 2021
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Careers counsellors, young adult NEETs
- **Educational level(s)**
  CVET (for counsellors), IVET (for NEETs)
- **Learning settings**
  Online
- **Funding arrangement**
  EUR 228,934.43
- **Geographical scope**
  Bosnia and Herzegovina, Germany, North Macedonia, Serbia, Slovenia
- **Project coordinator**
  Deutsches Institut fuer Erwachsenenbildung eV Leibniz-Zentrum für Lebenslanges Lernen, Germany (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - Andragoski zavod Ljudska univerza Velenje, Slovenia (school/institute/educational centre – adult education)
  - Association for Competency Development "S.K.I.L.L.S.", Bosnia and Herzegovina (non-governmental organisation/association/social enterprise)
  - Laris, Serbia (non-governmental organisation/association/social enterprise)
  - Zdruzenie za obrazovanie na vozrasni Centar za Dozivotno Ucenje Skopje, North Macedonia (non-governmental organisation/association/social enterprise)

Brief description of the project

The CORE project focused on the challenge of youth unemployment, particularly among NEETs in Balkan countries. It aimed to combat this issue by developing competence assessment tools and a comprehensive toolkit for counsellors, empowering vulnerable young adults to identify and showcase their competences to allow better integration into society and employment.

Relationship to policy priorities

The CORE project contributes to the policy priority of engaging young people, particularly NEETs, by developing user-friendly tools such as ProfilPASS Kickstart Your Career!, thereby empowering NEETs towards societal and employment integration. The provision of comprehensive training for job counsellors ensures the effective utilisation of these tools, aligning with policy goals to engage and support young people in accessing opportunities for personal development and employment.

Specific objectives covered

- Tailoring the curriculum for career counsellors and competence assessment toolkit to the needs of young adults.
- Assessing the informal and non-formal competences of NEETs in order to plan their upskilling trajectories
- Training for careers counsellors.
- Curriculum testing with young adults.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The project was designed in response to the high unemployment rates among NEETs, particularly prevalent in Balkan countries during the project's implementation period. The project aimed to promote the integration of NEETs into the labour market by facilitating their access to counselling sessions that were lacking in these countries. During these sessions, counsellors would assist NEETs **in assessing their informal and non-formal competences**, thereby enhancing their prospects for employment or education and contributing to a reduction in the high unemployment rates. In addition, the project sought to equip counsellors with the skills necessary for effectively working with NEETs. The project's scope was transnational, and was coordinated by the German Institute for Adult Education, with partners coming from North Macedonia, Slovenia, Bosnia and Herzegovina, and Serbia.

Methods and key activities

During the initial phase of the project, the project partners gathered information about NEETs within their countries. Partners carried out desk research by reviewing relevant literature, as well as conducting **interviews and focus group discussions** with those who work with NEETs, with NEETs themselves, and with those who conduct research into this group. In this way, the partners were able to gather statistics concerning NEET rates and school drop-out rates, and to identify the needs of NEETs. The results of each country's research were summarised in a **comprehensive report on young adults not in education, employment or training**. Following on from this, 27 existing tools for assessing competences, vocational orientation, empowerment and up-skilling were collected from the partner countries and compiled into a **CORE toolkit**, together with a fact sheet offering relevant information about the tools. The image below provides an example of one such tool. It is evident that the toolkit was organised in a user-friendly manner, clearly g explaining each tool, along with its target group and key features, and providing a link for further exploration.

Based on interviews with those who work with NEETs, it was found that existing competence assessment tools such as ProfilPASS for adults and ProfilPASS for young people, were too challenging to use, due to their complex language. They also lacked a thorough exploration of individuals' competences. Consequently, both tools were merged, and adjustments were made to their language, content and layout to cater to the needs of the target group of NEETs. This led to the development of a new tool called **ProfilPASS – Kickstart Your Career!**. Counsellors were provided with training on how to use this tool. This was especially beneficial to them, as competence assessment tools are scarce in the Balkan region.

Within the CORE project, counsellors adopted an individualised approach, recognising that no two individuals are alike. Therefore, counselling sessions were tailored to accommodate the unique backgrounds, personal traits and goals of each young person involved. The photo below represents part a counselling training course which lasted for 30 hours. During this course, counsellors honed their skills and expanded their knowledge to better equip them for their work. The partners also organised consortium meetings at which they discussed the process of developing the toolkit and its components, as well as deliberating on further steps to be taken.

Source: Website of the project

Results of the initiative

Outputs

The project produced several key outputs, the primary one of which being the **CORE toolkit**, developed by the German Institute for Adult Education. This comprehensive toolkit aimed to equip counsellors with the methods necessary for competence assessment, vocational guidance and empowerment tailored specifically to the needs of disadvantaged young adults who are NEETs. Accompanying materials were also developed to assist counsellors in making effective use of the toolkit. Among these materials was a detailed **curriculum** providing guidance in the training of new counsellors, along with a **manual** offering practical advice on how to implement the materials developed in counselling sessions.

At the core of the CORE toolkit is the **ProfilPASS – Kickstart Your Career!** tool. This operated on the premise that individuals often acquire valuable skills through informal experiences such as family life and volunteer work, yet remain unaware of these competences. Geared towards counsellors working with NEETs, the ProfilPASS tool assisted NEETs in evaluating various aspects of their profile, including their life experiences, activities, qualities and future aspirations. By identifying these aspects, counsellors helped young adults to recognise their strengths, build a CV and set meaningful goals for their future endeavours, whether it be further education, participation in vocational programmes, or engagement in volunteer work.

The CORE toolkit, along with of all its components, remains accessible on the project's website and has been translated into all of the partner languages as well as English. This ensures that counsellors across different regions can easily access and utilise these resources to support disadvantaged young adults in their journey towards employment and personal development.

Outcomes

The project yielded several positive outcomes. First, the project fostered the development of NEETs' **entrepreneurial, digital, and technological skills**. These competences are crucial for employment, as demonstrated by the fact that **over 100 NEET individuals who received counselling reported securing new jobs** or feeling significantly

more confident when entering the labour market after receiving a counsellor's guidance. Some decided to participate in voluntary mobility programmes and similar opportunities. Typically, upon completing the programme, partners exerted efforts to ensure that NEETs received ongoing support, preventing them from dropping out again and enabling them to continue their journey in seeking education or employment. Indeed, both of the partners interviewed suggested that the project significantly boosted the confidence of NEET individuals, helping them to recognise their value, competences and importance.

Furthermore, the project contributed significantly to **enhancing counselling skills**. Counsellors were provided with resources on how to improve their counselling sessions. One such tool was 'peer-to-peer counselling and supervision of ProfilPASS counsellors', in which senior counsellors from the partner organisation, "S.K.I.L.L", observed other counselling sessions and provided feedback, thereby enhancing the overall quality of counselling in the Balkan countries and beyond. Another valuable resource was the 'EPALE Resource Centre', an electronic platform offering numerous articles, documents and materials to better inform counsellors about their work. Overall, thanks to the project, **15 new counsellors were trained to use the new ProfilPASS – Kickstart Your Career! tool**, which is now making a significant impact in all five countries by reaching more organisations and people.

Impacts

By training career counsellors and empowering them to work with NEETs, partners from every country successfully **exposed NEETs to various educational and professional opportunities**. In addition, both target groups – counsellors and NEETs - have gained valuable tools from this project, which they will have at their disposal indefinitely. The tool 'ProfilPASS – Kickstart Your Career!' is now making a significant impact across all five countries, reaching numerous organisations and individuals. Moreover, feedback from Slovenian partners emphasises the ease of implementation of these tools across diverse programmes, as well as their adaptability to different target groups. For example, tools developed within the CORE project have been used effectively by associations working with young people and youth offices, showcasing the versatility and effectiveness of the project's outcomes.

Furthermore, the project fostered partnerships between the partners, leading to **continued collaboration on other projects**. For example, partners from Slovenia have worked together with Serbian partners on the project **HOPE – "Helping Women Gain Power in Their Lives".**

Source: Website of the project

Success factors

One of the critical success factors of the project, highlighted by the Slovenian partners interviewed, was the **user-friendly nature of the tools developed**. The tools, particularly the 'ProfilPASS Kickstart Your Career!', were designed to be accessible and easy to navigate, enabling both NEET individuals and counsellors to make effective use of them. This user-centric approach contributed significantly to the project's success by enhancing engagement and uptake among the target audience.

Moreover, **partners' engagement with youth associations and youth offices** served as another key success factor. This approach enabled partners to broaden their outreach and attract more NEETs or counsellors interested in the project.

Challenges and barriers

The **COVID-19 pandemic** posed a significant obstacle, disrupting the project's activities and requiring adaptation to remote working and the implementation of special protection measures. This was particularly challenging when working with young people, as **maintaining engagement and providing support** became more complex in a virtual environment.

Another challenge faced at the beginning of the project was **attracting the target group** of NEETs, as it was difficult to engage these individuals and encourage their participation in the project's activities. However, through the development of user-friendly materials and effective collaboration with counsellors, the project successfully managed to involve NEETs in the programme.

Lessons learned

Effective collaboration between the partners played a crucial role in the project's success, facilitating access to resources, expertise and networks. Building and maintaining these partnerships required ongoing communication, trust-building and the alignment of goals and expectations.

Furthermore, another key takeaway is that **good ties** should be established not only between partners, but also **with other organisations**. The success of the project was greatly influenced by partnerships and collaboration among youth offices and youth associations. These partnerships not only expanded the project's outreach but also facilitated the sharing of resources, expertise and best practices, emphasising the importance of collaborative efforts in addressing complex social issues.

Conditions for transferability

The transferability of the project's outcomes relies on several critical conditions. First, the establishment of support systems for NEETs is vital to ensuring the effective implementation of the project tools. **Providing careers counsellors with the necessary tools and training required** to acquaint them with the tools developed (such as ProfilPASS – Kickstart Your Career!) is essential to ensure that counselling sessions are effective, and that young NEETs receive valuable takeaways.

Furthermore, **partnerships with youth offices and youth associations** are essential to ensuring the project engaging enough to attract both NEETs and job counsellors.

Sources

Desk research

- "Assessing COmpetences for REintegration" on Erasmus+ website
- "Assessing COmpetences for REintegration" – initial results and materials developed in the Erasmus+ project "CORE" on EPALE
- ProfilPASS CORE website
- 'Assessing Competences for Reintegration' on Erasmusly
- 'ProfilPASS Kickstart Your Career!' manual

Interviews

- Interview with representative of a partner organisation (07 March 2024)
- Interview with representative of a partner organisation (14 March 2024).

CASE STUDY 8

BECOMING A WOMAN CODER

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-FR01-KA202-080582
- **Duration**
  01 October 2019 to 31 March 2022
- **Field/sector**
  Digital
- **Target group(s)**
  Employment professionals, NEET women
- **Educational level(s)**
  CVET (for trainers), IVET (for learners)
- **Learning settings**
  Online
- **Funding arrangement**
  EUR 263,385.00
- **Project coordinator**
  Hauts de Garonne Développement, France (non-governmental organisation/ association/social enterprise)
- **Key partners involved**
  - Acrosslimits Ltd, Malta (school/institute/educational centre – vocational training, tertiary level)
  - Carrots Foundation, Poland (foundation)
  - CJ Conseil, France (small/medium sized enterprise)
  - Ohjelmisto- ja e-business ry, Finland (non-governmental organisation/ association/social enterprise))
- **Geographical scope**
  France, Malta, Finland, Poland

Brief description of the project

This project aimed to create awareness and training tools to tackle stereotypes and encourage more women to become coders, especially those facing unemployment or currently in the position of NEETs. This issue was tackled by targeting those employment support professionals who were the first point of contact for women trying to find new employment. The 'Become woman coder' project enhanced the competences of the professionals involved in the retraining of women within coding professions. In addition to this, the project developed outputs that could be used by unemployed women if they choose the path of individual retraining.

Relationship to policy priorities

By developing educational resources and tools to engage women facing economically challenging obstacles to pursuing coding careers, the project addressed gender disparities within the ICT industry, contributing to both the development of digital skills and the engagement in upskilling of a vulnerable group. Moreover, by collaborating with companies to provide skills training and certifications, the project facilitated engagement between aspiring female coders and potential employers, fostering greater participation and representation of women in the tech workforce.

Specific objectives covered

- Encouraging more NEET women to consider the profession of developer.
- Providing access to an e-learning platform with the tools necessary for retraining.
- Guiding employment and integration professionals in supporting NEET women.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The primary objective of 'Becoming a Woman Coder' was to tackle gender disparities within the ICT sector, in which women are under-represented in various roles. The project partners aimed to raise awareness about stereotypes within the field of ICT and to develop tools to engage women in pursuing careers in coding.

Methods and key activities

The initiative began with partners interviewing women who had successfully transitioned into ICT careers. These interviews helped to identify the motivations driving women to pursue coding as a career, and the challenges they faced in doing so. Subsequently, data collected from 38 interviews were synthesised and presented in a report that became the basis for the creation of a digital toolkit. This combined training tools with useful resources aimed at raising awareness and tackling gender stereotypes in IT, to promote the inclusion of women. The materials and training tools developed were offered to (1) job counsellors seeking to enhance their ability to help women re-integrate into the labour market through re-skilling; and (2) women themselves who were interested in re-training. Each target group received tailored materials and tools to aid them in achieving their goals.

Results of the initiative

Outputs and outcomes

Qualitative study on women changing their careers to coding (based on 38 questionnaires)	A detailed study report outlined the essential success factors, benefits and challenges involved in transitioning to the developer profession, and built as a foundation for the development of more **accurately targeted** training materials.
Development of an e-learning platform	The creation of an online training platform tailored to integration professionals and unemployed women not only allowed the structuring of training resources, but also facilitated access to **continuous training and upskilling**.
Educational animation 'Breaking the clichés'	Presented in an accessible form, this animation **raised awareness** among viewers (employment professionals and women) about the accessibility of a coding career, **encouraging interest** in IT.
A series of mini-videos, 'Testimonies of reconversion in tech'	A series of videos, containing real-life experiences, provided **relatable and inspiring examples** for potential trainees, illustrating successful transitions and the tangible benefits of becoming a developer.
Serious game, 'Learning good support practices'	This game was designed to simulate work situations to support women in their transition into the developer profession. Scenario-based learning aims to **boost confidence, increase familiarity and enhance learners' ability to facilitate successful career transitions**.
An e-learning module aimed at employment professionals	This module facilitated the **continuous training and upskilling of employment professionals,** enabling them to guide women more effectively towards employment, and more specifically towards ICT-related careers. It featured segments focusing on programming languages such as HTML and CSS, as well as a memory game. Moreover, scenario-based games were developed to simulate counselling sessions, enabling counsellors to prepare women for real-life scenarios in which they might feel discouraged from starting a career in IT.
A toolbox for the recognition of competences of employment and integration professionals	Tools developed to reinforce the importance of and recognise specific competences **increase acknowledgment of the professional skills** of employment advisors, boosting their confidence and efficacy in supporting career transitions.

Outcomes

The project aimed to empower women by providing them with essential skills such as 'learning-to-learn', while fostering **logical thinking, reasoning and memory abilities**. These skills are not only crucial in coding but also in everyday life. Interactive games within the e-learning module allowed women to acquire practical knowledge and a deeper theoretical understanding of various aspects of the ICT sector. For example, the games helped them to explore and understand the distinctions between various web-related job options, such as data analyst, front-end developer and back-end developer. Through these games, women were introduced to programming languages such as HTML and CSS. This hands-on approach facilitated their learning journey, equipping them with both theoretical insights and the practical skills necessary for successful careers in the ICT industry.

Source: Facebook page of the project

Although indirectly, the project also **contributed to the development of women's coding skills**. The Finnish partner interviewed highlighted that thanks to this project, by partners were able to establish connections with companies such as Microsoft and Amazon. These companies willingly collaborated with the project partners and organised learning

opportunities for women to learn coding. Subsequently, partners provided women with certifications, enabling them to apply for jobs in the IT sector.

Impacts

As highlighted by the Finnish partner interviewed, the project did not focus directly on developing women's coding skills, but on educating women about the ICT industry and **enhancing their confidence** in selecting this career path. Indeed, the project successfully altered the perception that coding is an exclusively male domain, emphasising opportunities for women to retrain and enter the tech field as well. Moreover, women empowered by the project were able to spread awareness to others, encouraging them to explore career opportunities in the ICT industry.

Furthermore, the impact of the project extended beyond its original scope, reaching other groups of learners while combatting stereotypes against women. As highlighted by the project partner interviewed, the resources developed throughout the project have the potential to be seamlessly **transferred into other educational contexts**. For instance, educational cartoons can effectively convey the message to younger students that women can pursue successful careers in coding. Similarly, the aptitude test can assist younger girls in transitioning from school to the labour market by assessing their skills and potential in coding-related fields. This broad transferability of the materials and tools developed ensures that awareness about women in coding is raised among diverse audiences, promoting gender equality and inclusivity in the tech industry.

Source: Facebook page of the project

Success factors

Collaboration with private companies. As emphasised by the Finish partner, a common issue arises whereby governments provide resources for young people to acquire education and skills to enter the labour market, yet support for adults is often overlooked, despite market demand for an upskilled and reskilled workforce. Private companies possess the resources necessary to provide training and certifications for women who want to enter the ICT sector. Such a partnership effectively bridges the gap between skills deficiency and employment, benefitting both individuals seeking to enhance their skills and the companies seeking a qualified workforce.

Source: Facebook page of the project

Peer learning as a pedagogical choice. The Finnish partner also emphasised that social media campaigns encouraging women to pursue coding are noticeably less effective than peer learning from women who have successfully retrained and established themselves in the field of ICT. The stories of these women serve as powerful motivators, dispelling myths and inspiring other women to challenge established stereotypes about women in coding.

Challenges and barriers

The primary challenge highlighted by the partners interviewed was the **impact of the COVID-19 pandemic**, which occurred during the project implementation period. Dissemination activities became more challenging, and participants faced difficulties in attending events and engaging with others in person. However, by transitioning all meetings and events online and maintaining an active presence on the project's social media platform, organisers were able to effectively reach their target audience and ensure sufficient engagement.

Lessons learned

Finding a **personal source of motivation** in the course of peer learning proved to be highly effective in inspiring women to pursue careers in coding. Real-life success stories from women who had successfully transitioned into the field of ICT served as powerful motivators, dispelling stereotypes and instilling confidence in other women.

A tailored approach to the needs of a vulnerable group is essential. In the case of 'Becoming a Woman Coder', it became evident that the experiences of both unemployed women and those who had transitioned into careers in IT needed to be taken into account when designing interventions to attract women to coding careers. By understanding the unique motivations and challenges faced by women, the project was able to develop targeted materials and tools that resonated with the intended audience.

Conditions for transferability

The success and impact of the 'Becoming a Woman Coder' project highlight several key conditions necessary for the transferability of its outcomes to other educational contexts. First, the **use of real-life success stories** from women who had successfully transitioned into the ICT field served as a powerful motivator, dispelling stereotypes and instilling confidence in other women. This emphasis on peer learning underlines the importance of relatable experiences in motivating and empowering individuals. Second, **collaboration with external stakeholders, particularly companies** in the ICT sector, facilitates opportunities for skills development. Companies can provide NEETs with the necessary skills for the labour market, thus bridging the gap between skills deficiency and employment. These conditions are crucial in ensuring the relevance, effectiveness and sustainability of initiatives aimed at promoting inclusivity and diversity in the ICT sector.

Sources

Desk research

- 'Becoming a Woman Coder' website
- 'Becoming a Woman Coder' on Facebook
- 'Becoming a Woman Coder' on LinkedIn
- 'Becoming a Woman Coder' on Youtube
- 'Becoming a Woman Coder' on Erasmus+ website

Interviews

- Interviews with two partner organisations (22 March 2024 and 06 March 2024)

CASE STUDY 9

DIGITAL PACKAGE FOR AUTONOMOUS SYSTEMS AND SELF-DRIVING VECHICLES

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2018-1-EE01-KA202-047111
- **Duration**
  01 September 2018 to 31 August 2021
- **Field/sector**
  Automotive industry
- **Target group(s)**
  VET teachers
  VET learners
- **Educational level(s)**
  IVET
- **Learning settings**
  Work-based
- **Funding arrangement**
  EUR 231,622.00 (high)
- **Project coordinator**
  ITT Group, Estonia (small/medium-sized enterprise)
- **Key partners involved**
  - Politechnika Slaska, Poland (higher education institution, tertiary level)
  - Profesionalas Izglitibas Kompetences Centram Rigas Valsts Tehnikums, Latvia (school/institute/educational centre – vocational training, secondary level)
  - Rigas Tehniska Universitate, Latvia (higher education institution, tertiary level)
  - Viljandi Kutseõppekeskus, Estonia, (school/institute/educational centre – vocational training, secondary level)
- **Geographical scope**
  Estonia, Latvia, Poland

Brief description of the project

This project aimed to develop and implement a new training content tailored to the dynamic field of autonomous systems, encompassing self-driving cars, drones and related technologies. A consortium of business and educational organisations identified the knowledge necessary for the labour market in the automotive sector, developed an educational framework and professional learning and teaching material, which was piloted and evaluated in a vocational training environment.

Relationship to policy priorities

The key policy priority emphasised by the project is the enhancement of digital skills. The project is strategically designed to develop specialised training modules that integrate advanced digital technologies relevant to the automotive sector, such as artificial intelligence and machine learning. This aligns with broader educational and employment policies aimed at increasing the digital competence of the workforce, preparing them for emerging industries and future job markets.

Specific objectives covered

- Developing practical learning content tailored to the field of autonomous systems, encompassing self-driving cars, drones and related technologies.
- Integrating work-based learning approaches to bridge the gap between educational offerings and the demands of industry.
- Responding to the pressing industry demand for skilled professionals in autonomous systems by providing education and training at VET and university levels.

Type and scope of the project, methods used, and key activities

Type and Scope of the project

Self-driving cars and other autonomous systems (e.g. drones) are some of the most paradigm-changing technological developments in today's market. All major automotive and ICT companies are working in this field, while many start-up companies are active in the development of new solutions. There is a major need for engineers, autonomous system operators, technical managers and start-up entrepreneurs in this field. However, there is a lack of curricula or courses on self-driving cars and autonomous systems taught at VET or university levels. Hence, international partners from Poland, Latvia and Estonia came together to develop new training content on autonomous systems, with the aim of implementing it in VET schools and universities.

Methods and key activities

Each partner played a distinct role in the project's implementation. The coordinator, ITT Group, provided insights into labour market demands. The Silesian University of Technology and Riga Technical University developed teaching materials. Partners from VET schools, including Viljandi Vocational Training Centre and Riga State Technical School, implemented and piloted these materials in the VET environment and evaluated the results.

The project began with thorough research and analysis of the existing educational materials on autonomous systems. The team defined the required educational levels and modules for the new content. During the development phase they created teaching and learning materials for autonomous systems, designed self-driving simulation models, developed a training module for unmanned aerial vehicle (UAV) operators, and established a practical study platform on electric vehicles.

Results of the initiative

Outputs

The first output of the project was the **'Autonomous Systems Module – Teaching Material'**, presented in the form of a handbook tailored for vocational schools. This comprehensive resource delved into the concept of autonomy across various domains, including robotics and autonomous vehicles. It encompassed theoretical background knowledge and legislation pertinent to the field, reflecting the current legislation in partner countries and in the EU. This handbook included study materials in both electronic and printable formats, along with links to video lectures on key topics. It was accessible in paper, electronic book, and web page formats under a CC licence, complemented by video lectures and other project outputs.

The second output, **'Self-Driving Vehicles Simulation Models'**, offered a set of virtual vehicles in various scenarios, with open-ended problem descriptions and simulation software models. It included technical documentation and implementation guidelines for integrating these models into an educational environment. Covered within Chapter 2 of the 'Autonomous Systems Module – Teaching Material' handbook, this output enhanced hands-on learning experiences and provided additional resources accessible on the project's official website.

The third output introduced an **Electric Vehicle (EV) Study Platform**, designed to provide hands-on experience in autonomous control for VET students. This physical vehicle platform is accompanied by mechanical drawings, description of materials, electrical wiring diagrams, and a construction guide. The platform facilitated practical learning, enabling students to experiment with real-life vehicles and gain insights that simulations might not offer. All materials were made freely available for download from the project's official website, promoting accessibility and widespread adoption.

Electric vehicle. Source: website of the project

The fourth output, **'Curriculum Module on Drones'**, focused on autonomous flying systems or UAVs. It built on the foundational knowledge covered in the 'Autonomous Systems Module – Teaching Material' by offering specific information tailored to aerial vehicles. This module supplemented the broader curriculum, providing targeted insights into unique aspects of drone technology.

Drone technology. Source: website of the project

Outcomes

The Autonomous Systems Module and Self-Driving Vehicles Simulation Models have found broader utility among universities and VET schools beyond the project participants. The accessibility of the project outputs has stimulated **widespread adoption and usage**. The comprehensive resources and the accompanying video lectures, have been instrumental in **enhancing understanding and knowledge transfer** in the field of autonomous systems.

The Electric Vehicle (EV) Study Platform offers students **real-life experience** in autonomous control. Its free materials have broadened access and adoption, providing practical learning experiences to a wider audience.

The Curriculum Module on Drones has **expanded the scope of autonomous systems education**, focusing on autonomous flying systems such as UAVs. By supplementing the broader curriculum, this module has provided targeted insights into drone technology, catering to the specific needs of students and educators in this domain.

Impacts

Following the implementation of this project, several new initiatives have emerged, **extending the original project's impact**. One such initiative focuses on enhancing safety and advancing the study of autonomous systems at university level. These projects supplement each other, fostering continuous collaboration and the development of teaching and learning materials.

Success factors

One of the most notable aspects of the project has been **successful collaboration among its partners**. The consortium members shared a strong rapport fom previous collaborations, which greatly contributed to project's success. According to the coordinator from Estonia, this familiarity and history of cooperation were key factors. Additionally, all partners were recognised as **high-level specialists** dedicated to practical work, ensuring that the project progressed smoothly and efficiently, with each partner bringing valuable insights and contributions.

Challenges and barriers

According to the coordinator interviewed, the project encountered no significant challenges. However, a minor issue arose with **time management**, particularly with regard to the development of practical components. As is often the case, the creation of practical elements, such as virtual vehicles for the second output, required more time than initially anticipated.

Lessons learned

Throughout the project, valuable lessons have been learned. One key lesson is the importance of **flexibility and adaptability** in project implementation. Miinor challenges with time management during the development phase highlighted the need to anticipate potential delays and allocate resources accordingly. In addition, **effective communication and collaboration** among the consortium members have been critical success factors. Clear roles and responsibilities, along with regular communication channels, have facilitated smooth execution of the project and ensured alignment with its goals.

Conditions for transferability

The successful transfer of this project and its outputs depends on certain conditions. First, the **availability of resources and infrastructure**, such as technical expertise and educational facilities. A **supportive regulatory environment** that encourages innovation and collaboration in autonomous systems education is also crucial.

Stakeholder commitment is vital for sustainability and scalability. Active engagement from educational institutions, industry partners and policymakers is needed to integrate the outputs into existing curricula and training programmes.

Ongoing monitoring mechanisms are necessary to assess the impact and effectiveness of the outputs over time. By continually evaluating and adapting to evolving needs and challenges, the outputs can remain relevant and impactful in addressing the growing demand for skilled professionals in the field of autonomous systems.

Sources

Desk research

- 'A digital package for autonomous systems and self-driving vehicles' on Erasmus+ website
- 'Erasmus+: A digital package for autonomous systems and self-driving vehicles – Autonomian' website

Interviews

- Interview with the project coordinator (29 March 2024)

CASE STUDY 10

ACTIVE LEARNING COMMUNITY FOR UPSKILLING TECHNICIANS AND ENGINEERS (allCUTE)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-BG01-KA202-07904
- **Duration**
  01 September 2020 to 31 August 2022
- **Field/sector**
  Machine building and mechatronics
- **Target group(s)**
  Technicians and engineers
- **Educational level(s)**
  CVET
- **Learning settings**
  Work-based, online, hybrid
- **Funding arrangement**
  EUR 201,557.67
- **Project coordinator**
  Technical University – Gabrovo, Bulgaria (higher education institution, tertiary level)
- **Geographical scope**
  Bulgaria, Greece, Serbia, Poland
- **Key partners involved**
  - Association Cluster Trakia Economic Zone, Bulgaria (non-governmental organisation/association/social enterprise)
  - Chamber of Kavala, Greece (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Diethnes Panepistimio Ellados, Greece (higher education institution, tertiary level)
  - Gabrovska Targovsko-Promishlena Palata, Bulgaria (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Politechnika Gdanska, Poland (school/institute/educational centre – vocational training, tertiary level)
  - Privredna Komora Srbije, Serbia (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Regionalna Izba Gospodarcza Pomorza, Poland (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Univerzitet u Nisu, Serbia (school/institute/educational centre – vocational training, tertiary level)

Brief description of the project

This project addressed the urgent need for continuous technical and vocational education and training (CTVET) among engineers and technicians in the rapidly evolving sectors of machine building and mechatronics. By developing a comprehensive curriculum and an innovative online platform, the project aimed to enhance the adaptability of skills in the workforce, thereby increasing their employability and the competitiveness of companies within the industry.

Relationship to policy priorities

allCUTE focused on the strategic use of ICT through its active learning community platform (ALCP) to develop a mix of both basic and advanced digital skills. Basic digital skills were imparted in the form of general ICT literacy and online learning tools, while more advanced skills were emphasised through specialised course materials addressing complex, industry-specific digital technologies and automated processes. This blend ensured that participants not only understood digital tools, but were proficient at applying them, thus bridging the gap between current competences and industry requirements.

Specific objectives covered

- Increasing stakeholders' awareness of specific needs in the sectors of machine building and mechatronics, so that they can best tailor their TVET offers.
- Providing easy access to CTVET, in which ICT is used more strategically, so that the target groups can upskill themselves continuously.
- Providing better access to open educational resources for continuous upskilling in technology and engineering

Type and scope of the project, methods used, and key activities

Type and scope of the project

The allCUTE project was a transnational collaborative initiative focusing on upskilling technicians and engineers in the machine building and mechatronics sectors to meet the challenges presented by Industry 4.0. It involved a consortium of four universities, four chambers of commerce and industry and a VET provider, thereby ensuring that the curriculum and courses developed were balanced from both an educational and an industrial perspective.

Methods and key activities

allCUTE was largely informed by an initial survey to identify the needs of companies in terms of machine building and mechatronics, and the training requirements of employees. Based on the survey results, the partners developed a curriculum for VET schools, as well as online courses for technicians and engineers intended for self-study. **Project-based learning** and a **problem-solving approach** were key methods applied in the learning materials. All of the classroom materials were shared with learners. The tasks were designed in such a way as to encourage collaborative problem-solving and teamwork on projects.

Source: website of the project

Results of the initiative

Outputs

1. **Online survey** (among 161 companies): developed to identify the skills deficit among technical and engineering staff in the sectors of machine building and mechatronics.
2. **Partnership report**: documenting the findings of the skills deficit survey, available in five partner languages and English.
3. **Curriculum** for upskilling technicians and engineers in the sectors of machine building and mechatronics, comprising eight courses, available in the partner languages.
4. **Teacher's Toolkit** with details of active learning and how to implement it when delivering courses.
5. **Course materials for technicians** in (1) electricity, (2); electrical drivers; (3) pneumatics and electro-pneumatics; (4) hydraulics; (5) vacuum and vacuum technology; (6) the optimal use of compressed air; (7) operating CNC machines; and (8) operating automated production systems.
6. **Course materials for engineers** in (1) Basic schemes in automated pneumatic systems, (2) Energy efficiency in pneumatic systems, (3) Hydraulics, proportional hydraulics, (4) Electrical engines, complex electrical drives, (5) Automated manufacturing systems, (6) Quality assurance, quality control and testing.
7. **Active learning community platform (ALCP)** providing access to course materials, assessment forms, additional resources and a discussion forum for ongoing support and peer interaction.

Outcomes

1. **Enhanced digital and transversal skills** pertinent to modern industrial requirements
2. **Increased access to CTVET** through innovative and flexible learning pathways.
3. Implementation of active learning techniques in the training programmes, **enhancing the engagement** and effectiveness of learning experiences (primarily among younger learners, according to an interviewee)
4. **Improved cooperation between businesses, research hubs and VET providers**, leading educational offerings that are better aligned with the needs of industry.

Impact

1. **Sustained culture of learning**: allCUTE outputs have been used effectively by training centres after the end of the project (according to interviews)
2. **Introducing innovation across education levels**: partner universities incorporated components of allCUTE curricula into their Master's and PhD-level courses, enhancing academic offerings with industry-relevant experience
3. **Expanding the scope of upskilling**: a Bulgarian partner confirmed that course materials initially designed for the machine-building sector were being used to train electrical engineers, demonstrating the broader applicability of outputs across different fields and sectors.

Success factors

Involving businesses in the development of course content ensured that the project's educational materials were directly relevant to the needs of industry. This alignment addressed the common criticism that university education in Bulgaria (according to the interviewee) is often too theoretical and disconnected from practical application in real-world settings.

As indicated by a partner from Poland, **collaboration among partners** and their commitment to developing valuable materials for upskilling technicians and engineers was another pivotal factor contributing to the project's success.

Challenges and barriers

As noted by the coordinator, one of the primary challenges during the project was conducting pilot testing for the developed materials, particularly in **recruiting participants**. The need to recruit at least 10 people for cost-effectiveness made this process even more challenging. Companies have different products and needs, making it difficult to findi several enterprises with similar requirements to form a group of trainees. However, the involvement of chambers of commerce and industry was instrumental in overcoming this challenge. By leveraging their extensive networks and contacts within the sector, the chambers were able to identify suitable participants for the pilot testing.

The **COVID-19 pandemic** posed another significant challenge to the project's collaborative process and decision-making. The inability to travel and meet face-to-face hindered effective communication and detailed discussions among partners.

Lessons learned

Involving businesses in the development of educational materials is critical to ensuring their relevance and applicability. Effectively **integrating digital platforms** into the learning process demonstrated that technology, when used strategically, can enhance access to education, improve engagement, and facilitate continuous upskilling of the workforce.

Conditions for transferability

An **adaptable curriculum** allowed the use of project outputs outside the scope of its initial fields. The **linguistic accessibility** of the project's outputs, which were translated into all of the partner languages, ensured their continuous use in national contexts beyond initial implementing team.

Sources

Desk research

- 'Active Learning Community for Upskilling Technicians and Engineers' on Erasmus+ Website
- 'Active Learning Community for Upskilling Technicians and Engineers' on Facebook
- 'Active Learning Community for Upskilling Technicians and Engineers' Website

Interviews

- Interview with a partner organisation (19 February 2024)
- Interview with a coordinating organisation (11 March 2024)

CASE STUDY 11

ACCESSIBLE WORK FOR ALL

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-AT01-KA202-051516
- **Duration**
  01 September 2019 to 31 January 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Job seekers with hearing impairments
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 284,170.00
- **Project coordinator**
  Equalizent Schulungs- und Beratungs GmbH, Austria (Civil Society Organisation)
- **Key partners involved**
  - Fondazione Istituto dei Sordi di Torino ONLUS, Italy (non-governmental organisation/association/social enterprise)
  - Polska Fundacja Pomocy Dzieciom Niedoslyszacym– ECHO, Poland (foundation)
  - Universität zu Köln, Germany (higher education institution, tertiary level)
- **Geographical scope**
  Austria, Germany, Italy, Poland

Brief description of the project

The 'Accessible Work for All project aimed to promote equality for job seekers with hearing impairments by providing information on employment and regulations in accessible digital formats. Through sign language videos with subtitles and visual support, the project facilitated self-study and empowerment, and reduced disparities in access to digital technologies for deaf individuals.

Relationship to policy priorities

The project engaged young people with hearing impairments who are in the process of job seeking. The project provided them with relevant knowledge about employment regulations through accessible digital resources, including sign language videos and plain language texts. In addition, counsellors were trained on how to support such learners with their integration into the labour market.

Specific objectives covered

- Promoting equality, non-discrimination and diversity among job seekers
- Providing information on employment in accessible digital formats
- Assisting job seekers with hearing impairments in suitable formats, and empowering them to seek information unaided

Type and scope of the project, methods used, and key activities

Type and scope of the project

The project 'Accessible Work for All' was a vocational and educational development initiative aimed at promoting equality, non-discrimination and diversity among job seekers with hearing impairments. The project targeted 120 job seekers across Austria, Germany, Italy and Poland, providing them with accessible digital resources to enhance their understanding of employment regulations.

Methods used and key activities

The project was informed by research conducted by the project partners with regard to the current attitudes and knowledge levels among job seekers with hearing impairments with regard to employment regulations. In line with the results of this research, the partners developed employment-related digital content in sign language, complemented by plain text and visual aids, as well as a blended training programme empowering job seekers in their employment journey. The project actively employed co-creation by involving learners with hearing impairments, ensuring the connection between the project's outputs and the everyday challenges faced by people with disabilities.

Results of the initiative

Outputs and outcome

'Analysis and abstract' report

This comprised a digital survey involving more than 250 participants, an analysis and a transnational report assessing attitudes and knowledge levels among deaf job seekers with regard to employment regulations

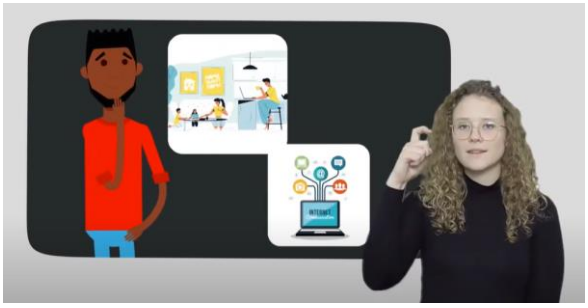
This output generated a **detailed understanding of knowledge levels and attitudes** towards employment regulations among job seekers with hearing impairments. This information informed the creation of the toolkit and learning package, making them relevant for learners.

The production of a transnational report provided **insights into the barriers** experienced by job seekers with hearing impairments in different national contexts.

'Accessible toolkit'

A collection of 60 explanatory videos in sign language on topics of employment (e.g. writing a motivation letter)

The toolkit made **complex information** about employment regulations **accessible** by translating it into sign language and using visually engaging imagery. Using these resources, job seekers with hearing disabilities could independently access and understand legal information regarding employment. This promoted **greater autonomy and confidence** in navigating the job market.



Screenshots from explanatory videos. Source: 'Accessible Work 4 All' YouTube channel

'Information is empowerment' package

This comprised a curriculum, a training package and a digital handbook (piloted on 40 learners), developed for trainers and counsellors

The development of a blended learning package, tailored specifically for trainers and career counsellors, equipped these individuals with the tools and methodologies necessary to **effectively support youth with hearing disabilities**. These materials were designed to be practical and accessible, ensuring that trainers were well-prepared to guide their students as they enter the job market.

Impact

The project's impact has extended beyond its immediate outcomes. Project outputs **continue to serve as valuable resources** not only for VET students with hearing impairment, but are also **used in language courses for hearing individuals** who are training to become sign language interpreters. Furthermore, the **collaboration between partners** has fostered ongoing cooperation, with multiple projects being undertaken together. This sustained collaboration

underlines the project's lasting impact in **fostering inclusivity and empowerment**.

Source: Instagram page of the project

Success factors

Commitment to linguistic accessibility. By providing materials in plain language, animated formats, sign language and with subtitles, the project ensured that information was accessible to individuals with diverse communication needs, as well as to individuals of different ages.

Co-creation of materials with learners. Recognition of the lived experiences of individuals with hearing impairments made their active involvement crucial. The insights provided by older deaf people who had first-hand experience navigating the transition from school to the labour market and finding employment served as invaluable resources for the project partners, offering a practical and hands-on understanding of the challenges faced by job seekers with hearing disabilities, and hence making the project videos very helpful for future users.

Source: Instagram page of the project

Combining accessibility and empowerment. The videos developed for this project were designed to enable deaf individuals to access legislation in both sign language and plain language, and to empower them to learn and understand their rights autonomously.

Challenges and barriers

The **COVID-19 pandemic** hindered the project's ability to conduct face-to-face meetings and test the project materials at full capacity. This limitation impeded the project's initial plans to include a broader range of participants and gather diverse feedback in order to adapt the materials, ultimately affecting the effectiveness of the project's outcomes. In addition, the increased reliance on digital technology during the pandemic posed **accessibility issues** for some participants, particularly those who did not have access to personal computers or a suitable learning environment.

The prolonged periods of lockdown experienced by Polish and German partners further complicated the project's operations, **disrupting the anticipated network dynamics** among the partners. While strong relationships existed, a **lack of consistent interaction among partners** hindered the establishment of a collaborative network as initially envisioned.

Lessons learned

Ensuring **information is accessible in multiple formats** (sign language, plain language, animations, subtitles) is crucial for inclusivity. This approach supports individuals with hearing impairments, and benefits a broader audience, including those training to become sign language interpreters.

Providing educational materials that enable individuals to independently access and understand complex information empowers them, **building confidence and skills** for better navigating employment opportunities.

The COVID-19 pandemic highlighted the vulnerabilities associated with a reliance on digital platforms, particularly in terms of accessibility and collaboration. This emphasised the need for robust digital infrastructure and flexible project designs that can adapt to unexpected circumstances such as pandemics or other disruptions.

Conditions for transferability

Involvement of learners in the design of teaching materials. Prioritising inclusive practices, such as co-creation with the target population, is essential to ensuring the relevance and impact of project outcomes – especially when it comes to vulnerable populations with disabilities. By actively involving the target community in the development process and addressing their specific needs, projects can foster greater inclusivity and empowerment.

Commitment to linguistic accessibility. By providing materials in plain language, animated formats, sign language and with subtitles, the project ensured that the information was accessible to individuals with diverse communication needs, as well as to individuals of different ages. As noted by the Austrian partner, a similar model would later be applied in another upcoming project about sex education.

Sources

Desk research

- 'Accessible Work for All' on Erasmus+ Website
- 'Accessible Work for All' Website
- 'Accessible Work for All' YouTube Channel
- 'Accessible Work for All' Instagram page

Interviews

- Interview with a partner organisation (08 March 2023)
- Interview with the coordinating organisation (13 March 2023)

Case study 12

A DIGITAL VET TOOLKIT FOR PROMOTING THE 4TH INDUSTRIAL REVOLUTION IN THE EUROPEAN HEALTH SECTOR (DIGI4HEALTH)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-DE02-KA202-006068
- **Duration**
  01 October 2019 to 31 March 2022
- **Field/sector**
  Healthcare
- **Target group(s)**
  VET trainers, healthcare mentors, healthcare professionals
- **Educational level(s)**
  CVET
- **Learning settings**
  Work-based, online, hybrid
- **Funding arrangement**
  EUR 196,382.08 (high)
- **Geographical scope**
  Malta, Cyprus, Greece, Romania, Lithuania
- **Project coordinator**
  Macdac Engineering Consultancy Bureau Ltd – MECB, Malta (small/medium-sized enterprise)
- **Key partners involved**
  - INHWE LTD, Cyprus (small/medium-sized enterprise)
  - International Network for Health Workforce Education, Spain (small/medium-sized enterprise)
  - Kainotomia & SIA EE, Greece (small/medium-sized enterprise)
  - Senior Europa Sociedad Limitada, Spain (small/medium-sized enterprise)
  - Universitatea Politehnica Din Bucuresti, Romania (higher education institution, tertiary level)
  - Všį Kauno mokslo ir technologijų parkas, Lithuania (non-governmental organisation/association/social enterprise)

Brief description of the project

The digi4HEALTH project was designed to equip VET trainers and health sector mentors with a novel digital toolkit. This toolkit included a curriculum, e-learning platform and case studies, all focusing on the integration of digital technologies into healthcare. The resources aimed to enhance the digital competences of healthcare workers and were freely accessible for adaptation and use by educators from different national contexts. The project's ultimate goal was to ensure that healthcare professionals are well-prepared to use emerging technologies in their practices, thereby improving healthcare delivery.

Relationship to policy priorities

The digi4HEALTH project was closely aligned with the policy priority of advancing digital skills and innovation in healthcare. By developing a digital toolkit for VET trainers and healthcare mentors, the project directly supported the programme's goal of accelerating the digital transformation. Outputs such as the VET curriculum on Health 4.0, the e-learning platform and digital toolkit have contributed to enhancing basic digital literacy in healthcare

Specific objectives covered

- Increasing the digital and technological competences of healthcare personnel
- Developing teaching materials and resources for VET teachers and trainers

Type and scope of the project, methods used, and key activities

Type and scope of the project

The digi4HEALTH initiative focused on the development of digital training resources for VET trainers and mentors in the healthcare sector. The project aimed to help healthcare professionals keep pace with advancements in digital technologies such as 3D printing, AI, robotics and AR/VR, which are pivotal to the 4th industrial revolution in healthcare.

Methods and key activities

The materials for VET trainers and healthcare professionals were developed according to a cyclical approach. Initially, the partners developed the materials, which were then tested and refined. Pilot programmes were conducted to gather feedback from the target groups, allowing further improvements and adjustments. As a result, a Digi4Health toolkit was developed. This included an innovative VET curriculum on Health 4.0 and its digital technologies, a training programme, e-learning platform, case studies, and a bank of thematic resources. All of the materials provided were divided into sections dedicated to each target group. Each group was provided with guidance as to which material was suitable for them and their needs. A strong emphasis was placed on collaboration and knowledge-sharing among the partners. Regular reviews of each other's content helped to identify errors, ensuring the quality of the final toolkit.

Source: shared by interviewee

The project concluded with a multiplier event held in Malta, at which the results of the project and main lessons learned were discussed.

Results of the initiative

Outputs and outcomes

VET curriculum tailored to addressing the specific training needs of healthcare personnel

→ Healthcare personnel gained **comprehensive knowledge and practical skills** in utilising Health 4.0 technologies. The curriculum enabled them to effectively integrate new digital tools and methodologies into their daily practices, thereby **improving service delivery and patient care**.

A set of case-studies which VET trainers and healthcare mentors could use to demonstrate how Health 4.0 digital technologies could be exploited in a healthcare service environment.

→ The case studies provided VET trainers and healthcare mentors with **contextual examples** of how digital technologies can be applied in real-life settings. Having practical illustrations can **encourage healthcare professionals to apply technologies in work settings,** bridging the gap between theory and practice

VET training materials, fact sheets and resources based on the curriculum were developed, intended for customisation and open access by VET trainers and mentors beyond the project partners.

E-learning platform containing case studies and training materials, providing a comprehensive digital learning environment for healthcare professionals.

→ Open access to project materials via the e-learning platform made them **available to VET trainers and mentors beyond the project partners**, who were able to tailor the content to fit their specific needs. The accessibility of the materials contributed to their outreach, thereby **promoting continuous professional development** in the healthcare sector. As one of the project partners described, the multiplier event demonstrated the real interest of healthcare professionals in digital technologies and their willingness to incorporate the materials developed throughout the project into their daily work.

Digital VET toolkit and a **framework** to guide VET trainers and healthcare mentors in utilising these resources effectively.

→ The toolkit provided a one-stop access point for all project resources, **simplifying the process** of VET trainers and healthcare mentors finding and using the educational materials. The accompanying framework **enhanced the training process** and ensured that learners could leverage these digital tools to the fullest extent.

Impact

The project made a notable contribution to **modernising teaching practices** in healthcare education. For example, demonstrating the application of augmented reality in healthcare empowered VET trainers to incorporate these advanced tools into their practice. As a result, they were able to effectively impart this knowledge to VET learners.

In additional, the project facilitated **collaboration opportunities**. The partner from Lithuania confirmed continuing collaborations with other members of the consortium, and the partner from Cyprus indicated that the project had gained them some visibility at the EU level, resulting in invitations from international organisations to collaborate on further projects. Furthermore, the tools and materials developed in digi4HEALTH were deemed transversal, indicating their potential **applicability in various other projects**.

The project indirectly contributed to **increasing awareness among health workers of technologies relevant to the COVID-19 pandemic**. During lockdown, the partners organised a meeting to showcase examples of ways in which digital technologies such as drones, 3D printing and robots could be effectively employed in the fight against the pandemic. In addition, they explored the innovative use of drones for tracking individuals who might not be adhering to safety regulations and travel restrictions, thereby enhancing public safety measures.

Source: 'Digi4Health' Facebook page

Success factors

Despite the initial challenges, the COVID-19 pandemic ultimately contributed to the project's success. The increased reliance on digital technologies during the pandemic fostered **more positive attitudes towards learning about and using digital tools** among all target groups. The partners capitalised on this opportunity by organising sessions on the application of digital technologies such as drones and 3D printing in healthcare, to aid in the fight against the virus. This increase in interest and willingness to embrace digital solutions facilitated knowledge-sharing and engagement among participants.

Another key factor contributing to the project's success, as highlighted by the Lithuanian partner, was the **strength of the partnership**. The project was designed to address the current needs of the healthcare sector, which motivated the partners to work closely together to develop relevant materials and tools. Their shared commitment to creating resources that would benefit the sector and facilitate mentor-led training on digital technologies in healthcare led to high-quality outcomes.

Source: *website of the partner organisation*

Another success factor was the **consolidation of information into easily accessible formats**. Despite the abundance of online information about digital technologies in healthcare, it is often scattered. The partners organised this information into manageable formats, such as case studies, making it easier to access and use. This approach also increased learners' engagement and motivation to learn about digital technologies and their application in healthcare.

Challenges and barriers

Initially, the **COVID-19 pandemic** presented a significant challenge to the project's implementation. Due to the safety requirements imposed, partners had to switch to conducting all activities remotely, relying solely on online communication platforms. This transition proved challenging, particularly when it came to guiding participants in the use of online platforms. Such guidance sometimes required physical presence and hands-on assistance, which caused delays and challenges in project management.

Lessons learned

Importance of effective collaboration. Close cooperation between partners and shared dedication to addressing the needs of the healthcare sector were essential in developing the project' resources and tools.

Importance of consolidating information into easily accessible formats. Organising materials into formats such as case studies enhanced engagement and motivation among target groups. This approach streamlined learning processes and facilitated the uptake of digital technologies in healthcare education.

Conditions for transferability

Promoting collaboration: to ensure success, projects need to prioritise collaboration among partners with diverse expertise. Strong partnerships facilitate knowledge-sharing, innovation and the development of high-quality resources tailored to the needs of the sector, which can be applied beyond the scope of the project.

Accessible information: ensuring accessibility and ease of navigation for project resources is crucial. Materials should be presented in user-friendly formats, enabling easy access and use by target groups. This promotes engagement and enhances the adoption of project outcomes beyond the consortium.

Sources

Desk research

- 'A Digital VET Toolkit for Promoting the 4th Industrial Revolution in the European Health Sector' on Erasmus+ Website
- 'A Digital VET Toolkit for Promoting the 4th Industrial Revolution in the European Health Sector' Website
- 'A Digital VET Toolkit for Promoting the 4th Industrial Revolution in the European Health Sector' on Facebook

Interviews

- Interview with a representative of a partner organisation (23 February 2024).
- Interview with a representative of the coordinating organisation (13 March 2024).

Case study 13

PROMOTING RESILIENCE OF REFUGEES BY DEVELOPING THEIR DIGITAL MARKETING SKILLS (dm4res)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2021-1-DE02-KA210-ADU-000027398
- **Duration**
  01 November 2021, 30 June 2023
- **Field/sector**
  retail, marketing, real estate, tourism
- **Target group(s)**
  Adult refugees
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 60,000.00
- **Project coordinator**
  Existenzgründer- und Unternehmervereinigung EXUV – München e.V., Germany (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  Lifelong Guidance GR, Greece (small/medium-sized enterprise);
  Onfluence BV, Netherlands (small/medium-sized enterprise);
  Pigi Koinsep, Greece (non-governmental organisation/association/social enterprise).
- **Geographical scope**
  Germany, Greece, Netherlands

Brief description of the project

The project's general objective was to promote the resilience of adult refugees against crisis by improving their digital marketing knowledge, skills and competences. The project aimed to support and promote the social inclusion of refugees via lifelong learning opportunities, especially by exploiting digital technologies. It also encourages refugee communities in Germany and Greece to work together with NGOs to motivate and enable adults of all ages to learn the new digital skills necessary to be resilient.

Relationship to policy priorities

The Dm4res project directly supported the policy priority of providing outreach, guidance and awareness-raising for young people by addressing the digital and entrepreneurial skills gap among adult refugees in Europe.

Specific objectives covered

- Promoting the resilience of adult refugees against crisis by improving their digital marketing knowledge, skills and competences.
- Supporting and promoting the social inclusion of refugees via lifelong learning opportunities, especially by exploiting digital technologies.
- Encouraging refugee communities in partner countries to work together with NGOs to motivate and enable adults of all ages to learn the new digital skills necessary to be resilient.

Type and scope of the project, methods used, and key activities

Type and scope of the project

Dm4res was an educational and empowerment initiative aimed at developing the digital marketing skills of adult refugees across Europe. This transnational project involved partners from three European countries, each contributing their experience in entrepreneurship and resilience development.

Methods and key activities

The project employed a **flexible and engaging approach**, customising activities to meet learners' needs. Training materials were created based on participants' needs and interests, gathered through pre-project interviews. Key activities centred on two main areas: developing digital marketing skills, and enhancing resilience skills. Participants received guidance from trainers through personal consultations, site visits to their businesses, and surveys about additional seminars. For example, seminars about national e-commerce regulations or how to start a business on Amazon were organised on the basis of requests received from participants during the project.

Results of the initiative

Outputs

The project achieved significant results, including:

- **96 hours of online digital marketing training** for **117 refugees** (73 in Germany and 44 in Greece), with **56 participants** certified
- **30 hours of individualised training and mentoring** based on participants' educational backgrounds, professional experience and needs
- **8 seminars on sectoral information and national regulations** (concerning the retail sector, real estate sector, tourism sector, German and Greek business regulations, employment guidance, start-up guidance, and job opportunities in Germany and Greece).
- **54 hours of hybrid digital marketing training for trainers** involving **41 participants**
- **Resilience-building activities** for **50 participants**, each receiving **8 sessions**
- A **scientific article** published in English and Ukrainian
- A **blog** on the European Commission EPALE system: "Resilience and digital marketing skills, An interdisciplinary training approach for adults with refugee backgrounds"
- **2 digital marketing learner support centres** established in Greek and German partner institutions.

Outcomes

The project enabled refugees to gain valuable digital marketing skills, such as creating a website and social media content, advertising campaigns and personal branding. This equipped them with tools for employability, entrepreneurship, advocacy and adaptability in a new cultural environment. Refugees also found a platform for self-expression, fostering empowerment and connection within their communities.

Impacts

The project's long-term impacts have extended beyond its immediate learning achievements to encompass broader societal and development changes. Approximately 20 refugees who participated in the project have started their own businesses either before or immediately after the project, and launched them online.

"For example, there was a guy who started to sell some Korean skincare products. When we started training, he was ahead in this process, but when I saw him in Greece, he was very excited about the project. In Germany, there were refugees who started their taxi company, and after the training, they started advertising it on Google. In Greece, there was a grocery store, it was a physical store, but after the training, they also started selling the products online" (from the interview with the project partner).

Success factors

Team's commitment and deep understanding of the topic were key success factors, with many of the project representatives being refugees themselves. Another success factor was the project's **flexibility and adaptability** to the participants' needs, leading to eight extra seminars based on participants' requests, covering topics such as Amazon digital marketing, legal information about starting a business in the EU, and more.

Challenges and barriers

One of the main challenges identified by the project team was **diversity in its participants' digital skills and motivation**. While some participants had already started their online businesses, others were beginners at digital marketing. This required learning materials to be differentiated and a more individualised approach adopted.

Lessons learned

The project underlined the need to **address diverse digital skills and motivation** levels for effective digital marketing education. A personalised approach was necessary to accommodate varying needs and abilities. **Assessing participants' existing knowledge and skills in digital marketing** through interviews or surveys helped customise learning content. Continuous upskilling in digital marketing is essential, and future projects could develop materials on new topics, such as AI in digital marketing or gamification.

Conditions for transferability

Key conditions for the initiative's transferability include **international collaboration**; **flexible and personalised learning approaches**; **combining learning and psycho-emotional component**; and **emphasising long-term impact and sustainability**. Understanding and addressing the diversity of participants' skills and motivations, along with a commitment to continuous learning and adaptation, are also crucial. Prioritising these aspects enables similar projects to effectively promote resilience and social inclusion among refugees in various contexts.

Sources

Desk research

- 'Digital Marketing for Resilience: Promoting Resilience of Refugees by Developing Their Digital Marketing Skills' website
- 'Digital Marketing for Resilience: Promoting Resilience of Refugees by Developing Their Digital Marketing Skills' on Erasmus+ website

Interviews

- Interview with a representative of the coordinating organisation (13 March 2024)
- Interviews with representatives of two partner organisations (07 March 2024, 25 March 2024)

CASE STUDY 14

RE-ENGAGING YOUNG OFFENDERS WITH EDUCATION AND LEARNING (RENYO)

SUMMARY

- **Erasmus+ programme type**
  Strategic Partnerships for vocational education and training
- **Project reference number**
  2018-1-UK01-KA202-048100
- **Duration**
  01 November 2018 to 31 October 2021
- **Field/sector**
  Different sectors
- **Target group(s)**
  Educators working with young offenders/ early school-leavers
- **Educational level**(s)
  CVET
- **Learning settings**
  School-based
- **Funding arrangement**
  EUR 279,331.48 (high)
- **Project coordinator**
  University of Gloucestershire, United Kingdom (higher education institution, tertiary level)
- **Key partners involved**
  - Centro studi e iniziative europeo (CESIE), Italy (non-governmental organisation/association/social enterprise)
  - Fundación Diagrama Intervención Psicosocial, Spain (non-governmental organisation/association/social enterprise)
  - Jearni Ltd, United Kingdom (small/medium-sized enterprise)
- **Geographical scope**
  UK, Italy, Germany, Spain

Brief description of the project

The RENYO project aimed to capitalise on the unique opportunity presented by time spent in custodial settings to re-engage young people with education and learning, thereby increasing their likelihood of participating in educational or training opportunities upon release. Recognising challenges such as lower levels of qualifications among prison educators, higher staff turnover and the limited availability of training specific to the needs of young offenders, the project focuses on enhancing educators' capabilities through the methodology of "authentic enquiry". By allowing learners to explore personally relevant topics and connecting them to formal curricula through the creation of educational artefacts, the project has successfully trained over 100 educators and directly involved 80 young people in the intervention, anticipating a continued impact through various channels.

Relationship to policy priorities

The project directly supported the policy priority of re-engaging young people with education and learning. It employed an innovative approach of "authentic enquiry" to raise learners' awareness about education and possible career pathways, including those offered by VET and apprenticeships.

Specific objectives covered

- Enhancing educators' capability to re-engage young people in conflict with the law through education and learning while in secure custodial settings.
- Training education staff in secure settings to engage young people in such settings with education through the use of 'authentic enquiry' as an intervention to enrich educators' repertoires in learning design.
- Developing improved practices around a digital learning infrastructure so that changes are more likely to be sustained beyond the project's lifespan.
- Producing a research paper presenting the lessons learned by educators with regard to the methodology and the experiences of young people in conflict with the law who are engaging with authentic enquiry.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The RENYO project was an **educational and empowerment initiative** with the aims of reconnecting young people in conflict with the law with formal education and learning through **non-formal education**. This aim was achieved by enhancing educators' capacity to use innovative methods and techniques when working with minors in conflict with the law. The project spanned across four countries: the UK, Germany, Italy and Spain.

Methods and key activities

The RENYO project was based on the methodology of **'authentic enquiry'** — an approach to developing personally relevant knowledge for educational purposes. According to this approach, each learner embarks on a tailored eight-step journey, beginning with the selection of a topic or object that holds personal significance. This initial step lays the foundation for understanding the topic's relevance to their own lives. Subsequently, learners engage in comprehensive research to deepen their understanding, connecting it with school subjects, culminating in the creation of a tangible public good.

Reconnection with the learning process is achieved by taking learners' interest, expressed through their own narratives and stories (personal), and navigating them towards the production of an 'artefact' such as a piece of art, poster or other product that has some external educational value (public). By translating personal insights and experiences into a form that can be shared with others, the project aims to connect the personal and public spheres, enriching individual learning experiences and broader educational discourse.

Educators working with the authentic enquiry method. Source: provided by interviewee

The project comprised two main parts: 1) developing **training materials** and conducting **training for educators** who work with young persons in conflict with the law or at risk of being so; and 2) **delivering the authentic enquiry methodology to young people** in custodial settings.

The project highlighted the effectiveness of authentic enquiry in re-engaging young people with formal education by tapping into their personal interests. For instance, one participant who was passionate about bodybuilding and gym activities developed a nutrition guide for a custodial kitchen. This exercise helped him to connect his interests in physical fitness with academic subjects such as biology and science, fostering a sense of pride and a newfound appreciation for learning. Similarly, another student became enthused about his school project after practical training at a plumbing company, choosing to research and build a model of a traditional Japanese bathroom. This project, which required extensive effort and dedication, demonstrated the motivational power of aligning educational activities with students' real-world experiences and interests.

A model of a Japanese bathroom made by a learner as a result of an authentic enquiry exercise. Source: provided by interviewee

Results of the initiative

Outputs

The project yielded several tangible results, including training for 100 educators across four project countries and the implementation of a testing methodology involving 80 young people in conflict with the law or at risk of being so. The training materials, which are available to download on the RENYO website, included the following:

Training guidance booklet. This output of the RENYO project enabled the development of a training programme in the authentic enquiry methodology, available to European practitioners for use in their own secure settings.

Guidance document for educators. This document provides a short guide for educators to use following their training. It aims to support educators in working through the authentic enquiry process.

Using authentic enquiry – the mentor's experience. This document offered practitioners insights from mentors who have used the authentic enquiry process within secure settings, presenting real cases of the use of the authentic enquiry methodology in custodial settings.

Outcomes

To assess the project's outcomes, the implementing partners employed qualitative and quantitative methods. A quantitative methodology was used to assess each young person's relationship with education both prior to and following the intervention. Each learner answered a questionnaire on the Learning Journey Platform. The project team also collected qualitative data on the authentic enquiry process through regular consultations with educators. In addition, each educator who participated in the training and piloting was interviewed to assess the project's impact on educators and learners.

When asked how the activity had changed young people, educators said that learners realised they could achieve their educational goals by being passionate and committed. The fact that learners could see tangible and visible results sparked their **motivation and self-esteem**, especially when they were influenced by positive feedback from peers and educators. They also improved their **self-awareness about their learning potential** in relation to their passion and interest. Some learners began to consider their **hobbies and interests** as something they could pursue as a career. Some young people were surprised by how this activity **helped them to work on their emotions or trauma, in order** to improve their awareness of their feelings.

Participants working on authentic enquiry methodology at a multiplier event. Source: provided by interviewee

The project **fostered stronger relationships and trust** between young people and educators in custodial settings. During the training, all educators tried out the authentic enquiry methodology for themselves, which helped them to empathise with the young people. Furthermore, educators actively acknowledged and supported the young people's passions.

Impacts

The project had a significant **impact on both educators and learners**. Most of the educators interviewed reported that their teaching methods had changed as a result of the project, becoming more learner-centred and active. They gave their students more freedom in the learning process, and encouraged their creativity.

In all country contexts, the project implementers concluded that students would carry this experience further in their lives, as it had changed their understanding of themselves, of learning, and of their future aspirations.

Success factors

Strong leadership and commitment from all of the partners enabled the project's success. The participants noted a positive relationship within the consortium.

With a strong focus on **a well-structured and clear methodology**, the project was dedicated to the implementation rather the invention of the methodology.

Another enabler of success – albeit one that did not occur in all contexts – was **educators' acceptance of the approach** and excitement about it.

Two years after the implementation of the project, its implementers continue to revisit its results, presenting them at conferences, lectures and articles. They also receive ongoing requests about the project and provide support to other educators who are interested in implementing the authentic enquiry methodology.

The project's success ensured its continuation and sustainability. RENYO was the first of three consortium projects aimed at developing personal, social and life skills for children in conflict with the law. 'Active Games for Change' (KA3) used sports and active games for this purpose, while the 'Skills for Life' project (KA2) created a whole curriculum using a non-formal education methodology.

Challenges and barriers

The **COVID-19 pandemic** impacted the project by shifting all of its activities to an online format. This posed certain challenges in terms of training educators in authentic enquiry, which involves discussing sensitive and personal topics. It also limited researchers' work in custodial settings and the observation of the methodology, leaving them to rely solely upon educators and consult with them online. However, the shift to the online implementation of the project also had a positive impact because a lot more educators could access the materials online, and the project had a greater long-term impact than if it had been a face-to-face event.

Another challenge related to **access to prison settings**, which required permissions and a great deal of bureaucracy. The fact that the project implementers would not be working directly with the young people facilitated the obtaining of necessary permissions. A solution was found by working with residential communities that host young people on probation in Italy, as well as with a special school working with children with behavioural challenges/young people at risk in Germany.

In some cases, the project was challenged by **teachers' criticism and resistance** to using the proposed methodology. Teachers in certain settings used input-oriented approaches and did not want to give learners the responsibility to guide their own learning process. They were also oriented towards following their own curricula and were unable to discern where this methodology would fit in. This problem was solved by using hours in the curriculum that were allocated to student project work, but had previously not been used in this way before. The project coordinator noted that initial interactions with school management and educators were challenging, as they were sceptical of outside advice, believing that the team lacked educational expertise. However, such attitudes shifted over time, evidenced by feedback from a teacher involved in the project who later reported that the school was advancing the use of active education and innovative learning methods.

Lessons learned

The project's implementation in various cultural contexts highlighted how **understanding of the methodology impacts its reception by educators** and, consequently, its effect on learners. Thus, different parties admitted that more **regular engagement** could positively impact the implementation of the project. Furthermore, project methodology needs to be adapted to different settings and contexts. For instance, in the case study on one country, teachers who were reluctant to share their own authentic enquiry were offered the option of choosing a topic that would be of interest to their students. This raised educators' interest in the methodology, as well as their understanding of their students.

Conditions for transferability

The project originated from research conducted by the University of Gloucestershire to test the authentic enquiry methodology in different cultural and educational environments. The project's methodology proved universal and adaptable to other environments, countries and age groups. Its emotional and empowering component goes beyond reconnecting young people with formal education, and can also benefit adult learning or any other group of learners.

Sources

Desk research

- 'Re-engaging young offenders with education and learning' website
- 'Re-engaging young offenders with education and learning' on Erasmus+ Website

Interviews

- Interview with a representative of the coordinating organisation (29 February 2024)
- Interviews with a representative of a partner organisation (21 February 2024)
- Interviews with a representative of a partner organisation (26 March 2024)

Case study 15

PROMOTING FINANCIAL, DIGITAL AND ENTREPRENEURIAL COMPETENCES FOR VULNERABLE ADULTS (WOMEN) WITH RESTRICTED ACCESS TO THE DIGITALISED MARKET (HOME BASED) (FINE2WORK)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2019-1-LV01-KA204-060337
- **Duration**
  01 October 2019 to 30 November 2021
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Adults in vulnerable groups (NEETs, women with families, adults with disabilities, senior and other citizens who cannot re-enter labour market)
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 145,307.20 (high)
- **Project coordinator**
  Project Net, Latvia (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  Emphasys Interactive Solutions Ltd, Cyprus (school/institute/educational centre – adult education)
  Desculartе – Associaçao Promotora de Projetos para a comunidade, Portugal (non-governmental organisation/association/social enterprise)
  Rusensko Targovsko-Industrialna Kamara, Bulgaria (non-governmental organisation/association/social enterprise)
- **Geographical scope**
  Bulgaria, Cyprus, Latvia, Portugal

Brief description of the project

The main aim of this project was to provide adults facing barriers to traditional employment (including women with family responsibilities, individuals with health conditions or disabilities, and seniors or unemployed individuals seeking flexible work opportunities) with a three-stage upskilling pathway, focusing on financial, digital and entrepreneurial competences, enabling them to work remotely. The project also aimed to upgrade the profiles of adult educators' through a professional development programme, ensuring they have the essential skills to support and train the target groups using a combination of online and offline resources, including the creation of the Fine2Work Remotely Hub.

Relationship to policy priorities

The project aligned with the EU policy priorities of social inclusion, supporting individuals in acquiring basic skills and key competences, and promoting open education and innovative practices in the digital era. It provided reskilling and upskilling opportunities for vulnerable groups such as NEETs, women with families, adults with disabilities, and seniors, to reengage them with the labour market.

Specific objectives covered

- Empowering adults (mainly women) to become integrated into the economy, either as employees or entrepreneurs, based on their needs and abilities.
- Supporting adults to set up their own 'home-based business model' or to 'work remotely as employees'.
- Providing high-quality learning opportunities for adults so that they could enhance their digital and financial competences while acquiring new key competences such as entrepreneurial skills, in an attempt to safeguard social inclusion, access and participation in the labour market and society.
- Facilitating access to upskilling pathways by designing a skills identification and screening tool, providing a learning programme adapted to the learning needs of the target groups, and validating the skills acquired through non-formal learning.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The project stemmed from the prior collaboration between members of the consortium (organisations from Latvia, Cyprus and Portugal) in the DIAL project (KA2), which aimed to enhance the digital skills of senior persons. The Fine2Work project shifted the previous focus towards developing the financial, entrepreneurial and digital skills of adults, in particular women, who wished to re-engage with the labour market on flexible terms.

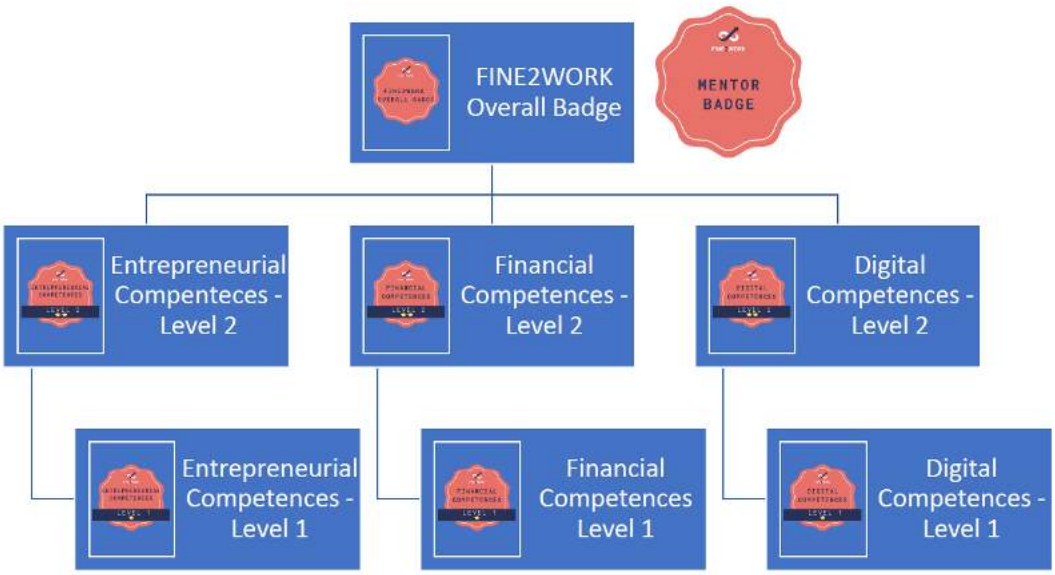
Methods and key activities

The project combined a set of methods to upskill and reskill senior-aged women wishing to re-enter the labour market. It began by using **skills screening and assessment** to identify participants' current skill levels and areas for their development. The project team then designed a **three-stage upskilling pathway programme** to help these adults to acquire, develop, assess and validate their essential competences, including financial, digital and entrepreneurial skills. The programme was accessible via an interactive e-learning platform that allowed seniors to register and freely access the project's materials. The project team conducted **face-to-face, online and hybrid workshops** for seniors to support hands-on learning experiences and interaction.

Results of the initiative

Outputs

The outputs of the initiative included research as well as various learning and training materials, both for adults and for those who work with them. The initial output of the project was mapping of opportunities for home-based or remote jobs for adults with restricted access to the labour market in each partner country and **from comparative perspective**. In addition to that the project team defined benchmarks and indicators for the FINE2WORK Competence Reference Framework against which young adults' financial, digital and entrepreneurship skills can be monitored, assessed and validated through the **Open Badges system**. The Competence Framework is divided to three modules including: **entrepreneurial, financial, and digital competences**. Each module is supported by the **educational pack, lessons plans and handouts** in the languages of partner countries.



Open Badges Tree Structure. Source: website of the project

One of the main results of the project is its **learning platform** functioning as an Open Learning Environment linked with the Open Badges system. **Training materials** for those who work with seniors were developed and validated at online training sessions in each partner country.

Outcomes

The learning outcomes of the initiative could be measured using **a self-assessment tool** available at the learning platform. All participants in the learning course could take a quiz after each module to assess their results. In addition, they could obtain a course certificate.

Impacts

The project has been sustained both nationally (in Latvia) and internationally. The project coordinator, Project Net (Latvia), initiated the **establishment of Senior University**, now operating in four Latvian cities and engaging about 250 adult learners. Teachers at Senior University use Fine2Work materials, particularly those on financial literacy and digital skills.

The **training toolkit was shared** among various networks in different countries, enabling social workers, psychologists, gerontologists and other specialists in adult education sectors to implement this programme in their own contexts.

The project coordinator and partner organisations **continued their international collaboration** by initiating a new project titled 'Women in Stories'. This project aims to improve the digital skills, creativity and active civic participation of senior women.

Success factors

The main success factor of the project, mentioned by all interviewees, was the **background expertise and experience of each partner**. For example, the Latvian partner runs a Senior University, providing direct access to the target group; the Bulgarian chamber of commerce has ties with organisations and small businesses that they have access to adults in need of developing their financial or entrepreneurial skills. The extensive experience and network of each partner therefore enabled the project's success.

Challenges and barriers

The main challenge encountered by the project was related to **COVID-19 pandemic restrictions**, which impacted the project's main phase by necessitating a switch to online training activities. Other than this, all three representatives of the project team interviewed stated that they did not experience any major challenges during the project's implementation. They attributed this to their extensive collaboration with the same partners in other projects.

Lessons learned

The implementation of the project coincided with the **COVID-19 pandemic and its limitations** on social life. The project partners had extensive experience in the field, so the only new aspect the project team needed to learn was how to use digital tools to organise online cooperation. As the representative of the project partner concluded, "The main lesson learned is that during the pandemic, we can still work and achieve results."

Conditions for transferability

This initiative offers **high potential for transferability**. In fact, some countries that did not participate in the consortium, such as Greece, have had the opportunity to read the materials on the platform and employ the assessment validation method. The methodology and learning materials developed under the Fine2Work project can easily be transferred to other social contexts in which basic knowledge of digital, financial and entrepreneurial skills needs to be taught.

Sources

Desk research

- 'Promoting financial, digital and entrepreneurial competences for vulnerable adults (women) with restricted access to the digitalised market (home based)' website
- 'Promoting financial, digital and entrepreneurial competences for vulnerable adults (women) with restricted access to the digitalised market (home based)' on Erasmus+ website
- National Report for Peer Learning: Latvia
- Comparative report for Peer Learning

Interviews

- Interview with a representative of the coordinating organisation (22 February 2024)
- Interviews with two representatives of partner organisations (08 March 2024, 26 March 2024

Case study 16

RECRUITING THE YOUNG GENERATION WORKFORCE: INNOVATIVE HR MANAGEMENT (REGROW)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-DE02-KA202-007396
- **Duration**
  01 September 2020 to 28 February 2023
- **Field/sector**
  Business
- **Target group(s)**
  Primary: career consultants, SME managers. Secondary: unemployed young people
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 345,368.23 (high)
- **Geographical scope**
  Denmark, Estonia, Germany, Poland
- **Project coordinator**
  Hanse-Parlament e.V., Germany (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
- **Key partners involved**
  - Arbeit und Zukunft e.V., Germany (research institute/centre)
  - Berufsakademie Hamburg IG BA-H GmbH, Germany (school/institute/educational centre – vocational training, tertiary level)
  - International Business College, Denmark (school/institute/educational centre – vocational training, secondary level)
  - Izba Rzemieslnicza w Opolu, Poland (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Eesti Kaubandus-Tööstuskoda MTÜ, Estonia (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
  - Wielkopolska Izba Rzemieslnicza w Poznaniu, Poland (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)

Brief description of the project

The REGROW project aimed to implement modern human resource management in SMEs, making them more strategic and future-oriented for the youngest generations. It involved providing examples of best practice, developing digital models, and creating a toolbox to match jobseeker' needs with company requirements. The project also focused on improving the knowledge and competences of HR managers, mentors, teachers and counsellors, with the goal of ensuring that the project's results are implemented by SME promoters (e.g. business support organisations, government agencies) and universities, for the ongoing benefit of SMEs.

Relationship to policy priorities

The project supported the engagement of young people by building the capacities of SMEs to identify skills relevant to their companies. It also took into account nuances relevant to reconciling differences between different generations, in order to attract young workers to the relevant fields.

Specific objectives covered

- Providing examples of best practice for modern human resource management.
- Developing and providing customised digital models and a toolbox to identify and match the individual needs of job seekers with the requirements of companies.
- Improving the knowledge and relevant competences of HR managers and mentors in SMEs.
- Improving the skills and competences of teachers and counsellors and of SME promoters, as well as those of VET institutions, enabling them to provide high-quality support to SMEs.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The REGROW project was a transnational initiative aiming to address the challenges caused by the decreasing number of young, qualified employees across Europe, especially in small and medium-sized enterprises (SMEs), as well as issues in intergenerational relations. The project focused on the development of instruments, best practices and digital models for human resource management, as well as implementing various training programmes involving various measures aimed at SME managers. These efforts are aimed at modernising human resource management in SMEs. The toolbox developed by the project helped to identify competences, skills and life aspirations, ensuring that employees' concerns are recognised and adequately addressed.

Methods and key activities

The project began with a survey of SMEs, identifying challenges in the recruitment of new employees and problems in intergenerational communication.

The project was innovative in many respects. Although the partners had organised numerous training courses for craftsmen before, this was the first time they had conducted training for craftsmen on the need to recruit employees from Generation Z, including the need to understand this generation, accept intergenerational differences, and to use these differences to build better relationships within the company.

Project participants could take advantage of training, training materials and workshops, as well as individual meetings with the lecturers conducting the training.

'Train-the-trainers' event in Estonia. Source: provided by interviewee

Results of the initiative

Outputs

Digitalisation Concept for HR Management. Research findings on HR management, focusing on the recruitment of younger employees, were analysed. Digital support tools were explored through preliminary studies. A survey with 216 SMEs assessed the importance of HR management and experiences of digital solutions. This informed a holistic HR management concept tailored to SMEs and available in English, German and Polish at the project's website as a downloadable brochure.

Toolbox for Skills Assessment and Alignment with Company Objectives. A four-stage process was developed to determine applicants' skills and to match these with company needs. Tested with 103 participants, the toolbox can be downloaded and customised in German, Polish and English, aiding companies in aligning skills with their objectives.

Skills Assessment Training Programme. Using insights from previous outputs, a training programme concept, curriculum and materials were developed. Tested with 13 participants, the programme is available for download from the project's website, aiding in skills assessment and training.

Training Programme for SME Managers. A comprehensive training programme for SME owners and managers was developed, incorporating findings from

Outcomes

The project yielded several valuable outcomes, notably its competence assessment tool. While young individuals struggled to sustain focus during assessments, employers found the tool useful for **understanding candidates' needs and facilitating discussions**. They valued positive attitudes and work ethic, but acknowledged the tool's utility in pinpointing key competences for job roles and crafting tailored job offers.

Additionaly, **mentorship training** highlighted the **importance of effective intergenerational communication**. Participants learned about the root causes of communication challenges and conflicts within multigenerational teams. This training heightened **awareness about maintaining positive interactions** with employees from diverse age groups, enhancing team dynamics and productivity.

Impacts

The project significantly impacted various stakeholders. SME owners and managers saw direct benefits, engaging over 150 individuals in trials. The work-based learning approach trained participants and positively affected their companies, benefiting numerous employees. Testimonials highlighted transformative effects, such as **increased awareness of applicants' perceptions in**

research conducted at the initial phase of the project. Tested with 68 participants, the programme continues to be financed by partners, and is downloadable from the project's website.

Training Programme for Mentors. A training programme for mentors was developed and tested with 64 participants, and continues to be financed by the partners. Available for download from the project's website, it supports companies in integrating older and younger employees effectively.

User Manual. A handbook was developed for SMEs to assess HR management and to access the project's results. Published as part of an established series and available online at no cost, the manual aids SMEs in understanding and implementing the project's outcomes.

recruitment processes and identifying areas for improvement within companies.

Participating organisations gained long-term value through **developing, testing and implementing tools and educational products.** These efforts strengthened their roles as SME promoters and VET providers, enhancing their regional influence. The ongoing implementation of training programmes for SME Managers in Estonia and Mentors in Denmark demonstrates the project's sustainability and expansion.

Counsellors and teachers benefitted from training, participation in product development, and piloting innovative educational tools. This involvement **broadened their skills and perspectives**, paving the way for the permanent integration of these products into their institutions. Equipped with effective tools and best practices, consultants and teaching staff continue to support SMEs, employees and jobseekers.

Success factors

In interviews, representatives of the consortium mentioned several factors that contributed to the success of the project. These factors included **good project management**, **effective communication between partners**, and the **project topic** itself, which was interesting to all project participants. The project coordinator was primarily responsible for handling all administrative issues, allowing the project partners to concentrate on the content work. The project attracted experienced partners from various fields, including HR specialists, educational institutions and NGOs on the one hand, and various chambers with close ties to companies on the other. This ensured the successful piloting of the programme that was developed.

Challenges and barriers

The primary challenge encountered during the project was the **COVID-19 pandemic and its associated complications**. The project did not allow for face-to-face training, so it was carried out online, which did not lower standards or the outcomes achieved.

Another challenge concerned the **recruitment of a sufficient number of participants to pilot the training programme in person**, since the mindset of people had shifted towards online preferences. A middle ground was found by conducting hybrid training in which participants and partners could join either in person or remotely.

Lessons learned

According to the representative of the project coordinator, the key lesson learned during the project was the need to **maintain flexibility in the use of different methods and tools when faced with challenges** such as COVID-19 restrictions. Other lessons mentioned relate to the project's success factors, such as diverse partnerships and close collaboration with the target group.

Conditions for transferability

The potential for the project's approach and results to be used in other projects, areas and fields of work is very high. Given the growing shortage of skilled workers, managers and young entrepreneurs, along with the evolving expectations of the younger generation, the project's approach will become increasingly important. There is a need to strengthen innovation and competitiveness, particularly in SMEs. The project's approach offered **sustainable support by increasing motivation, job satisfaction and reducing sick days**.

Sources

Desk research

- 'Recruiting the Young Generation Workforce: Innovative HR Management' website
- 'Recruiting the Young Generation Workforce: Innovative HR Management' on Erasmus+ Website

Interviews

- Interview with a representative of the coordinating organisation (13 March 2024).
- Interviews with two representatives of partner organisations (25 March 2024).

Case study 17

SMART ADULT EDUCATION

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2018-1-IT02-KA204-048099
- **Duration**
  01 December 2018 to 30 November 2020
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Adult educators, teachers and trainers, adults with low skills and/or low qualifications
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 258,689.51 (high)
- **Geographical scope**
  Greece, Italy, Romania, Spain
- **Project coordinator**
  Areté Cooperativa Sociale, Italy (social partner or other representative of working life, e.g. chambers of commerce, trade unions, trade associations)
- **Key partners involved**
  - Asociatia pentru Educatie si Dezvoltare Durabila, Romania (non-governmental organisation/association/social enterprise)
  - Cpia Napoli città 1, Italy (school/institute/educational centre – adult education)
  - Dafni Kentro Epaggelmatikis Katartisis, Greece (school/institute/educational centre – adult education)
  - EOI Do Mundo Lume, Spain (school/institute/educational centre – adult education)
  - Fundación Cibervoluntarios, Spain (non-governmental organisation/association/social enterprise)
  - Società Cooperativa Studio ERRESSE, Italy (civil society organisation)
  - Technologiko Ekpaideftiko Idryma (TEI) Dytikis Elladas, Greece (school/institute/educational centre – vocational training, tertiary level)

Brief description of the project

The Smart Adult Education project (SAE) supported and fostered the qualification process for operators and teachers working with fragile adults by providing new tools, techniques and working methods based on digital opportunities. The project has provided an important opportunity for educators, operators and teachers to enhance their digital skills in order to evaluate, plan and manage new and effective interventions aimed at bridging the relational and social gap imposed by the regulations.

Relationship to policy priorities

The project supported both the engagement of vulnerable youth and the enhancement of digital competences via a two-step approach. First, the digital skills of adult educators were developed, which then increased their capacity and enabled them to implement interventions aimed at increasing the inclusion of fragile young adults.

Specific objectives covered

- Increasing the skills of educators (trainers and teachers) in order for them to enhance their ability to empower adults through lifelong learning.
- Creating participatory methodologies and digital tools for teachers, professional educators and volunteers working with adults in the development of basic skills, digital skills and transversal skills.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The Smart Adult Education project (hereinafter, SAE) is a strategic innovation partnership project implemented in the field of adult education. SAE supported and fostered the qualification process for operators and teachers working with fragile adults by providing new tools, techniques and working methods based on digital opportunities. The project has provided an important opportunity for educators, operators and teachers to enhance their digital skills in order to evaluate, plan and manage new and effective interventions aimed at bridging the relational and social gap imposed by the regulations.

The SAE project was a natural continuation of another Erasmus+ project to provide more solutions and research in the field of digital learning for adults. It focused on providing tools, guidance and competence assessment toolkit for trainers and educators, as well as for volunteers working in life-long learning.

Methods and key activities

The key method used by the project to develop the digital skills of adult educators was **digital learning via a web app** (the **SAE WebApp Digital Platform**). The project also used an **E-assessment Toolkit** allows the skills and competences possessed by disadvantaged adults to be measured.

Furthermore, **local working groups** comprising educators and teachers from the partner countries were formed to facilitate discussions on training needs in relation to digital tools and innovative learning methodologies. These groups served as forums for exchanging insights, sharing best practices, and collectively addressing challenges in digital skills development. In terms of **dissemination**, the project spread awareness and shared insights through publishing articles and blog posts, engaging with audiences via social media platforms, and organising multiplier events aimed at reaching a wider audience and fostering collaboration among stakeholders.

The Smart Adult Education project team. Source: project website

Results of the initiative

Outputs

The SAE project resulted in three main outputs. The first is the development of the **SAE WebApp digital platform**, accessible in five languages and tested by 172 teachers by the project's end. The **SAE WEB App** is the result of an analysis of the strengths and weaknesses of similar existing products developed by partners at the design stage. The partners have imagined a product that can be used on all digital devices, especially smartphones; a place for interaction between different types of users, containing innovative digital methodologies, a place for orientation towards lifelong learning choices.

The SAE WebApp digital platform is accompanied by the **SAE WebApp User Guide** which is an operational reference for using the platform. It helps teachers, professional educators and volunteers working in the field of adult learning and education to make the best use of the operational tools available on the Smart Adult Education Platform.

The third output of the project is the **SAE E-Assessment Toolkit**, which provides assessment and self-assessment tools that measure the skills possessed by vulnerable adults, and any changes that may have occurred as a result of the targeted learning pathways.

Overall, 500 teachers/educators/training operators, and 230 adults with low skills and/or low qualifications, have been involved in the project's activities. The project reached around 250,000 people directly or indirectly via social media.

Outcomes

The main outcome of the project relates to the **capacity building of educators and trainers** who work with vulnerable adults. Through its activities, the project engaged 500 teachers, educators and training operators, as well as 230 adults with low skills and/or low qualifications. By offering training sessions and workshops, it enhanced digital skills and promoted digital literacy among vulnerable communities.

Impacts

The project continued to be visible after its end:

- In November 2021, it was selected by the European Association for the Education of Adults (EAEA) along with 20 other projects, and included as a good practice in the publication *Digitalisation & Democracy*.
- In March 2022, it was included in 'Erasmus Stories', a section of the Italian programme's portal dedicated to the stories of those who have lived Erasmus+ experiences, as well as ongoing projects and those identified by the national agencies as good practices.

Partnerships between the project coordinator, Arete Cooperativa Sociale (Italy), and a partner organisation, Fundacion Cibervoluntarios (Spain), continued in 'Smart learning class', a new Erasmus+ project focusing on the development of digital skills among school children.

Success factors

The project's **broad involvement across four European countries** — Italy, Spain, Romania and Greece — played a pivotal role. By promoting a digital approach within organisations engaged in adult education, SAE reached an impressive audience of approximately 250,000 individuals, either directly or indirectly. This extensive reach was facilitated through a strategic combination of social media engagement, insightful articles and blog posts, as well as active participation in multiplier events.

The **diversity of the stakeholders** was another crucial factor of success. Teachers, social workers and volunteers who worked with adults – all united around the use of the same methodology. This unity created an important synergy among the participants.

Challenges and barriers

The project was developed during the **COVID-19 pandemic**, which significantly affected vulnerable, low-skilled adults. Their living conditions deteriorated and the risks of social exclusion increased. These factors posed challenges to the implementation of the project under these changed conditions. At the same time the pandemic increased the relevance of the project enhancing digital skills of vulnerable adults in a time of increasing digital needs.

Lessons learned

The project underscored the crucial role of **incorporating digital elements** when creating learning materials designed to develop digital skills.

Conditions for transferability

The SAE project's transferability is supported by key elements for successful implementation in various contexts. **Strong digital infrastructure**, including the SAE WebApp and E-Assessment Toolkit, was crucial. Equally important was **investing in educators' digital literacy** to use these resources effectively. Partnerships across organizations and countries enriched the project by leveraging **diverse expertise and resources**. Flexibility allowed adaptation to different regions' needs. **Effective dissemination strategies** ensured stakeholders received the project outcomes, while recognition from relevant organizations boosted credibility and visibility.

Sources

Desk research

- 'SMART Adult Education!' website
- 'SMART Adult Education!' on Erasmus+ Website

Interviews

- Interview with a representative of the coordinating organisation (11 March 2024).
- Interviews with a representative of a partner organisations (11 March 2024).
- Interviews with a representative of a partner organisations (02 April 2024).

Case study 18

SAFE DIGITAL MARKETING FOR AGRIPRENEURS (DIGIAGRIMARK)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2020-1-TR01-KA204-094469
- **Duration**
  31 December 2020 to 29 June 2023
- **Field/sector**
  Agriculture
- **Target group(s)**
  Farmers
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 235,523.00 (high)
- **Geographical scope**
  Greece, Italy, Portugal, Spain, Turkey
- **Project coordinator**
  Aydin Valiligi, Turkey (regional public body)
- **Key partners involved**
  - Aydın Adnan Menderes Üniversitesi, Turkey (higher education institution, tertiary level)
  - Aydın İl Tarım ve Orman Müdürlüğü, Turkey (local public body)
  - Baldaque & Alves da Silva, Lda, Portugal (small/medium-sized enterprise)
  - European Grants International Academy Srl, Italy (small/medium-sized enterprise)
  - Inercia Digital S.L, Spain (small/medium-sized enterprise)
  - Institute of Entrepreneurship Development, Greece (non-governmental organisation/association/social enterprise)
  - Soke Zirai Uretim Isletmesi Tarimsal Yayim ve Hizmetici Egitim Merkezi Mudurlugu, Turkey (school/institute/educational centre – vocational training, tertiary level)
  - Sosyal Etki ve Yenilikci Egitim Dernegi, Turkey (non-governmental organisation/association/social enterprise)

Brief description of the project

The DigiAgriMark project aimed to enhance the digital marketing skills of farmers, emphasising safety and security, and contributing to the digitalisation of agriculture. The project involved activities such as needs analyses, curriculum development, and the creation of an e-learning platform. The results include a curriculum/course on safe digital marketing, training modules, an educational platform, and various guides and roadmaps to improve the skills of 'agripreneurs' in the agricultural and digital sectors.

Relationship to policy priorities

The project supported the development of digital skills among farmers – an occupation that is traditionally seen as more vulnerable in the context of the digital transition. The project focused on horizontal area of marketing that are relevant to various agricultural activities, and which represent an effective way of increasing digitisation in the sector.

Specific objectives covered

- Establishing an innovative and sustainable educational e-learning platform and developing a curriculum/course on safe digital marketing for the agricultural and digital sectors.
- Extending the competences of trainers, staff and agripreneurs using innovative tools and OERs.
- Increasing awareness of safe and secure online marketing in agricultural sector.
- Opening new doors to farmers to evaluate their products and increase their income.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The project aimed to tackle a common issue in the agriculture sector across five European countries. Many young people with digital technology skills are leaving the sector due to financial issues. Meanwhile, those who stay often lack the necessary skills to make effective use of digital tools for online business support. Digital marketing became increasingly important during the COVID-19 pandemic, which heightened the need for farmers to learn how to use these new tools. To address this need, the project team developed a set of materials dedicated to the basics of digital marketing, tailored to agriculture sector and taking into account national peculiarities in the field.

Participants in the multiplier event in Portugal. Source: provided by interviewee

Methods and key activities

The project began with **desk research and a needs analysis** of 224 agricultural entrepreneurs in all of the partner countries, to better understand the challenges and barriers they face in the digital field. Based on the results of this research, the project team developed a **curriculum for digital marketing and digital safety**, tailored to the needs of agricultural entrepreneurs. Later, materials were transferred to an **online platform** in order to make them accessible to people at all study levels and learning needs. The learning materials included interactive presentations containing many examples, questions and quizzes to keep learners engaged. The project team was available through the platform to support participants in the online course. In addition, **summary videos of the modules** were prepared and translated into all of the partner countries' languages. These are available on the project website and on YouTube.

The team also developed a **practical guidebook** containing foundational knowledge on the promotion of agricultural products and digital marketing campaigns, as well as the risks that digital entrepreneurs should be aware of such as phishing, scams, frauds etc. The project also developed a **roadmap** that serves as an interactive storyline and directs learners towards relevant materials according to their needs. This tailored approach ensures a more personalised and participatory experience. Lastly, the project included **a toolbox** – a platform for information at national level, as well as national regulations governing the selling of products online.

Piloting course materials in Italy. Source: provided by interviewee

Results of the initiative

Outputs

The initiative has led to several tangible outputs. One of its main outputs was **a training curriculum for Digital Marketing and Digital Safety and Security**, designed specifically to meet the needs of farmers. This curriculum can be for online training by farmer groups and for face-to-face or blended training by ICT experts, teachers, engineers and trainers with certifications in the digital field. The curriculum has been designed in accordance with EQF standards, and is the first detailed curriculum tailored to the needs of the agricultural sector, making it an innovative development in the field of digital marketing and safety for agripreneurs.

The project's second output was a set of materials including a **Learning Platform, Modules and Training/ Learning Materials** for Digital Marketing and Digital Safety and Security for Agripreneurs. Taking into account the needs of farmers and the advantages of online education, the DigiAgriMark Safe Digital Marketing for Agripreneurs course and training platform was developed within the scope of the project and built on an online platform based on the Moodle

learning management system. According to the training curriculum developed by all of the partners, the learning platform covers the topics of marketing management and digital marketing, content marketing, internet and social CRM (customer relationship management), data analysis and reporting, digital advertisements and campaigns, marketplace and e-commerce, agricultural cooperation, personal information security, and privacy and security in digital marketing. Rich content, including interactive online course content, summary videos, lecture notes and useful videos compiled from the internet, were prepared for publication on the training platform.

The third group of outputs includes

(1) the Agripreneur's Safe Digital Marketing Guidebook,

(2) a Toolbox for Safe Digital Marketing Strategy for Agripreneurs,

(3) a DigiAgriMark roadmap.

Source: project website

Outcomes

The outcomes of the above course focus on **improving the skills of farmers in digital marketing and digital safety and security**. Participants found the course helpful in overcoming barriers to the use of digital tools. They acquired knowledge and skills in creating digital content, making use of e-commerce, using digital market platforms and content-creating software, running advertising campaigns, and digital literacy and security.

Impacts

The initiative has had a significant impact in terms of **increasing the competitiveness of farmers in the digital market**. Participants in the course have begun using digital platforms such as marketplace to sell their products, as well as creating social media profiles and launching advertising campaigns for their businesses. The project partners have actively incorporated course and training materials into their work, and are planning to **continue collaborating in other projects for farmers**. The accessibility of the course materials not only on the project website but also on the partners' websites and on YouTube ensures long-term impact and wide outreach to the target audience.

Success factors

Preliminary research, including desk research and survey, provided a comprehensive understanding of farmers' needs and challenges in the digital realm. This enabled the creation of a course that farmers were willing to participate in. Second, the team adopted an **innovative approach to create content** in various formats, including presentations, videos, a roadmap, and a practical guidebook. The materials were distributed via multiple channels—such as the project's website, partners' websites, the learning platform, and YouTube—ensuring **accessibility to a wide audience** and long-term impact.

Effective and efficient project management was another key success factor. Partner organization representatives reported high levels of commitment and engagement. Regular meetings were held throughout the initiative, from discussing preliminary research results and brainstorming course materials to thoroughly planning work at the national level.

Challenges and barriers

The primary challenge faced by the project concerned the **engagement of participants**, starting from the research phase and continuing throughout the project. As one project team representative reported, "Most agricultural entrepreneurs, especially seniors, are stuck in manual work and not very interested in additional courses and expanding their views in the digital area." Conducting research and training courses was difficult because farmers are a very busy target group. The project team had to adopt a one-on-one approach to reach out to each entrepreneur and invite them to the course.

Another challenge related to **management**, as a large number of materials of different types were created, which required translation and management.

Lessons learned

Multiplier event in Turkey. Source: provided by interviewee

One of the lessons learned from the project comes from the asynchronous nature of the course materials, which limits learner engagement and guidance. One project representative suggested that **gathering feedback from participants** would provide better insights into their learning journey and needs. In addition, establishing a forum for participants might facilitate interaction with tutors and among the participants themselves, enabling them to exchange their thoughts and experiences.

Conditions for transferability

The course curriculum provides specific insights into the agricultural field while also providing basic information about marketing and digital safety. It can therefore be transferred easily to all countries, areas and learning settings. Because the target group generally has a very basic level of digital marketing skills, the materials provided are simple and easy to use. They could be used to target children, NEETs and persons of any age who are starting to learn digital marketing at a basic level.

Sources

Desk research

- 'SAFE DIGITAL MARKETING FOR AGRIPRENEURS' website
- 'SAFE DIGITAL MARKETING FOR AGRIPRENEURS' on Erasmus+ website

Interviews

- Interview with a representative of the coordinating organisation (29 February 2024).
- Interviews with a representative of a partner organisation (29 February 2024).
- Interviews with a representative of a partner organisation (8 March 2024).

Case study 19

STRENGTHEN THE SKILLS OF NEETS (STONE)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2020-1-RO01-KA204-079978
- **Duration**
  01 November 2020 to 31 July 2023
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Adult educators, young NEETs
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 169,003.00 (high)
- **Project coordinator**
  Centrul de Resurse pentru Educatie si Formare Profesionala, Romania (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - Asociacija Tavo Europa, Lithuania (non-governmental organisation/association/social enterprise)
  - Chatzi A. -Roupa E. O.E., Greece (small/medium-sized enterprise)
  - Enoros Consulting Limited, Cyprus (small/medium-sized enterprise)
  - Kuressaare Nooruse Kool, Estonia (school/institute/educational centre – general education, secondary level)
  - The Rural Hub CLG, Ireland (non-governmental organisation/association/social enterprise)
- **Geographical scope**
  Cyprus, Estonia, Greece, Ireland, Lithuania, Romania

Brief description of the project

The STONE project aimed to enhance the competences of adult educators who are addressing the skills gap affecting adults and NEETs in the job market. Through the collaboration of the partners, the project introduced training courses, an assessment tool, and a good practices toolbox tailored to the needs of adult educators working with NEETs.

Relationship to policy priorities

The STONE project indirectly supported the policy priority of engaging adults and NEETs into the job market by defining and acknowledging innovative models, approaches and tools in order to support adult learners' personal development processes, based on self-awareness. To achieve this, the project worked with and focused on adult educators who work with NEETs and vulnerable groups with adult learners, by upgrading their skills.

Specific objectives covered

- Preparing adult educators with essential learning skills, focusing on personal, social, learning-to-learn, citizenship, entrepreneurship, cultural awareness, and digital competence.
- Bridging the gap between the existing skills of adults and those demanded by the education system and by employers.
- Addressing the growing skills gap affecting adults and NEETs in today's job market.
- Empowering adult educators with essential skills, enhancing labour market readiness.

Type and scope of the project, methods used, and key activities

Type and scope of the project

STONE was an educational initiative aimed at narrowing the existing skills gap between young adults' skillsets and what is expected by employers and educational systems. This was to be achieved by means of training educators while ensuring they can better support learners towards resilience, motivation to learn and enhanced competitiveness in the labour market. The scope of the project was transnational, involving partners from six European countries, each of which had vast experience working with NEETs. The project focused not only on enhancing skills based on five key competences identified by the European Commission (digital competence, personal and social learning, citizenship, entrepreneurship, and cultural awareness) but also on additional skills including the handling of social media, ICT, mobility and European citizenship. The

project recognised the need for trainers to develop new skills to respond to the rapid changes in the labour market and in technology.

Methods and key activities

The methods and activities of the STONE project were based on a **needs analysis** and an **aligned development methodology**, with clear specifications and allocating clear responsibilities for development. The needs analysis approach allowed the project partners to identify gaps and missing links within the field, and to find ways in which the project could be enhanced. In addition, a **survey** was disseminated among adult educators with the aim of conducting a 'temperature check' regarding the key competences that would be addressed in the project.

The project introduced training courses targeting a key competence framework tailored toward adult educators across several countries working with NEET groups, as well as an assessment tool for both educators and learners, complemented by a good practices toolbox for upskilling adult educators and NEETs.

Several **pilot workshops** took place in the partner countries for the validation and refinement of the project outputs. These involved a total of more than 100 participants, including both adult educators and NEETs. According to interviewees from the partner organisations, the participants' feedback from the workshops was very positive, which further confirmed that the direction the project was taking was correct.

The self-assessment tool, aimed at both educators and participants, was **innovative in nature** and provided valuable insights into personal skills gaps. This self-test is a tool, not a common test. Feedback from participants was overwhelmingly positive. The tool was an important part of this project, as it allowed the participants to not only be evaluated in the classroom or during training, but also outside of it at a time that was convenient for them. The self-assessment tool utilised a **badge evaluation system** according to the level of competences.

The STONE project aimed to **translate complex content into a more digestible form** by creating a toolkit for trainers and youth workers. This material ranged from beginner to expert level, and included a variety of resources such as videos and exercises, making the learning process more interactive and tailoring it to the needs of the target group.

The partners aimed to develop **new educational materials and strategies, taking into account different learning strategies**. To do so, it was crucial to understand how people learn, and to connect teaching methods with these strategies.

Results of the initiative

Outputs

The STONE project had four primary outputs: a capacity-building training course on new key competences; a targeted training package for adult educators; an assessment tool for self-evaluation and learning personalisation; and a good practices toolbox for upskilling adult educators and NEETs. The **capacity-building training course on new key competences** was delivered as an e-handbook, with the overall aim of assisting adult educators in becoming more efficient and supportive in teaching NEETs and ESL students. The **targeted training package for adult educators** aimed to create a comprehensive cross-border set of materials, concepts and training elements to tackle the current issues faced by NEETs in an interactive, inclusive and evolutionary way.

'Train-the-trainers' activity. Source: provided by interviewee

These materials consisted of training methods, schedules, core modules and effective combinations of elements in the form of a toolkit. The **assessment tool on self-evaluation and learning personalisation** is suitable for carrying out self-assessment of educational services. This serves two main purposes: as a tool for adult educators and NEETs who want to improve their performance in skills relating to the project's subject matter, and to act as a 'bridge' to facilitate dialogue between various educational and training providers at both local and EU level. This tool consists of some basic questions and a case study examination, in order to generate optimum learning outcomes and improved performance of their skills in adult education. The tool provides feedback to both those who have achieved the necessary score, and those who did not. The **good practices toolbox for upskilling adult educators and NEETs** aimed to create an opportunity for adult educators to interact effectively with other adult educators and NEETs in order to exchange information, good practices and tips. To facilitate the use of the good practice toolbox, a user's manual was created that provided all the

information necessary to register a profile; undertake courses; upload and download material; contact and interact with peers and others; identify the structure of the course; how they can get help if necessary, etc. The manual was translated to all of the partners' languages.

Outcomes

Overall, 157 adult trainers and 120 learners across the six partner countries were actively involved in piloting the project's outputs. The wide scope of this initial testing ensured that the outputs were appropriate and relevant across various countries and groups. In addition, 308 participants engaged in multiplier activities in the six participating countries.

Furthermore, the project's robust dissemination efforts allowed more than 8,500 persons to be directly informed about its activities. Because the project's outputs are openly accessible online in five languages, the reach of the project could potentially expand still further, enabling participants from rural areas and varied backgrounds to access and benefit from the programme.

Impacts

The STONE project's intellectual outputs, digital resources and video materials were **actively utilised** in various settings – particularly within disadvantaged communities – even after the end of the project. These materials have been incorporated into educational environments, highlighting the project's **broad applicability** and the effectiveness of its content in **fostering learning and engagement**. The training materials developed have become a staple within the partner organisations, constantly serving as tools for continuous learning and adaptation. Specifically, the digital components of the project have made a significant impact and are consistently integrated into various ongoing initiatives.

There is growing interest in enhancing and expanding the self-assessment tool introduced by the project, underlining the demand for **more interactive and personalised learning resources**. The project has not only provided valuable materials, but has also fostered **strong partnerships** among the participating organisations. Encouraged by the positive outcomes and the strengthened network of partners, they are contemplating additional initiatives to further the achievements of the STONE project. The foundations laid by the strong relationships and shared knowledge among the partners offer a promising basis for future collaborations aiming to build on the success and the lessons learned from this initiative.

Pilot workshop. Source: provided by interviewee

Success factors

The **diverse expertise, skills and knowledge** of the partners and their understanding of the educational needs of young people were crucial to the success of the project. Some of the partner organisations operate within the field of adult education, while others focus on young people: a mix that provides a great combination of existing knowledge and skillsets. This strong partnership between experienced organisations allowed the partners to leverage their strengths and previous experiences. This **collaborative approach** was crucial to the project's success. Furthermore, effective teamwork was facilitated by the **successful coordination** of the project.

A **thorough needs analysis** ensured that the project addressed real needs. As one of the interviewees mentioned, the project was not just another project for the sake of having one; an existing gap and a real need were identified. The project's structured approach to developing and categorising competences also played a significant role in its success.

Challenges and barriers

The key challenges for the STONE project related to the unforeseen circumstances brought by the **COVID-19 pandemic**. As the project officially began during the pandemic, the partners had no opportunities for face-to-face interaction and training during its initial stages. The partners adapted to the new reality by extending the project's duration and implementing virtual training.

Another significant challenge was the **health issues** of a key team member, which led to a project extension. The situation was managed by having a succession plan and ensuring that multiple team members were familiar with the details of the project. In addition, the partners maintained **regular communication** with less responsive partners to ensure their continued involvement and contributions.

Lessons learned

According to one interviewee, the main lesson learned during the project was the importance of **detailed planning and management**. The STONE project started after the beginning of the COVID-19 pandemic, which led to the development of the project being at a standstill for some time. This created the need for partner organisations to learn how to handle the workload when the project restarted after a significant pause. This further emphasises the importance of **leadership and communication** among the project partners.

Conditions for transferability

The project has received overwhelmingly positive feedback, leading to the adoption of the project's training materials nationally in Estonia. Furthermore, the project's methodologies and materials, especially its video materials, have proven to be **exceptionally versatile and effective in teaching basic skills**. These resources are not only beneficial for a young audience, but have also proved valuable for adult learners, catering to a **wide range of educational needs**. This wide applicability and practical nature of its materials underline the project's success in creating transferable and adaptable educational resources that can be implemented across different countries and learning environments.

Sources

Desk research

- 'STrengthen the Skills Of NEets- STONE' on Erasmus+ Website
- 'STrengthen the Skills Of NEets- STONE' Website
- 'STrengthen the Skills Of NEets- STONE' on Facebook

Interviews

- Interview with a representative of the coordinating organisation (6 March 2024)
- Interviews with a representative of a partner organisation (12 March 2024)
- Interviews with a representative of a partner organisation (14 March 2024)

Case study 20

WE ARE AT WORK TOO

SUMMARY

- **Erasmus+ programme type**
  Strategic Partnerships for vocational education and training
- **Project reference number**
  2019-1-TR01-KA202-074775
- **Duration**
  15 October 2019 to 14 August 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Young people with learning difficulties, formal (teachers and trainers) and informal (families) educators of learners with cognitive challenges
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 234,988.00 (high)
- **Geographical scope**
  Italy, Poland, Portugal, Romania, Slovenia, Turkey, United Kingdom
- **Project coordinator**
  Konya Il Milli Egitim Mudurlugu, Turkey (Local Public body)
- **Key partners involved**
  - Agrupamento de Escolas Trigal de Santa Maria, Portugal (school/institute/educational centre – vocational training, secondary level)
  - Centrul Scolar Pentru Educatie Incluziva Albatros, Romania (school/institute/educational centre – vocational training, secondary level)
  - Collegium Balticum – Akademia Nauk Stosowanych z siedzibą w Szczecinie, Poland (higher education institution, tertiary level)
  - Hanta Associates Limited, United Kingdom (Small/medium-sized enterprise)
  - Karatay Ozel Egitim Meslek Okulu, Turkey (school/institute/educational centre – vocational training, secondary level)
  - Município de Torres Novas, Portugal (local public body)
  - Trend-Prima, Zavod Za Raziskave Inrazvoj Znanja, Maribor, Slovenia (non-governmental organisation/association/social enterprise)
  - Vitale Tecnologie Comunicazione – Viteco Srl, Italy (small/medium-sized enterprise)

Brief description of the project

The 'We Are at Work Too' project aimed to enhance the social and self-care skills of learners with cognitive challenges at special education vocational schools, fostering better vocational education standards for increased employability. The project conducted field research to identify the needs of students, parents, teachers and employers, with a focus on raising awareness of disabilities within families. Through four intellectual outputs, including a family education programme and supporting vocational training modules, the project implemented activities, meetings and training, both online and hybrid, to disseminate its outputs and promote the professional and social development of students, ultimately increasing their employment opportunities post-graduation.

Relationship to policy priorities

The 'We Are at Work Too' project directly supported the policy priority of engaging young people into the job market by aiming to increase the professional and social skills of students with disabilities. Students taking part in the project were guided through the various stages of job applications, from finding jobs to applying and being interviewed for them, with content being prepared by considering the needs of the labour market and through the direct support of teachers in partner educational institutions.

Specific objectives covered

- Enabling students with cognitive challenges studying at special education vocational schools to acquire better social and self-care skills at home (family) through a holistic approach.
- Increasing the employability of students with cognitive challenges in their field after graduation.
- Raising the awareness of families about their children's disabilities.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The 'We Are at Work Too' project aimed to support students with disabilities in vocational schools in its partner countries, focusing on their integration into the job market. The project originated from the need to address the employment challenges faced by students with intellectual and physical disabilities at the age at which they can enter the job market. The project targeted the enhancement of the social skills and self-care abilities of these students, as these are crucial for their integration into workplaces such as restaurants or hotels, and many students lacked such soft skills necessary for employment. The project therefore aimed to supplement their education with additional lessons focusing on these areas. The vocational schools tried to integrate these students into the job market by matching their abilities with companies' needs. This involved engaging in dialogues with companies to understand their requirements in order to prepare students for employment. The focus was on enabling students who could perform basic tasks to become full members of society.

The scope of the project was transnational, including vocational schools and students from Western to Central Europe, as well as in Turkey. The range of the students' disabilities were also varied.

Methods and key activities

Five transnational project meetings took place as part of the project, as well as one learning and teaching activity in which a total of 14 teachers, project coordinators and administrators from special education vocational schools took part. In addition, four multiplier events and local training sessions for students and parents were carried out. A **holistic approach** was adopted that involved the creation of content for teacher training, students and their families. An **international research study** was conducted, collecting data through a survey of teachers, parents and employers to identify gaps in education and training for students with disabilities. This research culminated in a report providing policy recommendations. Based on the research, training modules for families, teachers and students were developed, and an online e-learning platform was created to facilitate learning. The training content on the online learning platform could be accessed by teachers and trainers from other cities or countries.

Modules targeting students included **practical exercises and examples**, which are very important for students with mental disabilities in order to ensure the efficiency and inclusivity of the learning process. Students and their parents reported being satisfied with the fact that the modules were downloadable and could be easily accessed later.

Students who took part in the project were supported in the **process of preparing for job interviews**. One interviewee from a partner organisation mentioned that representatives of companies conducted mock interviews with the students. This allowed students to practise, and also to prepare for the negative outcomes that might result from some job interviews. The students were taught how to present themselves in the job market, how to search for available jobs in newspapers and online (especially using government sites advertising employment opportunities for people with disabilities). This training equipped the students with the skills necessary for seeking employment after they turned 18.

Students from some of the partner vocational schools undertook **practical courses** with possible future employers within the scope of the project. This opportunity was not only beneficial for the students, but also for the partners in the project, as these potential employers were asked after the courses about their needs and what skills they noticed the students lacked. This feedback helped teachers and trainers to further align their efforts with the needs of the job market, as at times the students received theoretical knowledge that they do not know how to translate into real-life skills.

Results of the initiative

Outputs

The 'We are at Work Too' project had four main outputs: Family Education Program modules, modules Supportive Vocational Training Modules for Students, an implementation guide for teachers and an e-learning platform. The **Implementation Guide for Teachers** addressed gaps in their educational backgrounds, particularly in teaching social and self-care skills. The **Family Education Programme** was developed to educate parents on disabilities and employment opportunities for their children, with the aim of improving understanding and support at home. This programme consisted of five modules, and was translated into the languages of the partner countries. This output takes into consideration the differences in laws and regulations between countries and informs parents of the rights their children have in each of the partner countries, and what kinds of jobs they can do or apply for within or outside government. Five **Supportive Vocational Education Modules for Students** were prepared and translated into the languages of the partner countries. These modules focused on topics that were missing from the school curriculum such as social care, self-care skills, hygiene, etc. These initiatives were complemented by an e-learning platform making all of the resources accessible to a wider audience. This online platform was a significant resource, allowing self-paced learning and certification upon completion. **Programme introduction videos and an e-learning user guide** were created to introduce and enable the easy use of the project's outputs.

Outcomes

The project partners organised three national and one international **multiplier events** to disseminate the intellectual outputs of the project. A total of 255 people participated in these activities face-to-face, and 50 people attended online. In addition, **local training session** for parents, teachers and students were organised for the promotion, implementation and dissemination of the outputs created. For example, in Turkey, more than 200 parents were trained during such sessions, and in Romania, 60 parents or legal representatives were trained. In addition, 50 teachers and 287 students were trained in Romania, while in Turkey, more than 50 teachers were trained, who then organised multiplier events to reach an additional 200 to 250 teachers across the participating countries.

Source: provided by interviewee

In particular, the project improved **digital literacy skills** among students, teachers and parents. While not every participant completed the modules, those who did reportedly saw an improvement in their skills.

An additional beneficial outcome of the programme was the **formal certification** offered upon completion of various aspects of the training. This aspect was particularly appreciated by parents, who valued the tangible acknowledgment of their child's learning and achievements. The provision of a certificate not only serves as a testament to the skills acquired, but also motivates participation, with many parents expressing a keen interest in ensuring their children engage in activities that culminate in formal recognition. This formal certification underlines the programme's commitment to offering not just educational opportunities but also a means to validate and celebrate the participants' hard work and success.

Impacts

Within the scope of this project, meetings were conducted with the families of participants to communicate the potential benefits the project could offer them. These sessions explained how the resources and strategies outlined in the booklets could significantly assist their children in securing future employment. These discussions were instrumental in guiding many families as to **how to effectively support their child's job search efforts**. Consequently, by following the structured approach detailed in thee materials, several families succeeded in helping their children to secure employment more seamlessly. This achievement is directly aligned with one of the project's primary objectives.

One interviewee reported how, out of the six students they had worked with, three had already **successfully gained employment**, showcasing the effectiveness of the project's initiatives and resources in facilitating meaningful job opportunities for participants. This achievement is not only impactful for those participants who landed jobs, but it also creates further opportunities for greater employability and acceptance of the next cohort of students by possible employers. Similarly, another interviewee noted that some students had secured employment in their fields of study after the completion of the project. This represented a significant achievement, given the traditionally extremely low employment rates among individuals with disabilities in the country.

The project's **outputs**, including its e-learning platform, **continue to be utilised**, showcasing the sustained impact of the project. For example, one of the Portuguese partners in the project has continued to actively use the project's outputs after the end of the project with the new cohort of 10 students.

Success factors

Comprehensive educational resources tailored to the needs of different target audiences. The project developed a range of specialised educational modules and tools, including the Family Education Programme, Supportive Vocational Training Modules for Students, and the Implementation Guide for Teachers. These resources were carefully tailored to address specific gaps such as social and self-care skills, which were missing from the standard curriculum. These resources were also translated into the languages of the partner countries to ensure their accessibility and relevance.

Enhancement of digital literacy and certification. The introduction of an e-learning platform facilitated widespread access to the project's resources, supporting self-paced learning and offering formal certification upon completion. This digital approach not only improved digital literacy among students, teachers and parents, but also provided a tangible acknowledgment of their efforts and achievements, which in turn motivated further participation and engagement.

Effective support and empowerment of families. The project included specific measures to involve families in the educational process, providing them with the necessary knowledge and tools to effectively support their children's career aspirations. Meetings with families to discuss the benefits of the project and structured guides on supporting their child's job search efforts proved instrumental in helping several participants to secure employment.

Challenges and barriers

Several significant challenges were encountered during the implementation of the project, the primary one being the outbreak of the **COVID-19 pandemic**. This situation pushed the partners towards changing their initial plan of conducting transnational project meetings in-person. Instead, these meetings were moved online, as pandemic restrictions made it impossible to meet face-to-face.

Another challenge faced by the project was **making the online platform more user-friendly** for its target audience. One specific issue faced by the partners was the complexity of the navigation process required to access certificates on the website. Students had to take multiple steps including registration, email verification and navigating through the course content, which proved to be a challenging process for the project's target group. Often, the assistance of an adult was essential for students to complete these tasks and to interact with the content effectively. Recognising this barrier, the process was simplified by reducing the number of steps and questions necessary.

The project also aimed to address **societal perceptions and challenges** related to employing individuals with special needs. The socio-economic climate, exacerbated by the pandemic, made it especially difficult for inexperienced individuals with special needs to acquire and maintain a job. Initial resistance from employers was rooted in concerns over the productivity and adaptability of the students. Many companies were hesitant to employ individuals with special needs, citing potential inefficiencies. Changing ingrained societal attitudes and perceptions towards people with disabilities proved to be a challenging task, and one that could not be fully resolved within the project's timeframe. Despite these obstacles, the partners endeavoured to make strides towards improving the situation through various dissemination activities at local, national and international levels, showcasing the project's impact and the collaborative efforts of all the partners involved.

Lessons learned

A principal takeaway from the project was the evident **necessity for further projects** focusing on enhancing employment opportunities for this demographic. The project served as a vital reminder of the substantial number of disabled students who would benefit greatly from access to opportunities that are readily available to their peers in mainstream education. This realisation led to a commitment from the project partners to develop and circulate resources specifically designed to meet the needs of students with disabilities, thereby fostering an environment that encourages further projects to be initiated in this crucial area.

Moreover, the project highlighted the need to **shift societal perceptions about individuals with special needs**. It became clear that both employers and families frequently underestimated the potential of such individuals, often overlooking their capacity to contribute meaningfully to the workforce and society. The project highlighted the critical importance of identifying and promoting suitable roles for individuals with special needs; roles in which they can perform effectively and find personal fulfilment. By demonstrating the valuable contributions these individuals can make, the project aimed to challenge and change outdated societal attitudes, advocating for a more inclusive and understanding approach towards persons with disabilities.

Source: provided by interviewee

The 'We are at Work Too' project not only shed light on the **gaps in employment opportunities** for students with disabilities, but also offered invaluable insights into the broader **societal changes needed** to support this demographic.

Conditions for transferability

The 'We Are at Work Too' project successfully developed online content to address an issue of local, national and international significance. Recognising the diverse situations across borders, each participating country **tailored the project's content** to align with its specific legal framework with regard to students and individuals with special needs. This flexibility in adaptation underlined the project's broad applicability and its potential for widespread impact if other countries were to make the necessary adaptations to the existing materials.

One notable strength of the project was its capacity to extend educational opportunities beyond local boundaries, effectively **reaching educators across multiple countries**. This achievement was facilitated by the project's inclusive approach, offering training materials that are accessible to anyone with an interest in supporting people with special needs, not just professionals in the field. The modules were made freely available, further enhancing the project's reach and utility.

Initial assumptions present during the initial stages of the project, whereby each country was expected to present unique challenges in relation to the field, were quickly revised upon discovering that **the core issues were consistent across all of the partners' countries**. This revelation highlighted common areas for improvement and underlined the universal applicability of the project's resources.

The project not only demonstrated the potential of **transnational collaboration in addressing shared challenges**, but also showcased the profound impact of tailored educational resources on a demographic that spans geographical and legal boundaries.

Sources

Desk research

- 'We are at Work Too' website
- 'We are at Work Too' on Erasmus+ website
- 'We are at Work Too' on Facebook

Interviews

- Interview with a representative of the coordinating organisation (26 March 2024)
- Interviews with a representative of a partner organisation (21 March 2024)
- Interviews with a representative of a partner organisation (27 March 2024)

Case study 21

WE ARE REALITY

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-IT01-KA202-008371
- **Duration**
  01 November 2020 to 31 October 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Young people with learning difficulties and young people with autism aged 17-29 years
- **Educational level(s)**
  IVET
- **Learning settings**
  School-based learning, work-based learning
- **Funding arrangement**
  EUR 269,512.41 (high)
- **Project coordinator**
  Lariso Cooperativa Sociale Onlus, Italy (school/institute/educational centre – adult education)
- **Key partners involved**
  - A18onlus – Associazione Autismo 18 anni, Italy (non-governmental organisation/association/social enterprise)
  - Associação Teatro Construção, Portugal (non-governmental organisation/association/social enterprise)
  - Associazione Studio L&P (Learning & Progress), Italy (non-governmental organisation/association/social enterprise)
  - Internationaler Bund e.V., IB Süd, Germany (school/institute/educational centre – vocational training, secondary level)
- **Geographical scope**
  Germany, Italy, Portugal

Brief description of the project

The WeAR project aimed to design a support model for job placements, focusing on young people with autism and young people with learning difficulties. It sought to enhance training and mentoring methodologies in work-based learning (WBL) for social and workplace inclusion. The project involved the development of innovative elements such as an augmented reality (AR) application on safety and an 'escape room' for educational purposes, impacting the systemic inclusion of the job placement module and increasing awareness within communities in Italy, Germany, and Portugal concerning placement possibilities for young people with difficulties.

Relationship to policy priorities

The WeAR project directly addressed the policy priority of engaging young people by designing tools and outputs that supply young people with special needs with the skills and knowledge that are essential for their integration into the society and the job market. The project's outputs followed methodologies and designs that take into account the learning differences that these students have.

Specific objectives covered

- Developing a support model for job placement for autistic and young people with learning difficulties by directly involving trainers and VET operators.
- Supporting the social and workplace inclusion of young people with learning difficulties and young people with autism (aged 17-29 years) through the improvement of training and mentoring methodologies.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The 'We are Reality' project, a partnership between NGOs and educational institutions, addressed job placements difficulties for students with special needs, focusing on learning difficulties and autism. It aimed to create universally applicable resources for diverse learning and social backgrounds. Involving Germany, Italy, and Portugal, the project sought to develop methods applicable across all three countries and beyond.

Methods and key activities

The WeAR initiative combined the **TEACH approach** and **task analysis** from autism therapy, with an empowerment approach focused on **work orientation**. **Practical experiments in simulated enterprise environments and support for co-working** aimed to develop a comprehensive strategy to assist young people with special needs.

Central to the project's methodology were **innovative tools** like escape rooms and AR applications, in order to cultivate logistical and mathematical skills in an engaging manner. These flexible tools catered to varied needs of the participants, enhancing **soft skills, teamworking, and overall competence** – especially for those with little job experience.

The **Metaverse application** was selected for the project's AR output, on account of its user-friendliness and ability to engage students in **understanding workplace safety**, crucial for internship preparation. Interactive and image-oriented, it made learning accessible for students with various learning difficulties and received positive feedback for boosting motivation and engagement.

The project actively **involved students in the development phase**, making the learning process enjoyable and practical. This innovative approach was well-received by both students and teachers, proving more effective than conventional methods.

Results of the initiative

Outputs

The project developed a comprehensive **work placement module** tailored for young individuals with autism and/or learning disabilities. This initiative comprised a three-month course, followed by a three-month work-based learning experience. The job placement module involved 10 young people in each partner country (30 students in total) and 10 VET trainers/educators in each country (30 in total) who, in turn, were involved in two learning and training activities. The three-month course integrated empowered approaches and skill transfer through experimental tools, demonstrating the project's innovative nature. These tools included an **augmented reality application** focusing on safety in the workplace, and an educational '**escape room**' designed to enhance soft skills such as problem solving, teamwork and critical thinking. Furthermore, an **evaluation kit** was created to enable the multidimensional evaluation of VET pathways and for the self-evaluation of educators, accessible via a dedicated website.

Innovative tools such as the **escape room** were developed to offer a new approach to learning logistics and mathematics in an engaging manner, without the need for traditional writing or listening methods, instead encouraging **critical thinking** and **problem solving**. The escape room consists of a logic game in which players, locked into a themed environment, must try to get out of the room by solving puzzles, riddles and codes. This flexibility of the tool allows it to be adapted to various scenarios and learners' needs, showcasing the project's commitment to creating versatile educational resources.

Outcomes

A series of materials and resources were produced as part of the project's outcomes, including a **training manual on methodologies** to support job placement for young people with learning disabilities and autism, and **operating instructions** for using augmented reality applications and for the design and creation of escape rooms for educational purposes. These resources are available in **multiple languages**, enhancing accessibility and impact. The project's achievements were documented in the 'Story of WeAR' **final report** and a **dissemination and diffusion report** with a **short film 'WeAR'** summarising its activities and outcomes.

The **tools created**, such as the AR application and escape rooms, **continue to be used** in partner organisations' initiatives, including summer camps and training centres. AR has proven effective for teaching safety measures, illustrating the innovative potential of digital tools in education.

Initially aimed at autistic learners, the project benefited **a wide range of students with learning difficulties**, enhancing the learning experience for all participants.

Constant monitoring and dissemination of results ensured the sustainability and transferability of outputs through **dissemination events** and the **project's website**, allowing iinnovations to reach beyond its immediate context, and offering potential for its replication and adaptation into other areas and settings.

Impacts

One significant impact of the project has been the **systematic inclusion of the job placement module** by the partner organisations. Designed for young people with autism and learning difficulties, this module has become a key component of their programmes, demonstrating a commitment to supporting this demographic. Additionally, the **professional placement module** has been incorporated into training courses aimed at the broader youth demographic by other VET agencies across the three participating countries. The escape room, AR application and assessment kit developed through the project have found **application within VET agencies and institutions** even after the project's conclusion.

Beyond the direct benefits to participants and educational institutions, the project has raised a **greater awareness of communities with special needs**. This awareness includes the employment possibilities for young people with special needs, helping to challenge and change perceptions regarding their potential and capabilities. The project has provided tangible tools and methodologies to support this demographic and played a crucial role in **fostering a more inclusive community perspective** regarding placement possibilities for these young individuals. Additionally, two participants in the project are now working in new initiatives by the partner organisations.

Success factors

According to the interviewees, one of the main success factors of the project was the **diversity of backgrounds among the partner organisations**. This diversity brought an array of skills and perspectives to the project. The interviewees mentioned the value of the insights gained from the Italian partner concerning autism, providing the staff of the project with a deeper understanding of this subject matter. Similarly, contributions from the other partners added substantial depth to the project, demonstrating the strength found in varied expertise and experiences.

The involvement of a **small number of countries** in the project also proved to be advantageous, making the collaboration more manageable and effective. This strategic choice not only streamlined communication and decision-making processes, but also ensured that each partner could contribute meaningfully to the project, leveraging their unique strengths and areas of knowledge for the collective benefit.

Challenges and barriers

The **COVID-19 pandemic** significantly disrupted the project's planned activities, forcing the shift to online collaboration and digital adaptation of the project materials.

One challenge was **adapting the methodologies to diverse educational systems and cultural backgrounds**. To address this, a common web platform for evaluation was developed, actively involving young participants to facilitate direct dialogue and interaction with their peers across Europe, bridging cultures and educational differences.

Adapting to **differing approaches and cultural nuances**, especially with sensitive methods such as interviews and questionnaires, posed another challenge. Clear and direct communication was essential for effective monitoring and research to understand the perspectives of teachers, young learners and parents. Additionally, meeting the **varied needs and expectations** of the partner organisations, each serving different target groups, added complexity necessitatig a balance in developing universally relevant and beneficial outputs.

Lessons learned

According to one interviewee, a key takeaway from the project was the importance of ensuring that the team is **adequately prepared for international endeavours**, particularly with regard to the time required to develop project deliverables.

Another lesson learned was the complexity of working with **organisations that have varying focuses and target groups**. However, the interviewees mentioned that the collaborative spirit among the partner organisations enabled them to overcome challenges and find common solutions, striving towards a universally beneficial outcome while acknowledging the impossibility of creating something that was perfect for everyone.

Conditions for transferability

The tools created during the project are **highly transferable**, as shown by the use of escape rooms and AR applications outside the WeAR project. These outputs are adaptable to various cultural and educational contexts, such as tailoring escape rooms to different environments. The initiative also fostered a **robust network among European educators and professionals**, enhancing collective expertise and sustaining collaborative efforts.

Despite varying approaches across the three countries, the aim was to **develop a universally applicable methods**, driven by a shared understanding of diverse needs and cultural backgrounds. While not every output is universally applicable, they **inspire** organisations worldwide facing similar challenges. The methodologies contain **adaptable elements for various educational contexts**. The project prioritised continuous monitoring and the broad dissemination of results, ensuring the **sustainability and transferability of its outcomes**.

Sources

Desk research

- https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-IT01-KA202-008371
- https://wearproject.eu/en/

Interviews

- Interview with two representatives of the coordinating organisation (21 March 2024)
- Three interviews involving four representatives of partner organisations (12 March 2024, 21 March 2024 and 27 March 2024)

Case study 22

THE VET-IFICATION OF ONLINE GAMING THROUGH INNOVATIVE CHALLENGE BASED LEARNING (CASINO)

SUMMARY

- **Erasmus+ programme type**
  Partnerships for digital education readiness
- **Project reference number**
  2020-1-FR01-KA226-VET-094951
- **Duration**
  01 March 2021 to 28 February 2023
- **Field/sector**
  Education
- **Target group(s)**
  NEETs, VET professionals working with disadvantaged young people
- **Educational level(s)**
  IVET (for learners), CVET (for trainers)
- **Learning settings**
  Online learning, hybrid learning
- **Funding arrangement**
  EUR 255,567.00 (high)
- **Geographical scope**
  France, Croatia, Cyprus, Ireland, Spain, Portugal, Germany, Lithuania
- **Project coordinator**
  Association de Gestion des Fonds Européens, France (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - Callidus ustanova za obrazovanje odraslih, Croatia (school/institute/educational centre – adult education)
  - Centre For Advancement Of Research And Development In Educational Technology LTD-CARDET, Cyprus (research institute/centre)
  - Future In Perspective Limited, Ireland (small/medium-sized enterprise)
  - Instituto Para El Fomento Del Desarrollo Y La Formacion SL, Spain (research institute/centre)
  - Rightchallenge – Associação, Portugal (non-governmental organisation/association/social enterprise)
  - Skills Elevation FHB, Germany (small/medium-sized enterprise)
  - Všį Socialinių inovacijų centras, Lithuania (non-governmental organisation/ association/social enterprise)

Brief description of the project

The CASINO project aimed to enhance VET through gamified, challenge-based e-learning, with a focus on promoting social inclusion and equal opportunities. It involved developing digital games and providing continuing education for VET professionals, accessible via a free MOOC platform without prerequisites. The project's implementation involved various activities, including research, analysis, field experiments, and the creation of tools, resulting in 192 challenge games, an in-service training programme for VET professionals, and an online platform featuring games, a community of practice, and a portfolio of competences and open badges for NEETs.

Relationship to policy priorities

The CASINO project directly aligns with policy priorities centred on engaging young people and enhancing digital skills. By targeting NEETs, the project addresses the crucial need to re-engage this demographic in productive activities, a key policy goal. Furthermore, its emphasis on gamified learning and the development of digital games and resources not only makes education and training more accessible and appealing, but also promotes digital literacy. The project's innovative approach to vocational education (through the use of digital tools and platforms_ supports the broader policy objective of fostering digital competence among young people – crucial for their integration into a digitally-driven economy and society.

Specific objectives covered

- Developing challenge-based e-learning materials for gamified VET (digital games).
- Promoting social inclusion and equal opportunities.
- Developing the basic skills of NEETs and the digital skills of VET professionals.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The CASINO project aimed to address limited access to education, training and employment opportunities for NEETs, recognising the long-term negative impacts on individuals and the economy. The project developed innovative, challenge-based educational resources to empower VET professionals and enhance skills of disadvantaged young people.

The project sought to foster competences such as literacy, numerical reasoning, critical and creative thinking, logical reasoning, information retention, and digital skills. The team adopted a comprehensive approach, simplifying content and involving target groups early to ensure accessibility and engagement.

The project's transnational scope included eight partner countries across Western, Southern Europe, and the Baltics.

Methods and key activities

The CASINO project was founded on the **principle of gamification**, with the goal of appealing to digital natives who are not currently engaged in education, employment or training (NEETs). This innovative approach focused on building the **self-esteem** and **crucial skills** of NEETs necessary for their successful engagement in employment, education and training. A significant part of the project was dedicated to developing resources that could **tackle integrated learning challenges**, with the aim of **enhancing basic and digital skills** for both NEETs and VET professionals.

Source: *provided by interviewee*

The CASINO partnership undertook a broad spectrum of activities, including **research, analyses and field experiments** utilising both internal and external resources, to **develop innovative tools**. The tools implemented were digital and online escape rooms, bespoke materials for VET providers, and a self-paced MOOC environment. A continuous quality assurance process took place to ensure that these materials were accessible and engaging for all participants. Tailored materials for VET providers were tested, and the MOOC environment introduced self-paced and interactive learning options, supplemented by accessibility features on the website to enhance inclusivity.

To bring the project to life, a variety of events were organised, including **youth training sessions**, **multiplier events** and a major event in Ireland that attracted around 10,000 attendees ranging from young individuals to trainers and educational providers. These events were instrumental in introducing the concept of the gamification of learning resources, demonstrating their potential integration into formal and informal learning systems. The spread of COVID-19 further underlined the relevance of the project's approach, leading to the popularisation of hybrid learning events that highlighted the importance of digital skills.

Throughout all phases of the project, a **youth participatory approach** was implemented from design to dissemination, ensuring that the needs and voices of young people were central to the development and finalisation of the deliverables.

Results of the initiative

Outputs

The CASINO project had three major outputs. The first was **digital games that could be accessed on smartphones or tablets**. The second was an **in-service training programme for VET professionals** to increase their digital and pedagogical skills in online environments, to use CASINO resources with their learners, and to create their own resources in formats suitable for online teaching. The third was a **MOOC platform** on which users could access all of the digital outputs of the project without any prerequisites for their use.

The digital breakouts (digital games) were constructed around **real-life challenges and scenarios**, offering users an **engaging and immersive learning experience**. As participants navigate through these breakouts, they encounter situations that mimic real-world problems, enabling them to apply their learning in a simulated yet practical context. This innovative approach makes the learning process not only more interactive, but also more relevant to the users' potential real-life applications.

The MOOC platform houses a variety of **resources and interactive materials**, available for users to engage with at **their own pace**. The goal of the MOOC platform was to provide **accessible, self-directed learning opportunities**. It adopted a gamified approach to learning, encouraging users to explore the content in a way that is both enjoyable and beneficial. Through this platform, participants can access the extensive resources of the project, ensuring that the learning did not end with the completion of the project, but has continued to impact users long afterwards.

Outcomes

Within the scope of the project, **192 numerical challenge games in English** were created, each with four levels of difficulty and divided into six competences: literacy through reading comprehension; numerical reasoning and understanding through mathematical calculation; critical and creative thinking through problem solving; initiative through logical and spatial thinking; learning to learn through information retention and memory development; and digital and technological skills through basic coding exercises. Of these games, **24 have been translated** into Croatian, French, German, Greek, Lithuanian, Portuguese and Spanish.

A central component of the project's outcomes is the **dedicated platform**. This platform serves not only as a repository for the games but also fosters a community of practice among VET professionals. It offers a portfolio of competences for NEETs, and awards **open badges** upon the completion of games, recognising and validating the skills acquired.

Impacts

The CASINO project identified a **significant gap** in the availability of resources aimed at developing digital skills in a manner that would not only educate but also motivate and inspire NEETs. Employing innovative methodologies such as digital breakouts, the project aimed to bridge this gap by creating resources that were both attractive and educational.

This project has significantly **enhanced collaboration and the exchange of practices** among organisations involved in VET. This collaborative attitude has fostered the development of skills among both staff and learners, and initiated systemic changes within the VET sector. The ongoing sharing of materials and support for vocational training organisations is a demonstration of the project's legacy. Communication between the project partners and VET centres continues as they seek clarification and guidance on the use of the project's materials, indicating the sustained relevance and utility of these resources. Throughout the project's lifespan, **impact assessments** were conducted at various stages, revealing significant impacts on various target groups. For organisations, the project has facilitated a rich exchange of good practices and learning experiences, enhancing the skills of the project managers, designers and developers involved. Learners, including VET providers and NEETs, have benefitted from the direct interactions and engagement facilitated by the project.

At a **systemic level**, the project has influenced vocational education trainers, universities and organisations by promoting a philosophy of adopting more innovative approaches to attracting and retaining the interest of learners. While it is challenging to quantify the ripple effects of influencing trainers – who in turn impact learners and their peers –the project's overarching impact on the vocational education landscape is undeniable.

Success factors

The project distinguished itself through the **development of innovative and engaging resources**, notably the digital breakouts, which marked a departure from traditional classroom-based learning. This innovation was crucial to addressing one of the primary challenges faced by the project: reaching and engaging individuals who were not currently involved in employment or education. By **moving away from conventional teaching methods** and introducing materials that captured the attention of these hard-to-reach groups, the project effectively bridged a significant gap.

A key factor contributing to the project's success was the formation of a **strong consortium**. Collaboration among the partners enabled smooth communication and the exchange of constant feedback, ensuring that the resources developed were of high quality and met the needs of the target groups.

Challenges and barriers

Consistent engagement of the project participants proved to be a challenge. It became clear that providing continuous support and feedback was vital to enhancing the learning experience, highlighting the necessity for adaptive strategies in projects aimed at NEETs and disadvantaged youth. Furthermore, it also proved challenging to ensure the **effective engagement** of project participants. Despite the project partners' efforts to combine real-life problems, various thematic topics, and diverse skills and knowledge, reaching the target audience remained a significant hurdle. This was further evidenced through the MOOC platform, where it was observed that **many participants started the course but did not complete it**. Discussions towards the end of the project, aimed at understanding the reasons

behind this drop-off, revealed that participants often required greater direction and guidance than the project provided. When faced with challenging sections, lack of clear support led many users to discontinue their learning journey.

Constraints in the project's timeline evidently was another challenge. A consensus was reached that allocating more time to the implementation of the pilot, as well as the overall execution of the project, might potentially have mitigated some of the engagement issues mentioned above.

Moreover, the **digitalisation** of content posed its own set of challenges, particularly in catering to varied learning styles and levels of literacy – as notably observed in France, where according to one interviewee, some project participants possessed insufficient linguistic capabilities to effectively partake in the project. However, the project's commitment to a flexible and learner-centred approach allowed adaptability. By enabling learners to progress at their own pace and incorporating their feedback into the project's development, the project partners endeavoured to tailor the content more effectively to meet the participants' needs.

Lessons learned

A key lesson learned was the **necessity of providing more guidance** for learners to bolster engagement and facilitated deeper learning outcomes. Despite creating guides on registering on the platform and accessing materials, the project partners discovered that some participants, particularly NEETs, lacked the basic digital skills required for such tasks. This realisation highlighted the need for projects to **consider the digital literacy levels of their target groups**, and to provide tailored support accordingly.

Feedback also highlighted the need to **extend the project's duration** to achieve a more profound impact. More time would allow the development of additional modules and resources in response to the feedback.

The CASINO project's **success in developing key skills** such as literacy, numerical reasoning, critical and creative thinking **and digital skills**, while **simplifying content and involving the target groups early on**, proved crucial in making learning materials accessible and engaging. The project's ability to **attract and motivate a traditionally hard-to-engage demographic** through innovative learning materials, underlined the significance of creativity and collaboration in educational initiatives. This approach highlighted **the potential of non-traditional methods and strong partner networks** to achieve significant impacts in the educational landscape.

Conditions for transferability

According to the partners, the outputs of the CASINO project were designed with the **flexibility to localise and tailor materials** to meet the specific needs of various target groups in various countries. This adaptability extended to the **innovative use of digital breakouts**, encouraging educators not just to utilise the materials developed throughout the project, but also to embrace the underlying concept of digital breakouts and to adapt it to their unique contexts. This points towards a promising future in which the project's methodologies and approaches can be further developed and applied in various educational contexts, offering a model for addressing similar challenges in vocational education and beyond.

According to one interviewee, a testament to the project's broad applicability and potential for transferability was the interest it attracted from over 25 countries during the needs analysis phase. This widespread interest underlines the **universal relevance of the project's methodologies and resources**, despite the differing rates of NEETs among the countries concerned. It highlights the project's capacity to make a significant contribution across a diverse array of educational settings and subject areas, far beyond its initial scope.

Sources

Desk research

- 'The VET-ification of Online Gaming through innovative challenge based learning' on Erasmus+ website
- 'The VET-ification of Online Gaming through innovative challenge based learning' project website
- 'The VET-ification of Online Gaming through innovative challenge based learning' project on Facebook

Interviews

- Interview with a representative of the coordinating organisation (19 March 2024)
- Interview with a representative of a partner organisation (29 February 2024)
- Interview with a representative of a partner organisation (2 April 2024)

Case study 23

ENTREPRENEURSHIP IN 365 DAYS

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2019-1-LV01-KA204-060354
- **Duration**
  01 September 2019 to 31 August 2022
- **Field/sector**
  Entrepreneurship
- **Target group(s)**
  Unemployed adult learners
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 214,066.00 (high)
- **Geographical scope**
  Greece, Latvia, Lithuania, Poland, Slovenia, Spain
- **Project coordinator**
  Macibu centrs 'EVA-93', Latvia (school/institute/educational centre – adult education)
- **Key partners involved**
  - Akademia Humanistyczno-Ekonomiczna w Lodzi, Poland (higher education institution, tertiary level)
  - Institute of Entrepreneurship Development, Greece (non-governmental organisation/ association/social enterprise)
  - Neotalentway S.L., Spain (school/institute/educational centre – adult education)
  - VšĮ Baltijos Edukacinių Technologijų Institutas, Lithuania (research institute/centre)
  - Zbornica za razvoj podjetnikov, Slovenia (non-governmental organisation/ association/social enterprise)

Brief description of the project

The E365 project was based on the EntreComp study, which defines entrepreneurship as a transversal competence, applicable to all areas of life. The project aimed to address the lack of entrepreneurial competences among unemployed adults in Europe, recognising the different traditions of adult education in entrepreneurship in the partner countries. Through the development of two intellectual outputs, 'Weekly Inspiration' and 'E365 – Everyday Challenges', the project created a self-directed learning platform offering weekly training resources, daily entrepreneurial challenges and monthly success stories to support the development of entrepreneurial skills and promote a supportive entrepreneurial culture.

Relationship to policy priorities

The E365 project directly supported the policy priority of providing outreach, guidance and awareness-raising for young people, especially NEETs, by addressing the entrepreneurial skills gap among unemployed adults in Europe. By developing a self-directed learning platform, the project responded to the autonomous learning preferences of young people, maintaining their interest and cultivating a habit of lifelong learning, which is crucial for navigating career paths. In addition, the project's emphasis on creating a supportive entrepreneurial culture and recognising the diverse educational traditions of the partner countries is in line with innovative approaches to engaging NEETs and other vulnerable groups, providing them with valuable skills and encouraging them to explore non-traditional career paths such as entrepreneurship.

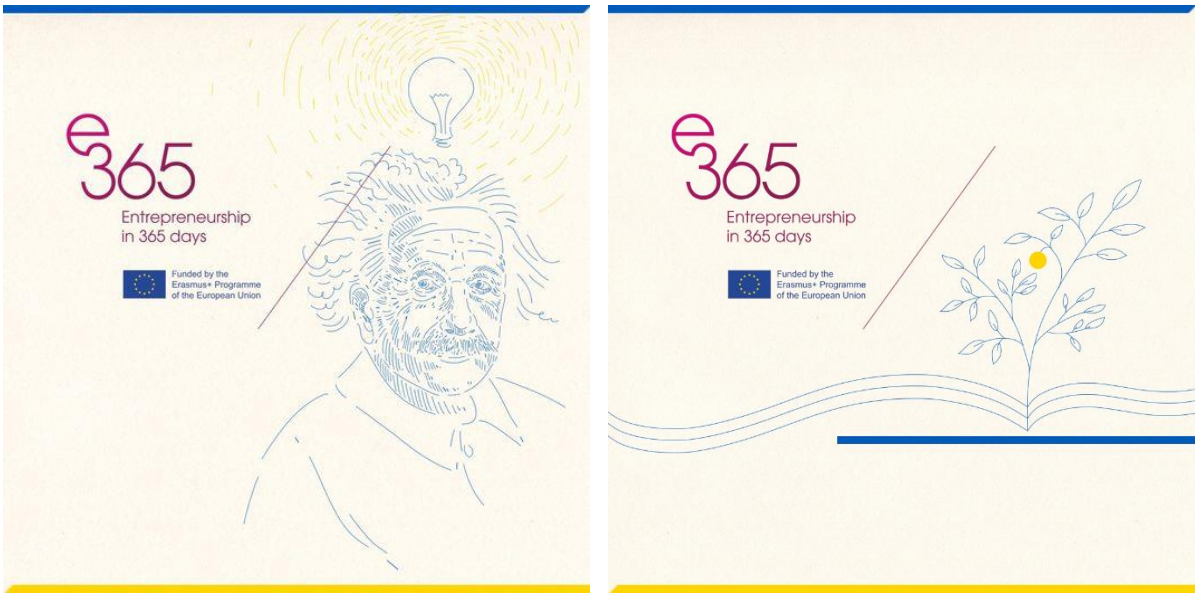
Specific objectives covered

- Developing and extending a self–directed learning platform to improve adult education in the six project partners' countries.
- Fostering the development of entrepreneurship skills among unemployed adult learners, including mentorship components to facilitate the empowerment of adult learners.
- Developing educational opportunities based on the necessities of extending entrepreneurial competences
- Fostering a more supportive entrepreneurial culture in the EU, using the results of E365 as a positive message to highlight the potential of entrepreneurship in terms of economic contributions, innovation and job creation.

Type and scope of the project, methods used, and key activities

Type and scope of the project

E365 was an educational and developmental initiative to improve the entrepreneurial competences of unemployed adults across Europe. The scope of the project was transnational, involving partners from six European countries, each bringing its own unique approach and traditions in adult education to the endeavour. This initiative addresses the disparities in entrepreneurial activity and skills in different contexts, from the highly entrepreneurial regions of Northern Europe and the Baltics to areas with lower entrepreneurial engagement such as Spain. By aiming to create a unified, inclusive and diverse training system, the project aims to meet the varying needs of adult learners across Europe, with a particular focus on digital skills, which are essential for entrepreneurship in today's market.



Source: *Facebook page of the project*

Methods and key activities

The methods and activities of the E365 project were based on a holistic educational approach. A cornerstone activity of the project was the **collaborative development** and **continuous refinement of educational materials**, facilitated by transnational project meetings. These meetings, both virtual and face-to-face, were instrumental in fostering exchange, alignment and shared understanding between partners with different cultural and educational backgrounds. This collaborative approach ensured that the project's content was not only comprehensive, but also adaptable to the diverse contexts of adult learning across Europe.

Another key activity was the **design and implementation of a self-learning training platform**, which was conceived as a dynamic, user-friendly environment to facilitate self-directed learning. This platform was structured around the innovative concept of integrating learning into the daily lives of users, with materials organised into thematic sections corresponding to the different stages of entrepreneurial development. The design of the platform emphasised ease of access and engagement, encouraging users to take ownership of their learning journey.

Source: E365 website

In parallel, the project focused on the **practical application of entrepreneurial concepts** through regular challenges and interactive content. This hands-on approach aimed to bridge the gap between theoretical knowledge and real-world application, thereby enhancing participants' practical understanding and skills. The inclusion of success stories and case studies further enriched this experience, providing inspiration and real-life context to the learning materials.

Underpinning these activities was a **mechanism for continuous feedback and evaluation**, embodied in the project's performance monitoring system. This system was essential for tracking progress, identifying learning outcomes, and fostering a culture of reflection and continuous improvement among learners.

The project coordinator emphasised that engaging NEETs required a tailored approach, based on evidence recognised by the European Commission. In particular, it involves the understanding that NEETs often face challenges not at the primary level of literacy, such as dyslexia, but rather at the secondary level of sustaining attention and comprehension over longer periods of time. This insight led to the development of concise, digestible content in line with the preferences observed in this demographic, who tend to favour **short, engaging formats** similar to those found on platforms such as Instagram. **This 'micro-teaching' methodology**, which breaks information down into segments of 10-15 minutes' duration, proved effective in maintaining engagement. In addition, recognising the importance of continuous engagement and support, the project included a **mentoring component**, complemented by the strategic use of reminders, to reinforce learning and ensure sustained participation among NEETs. This approach was specifically designed to address the unique learning styles and needs of the NEET population.

Results of the initiative

Outputs

The initiative successfully developed several key outputs that laid the foundations for its objectives. A notable achievement was the creation of a comprehensive **self-learning training platform**, which was made available in seven languages to cater to a diverse European audience. This platform was structured around two main intellectual outputs: **'Weekly Inspiration'** and **'E365 – Everyday Challenges'**. The former provided 52 weekly training resources, systematically organised into four thematic sections corresponding to the seasons, each aimed at building different facets of entrepreneurial competence. The latter provided 208 practical challenges and 12 success stories, designed to enable participants to apply theoretical knowledge in real-life contexts. In addition, the project facilitated **nine transnational meetings**, combining virtual and face-to-face formats, involving a total of **110 participants** in joint planning and knowledge sharing. Another significant output was the establishment of a **certification mechanism**, which awarded participants a certificate upon successful completion of 60% of the course content, thereby formalising their learning achievements. The creation of a **detailed algorithm for the transition of traditional learning to online formats** due to COVID-19 is another example of the project's tangible outputs.

Outcomes

The initiative led to several immediate outcomes indicative of its effectiveness and reach. First, there was a marked **improvement in entrepreneurial competence among participants**, as evidenced by their engagement with and progression through the platform's materials and challenges. The platform recorded 2,498 training sessions by 31 August 2022, reflecting both significant participant engagement and the practical utility of the resource. According to the project coordinator, the main outcome that the project aimed for (and managed to achieve) was the transformation of previously unemployed individuals into successful business owners and professionals, and the empowerment of stay-at-home mothers to re-enter the job market.

The integration into the platform of an achievement-monitoring system facilitated the effective tracking of learning progress, providing participants with insightful feedback on their development and accomplishments. Furthermore, the platform's multilingual design significantly broadened its **accessibility**, allowing a wider demographic reach and fostering inclusivity in entrepreneurial education across various linguistic groups. In addition, the project's ability to adapt to online delivery led to its extended reach, enabling participants from rural areas and varied backgrounds to access and benefit from the programme.

Source: Facebook page of the project

Impacts

The long-term impacts of the project extend beyond its immediate educational achievements to encompass broader societal and systemic changes. By providing accessible, comprehensive entrepreneurial education, the initiative has contributed to **fostering a more supportive entrepreneurial culture** within the European Union. This, in turn, aligns with broader objectives of economic innovation and job creation, addressing the critical need for the upskilling of unemployed adults. The project's global reach, evidenced by a notable percentage of users coming from outside the EU, highlights its international appeal and potential to influence entrepreneurial education. Moreover, the initiative supported the European agenda for **adult learning**, promoting continuous personal and professional development among participants, and encouraging them to maintain an ongoing engagement with skills enhancement and entrepreneurial activities.

The successful transition of educational programmes to online platforms has set a new **precedent for distance education**, particularly in the area of adult learning. In the case of E365, this shift caused had a chain reaction, with the project's methodologies and technologies being adopted by other programmes, thereby enhancing the overall educational landscape. The project's collaboration with Slovenian partners and its subsequent contract with local unemployment services illustrate its expanding influence and the potential for **sustainable, long-term partnerships**. Furthermore, the project's role in catalysing discussions and plans for future initiatives, including the adoption of microcredentials and competence systems, indicates its **impact on the evolving educational and professional standards**.

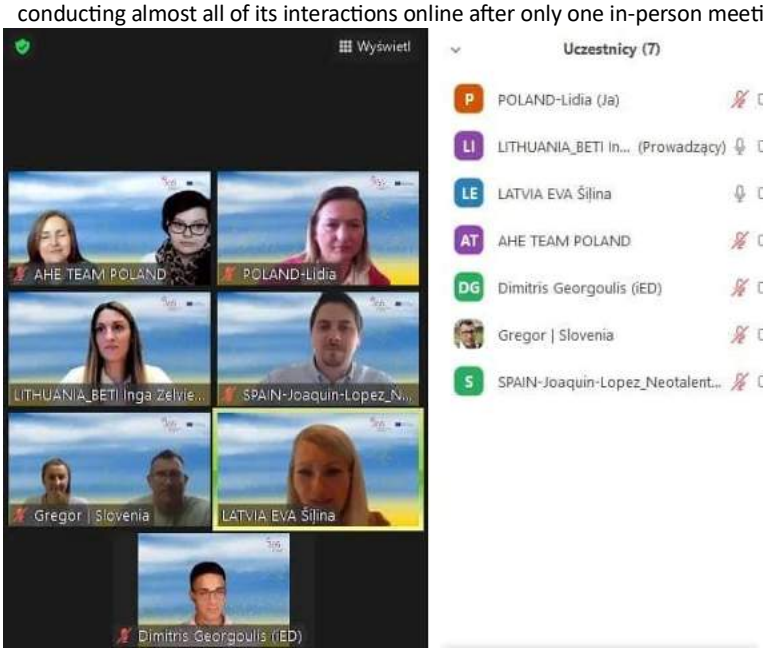
Success factors

A key success factor identified by the project coordinator was the project team's commitment to **thorough planning and effective communication**. Despite facing the unexpected challenge of transitioning to online collaboration during the COVID-19 pandemic, the team's ability to maintain detailed control systems and to adapt quickly to new digital tools and workflows enabled them to navigate these difficulties successfully. Their dedication to maintaining strong personal contacts and ensuring careful file management played a crucial role in the project's ability to meet its objectives.

Source: https://www.erasmusplus.lv/

Challenges and barriers

The key challenges for the E365 project related to the unforeseen circumstances brought about by the **COVID-19 pandemic**. Initially planned with multiple face-to-face meetings, the project had to adapt quickly to the new reality, conducting almost all of its interactions online after only one in-person meeting. This shift required a rapid and **intensive adjustment to digital collaboration**. This was a significant challenge, given the scope and complexity of the project, and involved the creation, sharing, testing and piloting of over 1,000 slides of content.



The difficulties involved in this **transition to online operations** were compounded by the use of GoToMeeting as the primary platform for communication and collaboration – a tool that was not as widely used or familiar at the time as Zoom or Microsoft Teams. Although GoToMeeting provided the necessary features such as transcription services, the project team had to quickly learn and adapt to this new platform, which added an additional layer of complexity to their work.

Source: Facebook page of the project

According to the respondent from a coordinating organisation, the **intensive nature of the job** was another major challenge. The need to redesign the project's approach "on the go" while maintaining a high level of detail in the control system placed significant demands on the team. This required a high degree of accuracy in file management and a robust system to ensure that all materials were properly prepared, shared and updated in real time, ensuring that the project's high standards were maintained despite the shift to an entirely online format.

Lessons learned

According to an interview with the project coordinator, the lessons learned from the project highlight **the importance of leadership and communication** in driving positive change and fostering an environment of learning and growth. Project leaders and educators are reminded that their role extends beyond mere instruction; that they are catalysts for motivation and inspiration among their peers or students. This involves not just the imparting of knowledge, but also energising others to pursue their goals and aspirations.

In addition, the value **of transparency and honesty in communication** of the project partners has been underlined. Admitting mistakes is integral to building trust and credibility. It demonstrates humility and a willingness to learn, encouraging others to do the same.

Moreover, the project emphasises the importance of **integrating and connecting different themes or subjects**. This approach helps in painting a comprehensive picture, and enhances understanding by demonstrating how different concepts interlink and apply to real-world situations. Concrete examples help in illustrating abstract concepts, making them more relatable and easier to understand. They bridge the gap between theory and practice, providing clear insights into how knowledge can be applied in practical scenarios.

Conditions for transferability

The transferability of the E365 model to different contexts or regions depends on a set of crucial conditions. First, there needs to be a clear understanding that the project must be adaptable to local educational traditions, cultural sensitivities and the specific needs of the target audience. In particular, unemployed adult groups must have **access to adult learning** without stigma or other barriers.

Access to appropriate digital infrastructure is also essential for replicating the project's self-learning platform. Regions looking to adopt the E365 model should ensure participants have reliable internet access and the digital skills necessary to navigate the online resources effectively.

The project's **micro-learning approach**, which proved effective in maintaining engagement among learners, particularly NEETs, should be maintained. Breaking down information into short, digestible segments caters to varying attention spans and encourages regular interaction with the material.

Another crucial condition is the establishment of a **robust mentoring and support system**. Prospective adopters should create a framework in which learners receive continuous guidance and encouragement, enhancing the learning experience and promoting persistence, irrespective of whether the learning happens in formal or non-formal setting.

Customisation of the **content's** plays a significant role in the project's transferability. Learning materials should be easily adaptable to reflect the local business environment, making the educational experience as relevant as possible to its new audience.

The sustainability of the project in a new setting requires a **viable funding model**, whether through government support, private partnerships or educational grants, ensuring the initiative remains operational beyond its initial phase.

Lastly, **commitment to a process** of **continuous improvement** is crucial. Regular updates and refinements based on feedback from learners and their changing needs will help to maintain the relevance and effectiveness of the project.

Sources

Desk research

- 'Entrepreneurship in 365 days' on Erasmus+ website
- 'Entrepreneurship in 365 days' Website
- 'Entrepreneurship in 365 days' on Facebook

Interviews

- Interview with a representative of the coordinating organisation (26 February 2024)
- Interviews with representatives of two partner organisations (both on 08 March 2024)

Case study 24

EXPERIENCING AUGMENTED REALITY ON CULTURAL HERITAGE APPLICATIONS IN IVET (CULTAPP)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2018-1-DE02-KA202-005088
- **Duration**
  01 November 2018 to 31 August 2021
- **Field/sector**
  Cultural sector
- **Target group(s)**
  Primary: VET teachers
  Secondary: VET learners
- **Educational level(s)**
  CVET (teachers), IVET (learners)
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 284,170.75 (high)
- **Geographical scope**
  Bulgaria, Germany, Greece, Italy, Netherlands, Poland
- **Project coordinator**
  Fachhochschule des Mittelstandes (Fhm) Gmbh – University of Applied Science, Germany (higher education institution, tertiary level)
- **Key partners involved**
  - CrystalClearSoft Anonymos Etaireia Parochis Ypiresion Logismikou, Greece (small/medium-sized enterprise)
  - Finance & Banking, Associazione per lo Sviluppo Organizzativo e delle Risorse Umane, Italy (non-governmental organisation/association/social enterprise)
  - Istituto Tecnico per il Turismo Marco Polo Rimini, Italy (school/institute/educational centre – vocational training, secondary level)
  - Natsionalna Asotsiatsia Na Resursnite Uchiteli, Bulgaria (non-governmental organisation/association/social enterprise)
  - PAIZ Konsulting Sp. z o.o., Poland (school/institute/educational centre – adult education)
  - Stichting Onderwijs Midden Limburg (SOML), Netherlands (school/institute/educational centre – general education, secondary level)

Brief description of the project

The CultApp project aimed to raise awareness of Europe's cultural heritage among young learners at initial vocational education and training (IVET) institutions, using augmented reality (AR) as a tool to engage students in a joyful and entertaining exploration of cultural assets. The consortium, consisting of institutions from various European countries, successfully implemented objectives including the development of three intellectual outputs: a compendium of AR practices, an online teacher training programme, and an augmented learning project, with tangible impacts on learners' skills and increased collaboration between IVET institutions.

Relationship to policy priorities

The relevance of the project to the development of digital skills among VET students lies in its innovative approach to integrating AR into cultural heritage education. Learners' engagement in digitally enhanced experiential learning experiences allows them to strengthen their digital competences while exploring and interpreting cultural and historical contexts. The project fostered a learner-centred educational environment stimulating transversal skills and equipping students with the technical know-how required to design and implement AR projects.

Specific objectives covered

- Contributing to raising awareness of Europe's cultural heritage among young people at IVET institutions.
- Introducing AR as a tool allowing learners to experience cultural assets in a joyful and entertaining way.
- Promoting a different set of 21st-century skills to young learners, including aesthetic, digital and civic competences, critical thinking, creativity and problem solving.
- Creating tools and strategies to support IVET stakeholders towards integrating innovative AR-based teaching and learning practices into their educational activities.

Type and scope of the project, methods used, and key activities

Type and Scope of the Project

The CultApp project was an interdisciplinary educational initiative inspired by the European year of cultural heritage (2018). The project sought to bridge the gap between traditional learning and the demands of the digital age by using AR technology to inspire young people in vocational schools to engage with Europe's culture. The project's scope encompassed the development and implementation of an open online teacher training programme, the creation of AR learning materials, and the facilitation of collaborative projects among students and teachers from different European countries. CultApp aimed to modernise VET curricula by integrating digital skills and cultural awareness, fostering transversal competences such as creativity, collaboration and intercultural communication, and strengthening partnerships between educational institutions, cultural organisations and the tourism industry.

Methods and key activities

At the core of the CultApp project was the development and implementation of an **open online teacher training programme** designed specifically for art, history, media or graphic design educators, and aimed at deepening their understanding of the pedagogical value of AR. By enabling teachers to use AR tools to teach cultural heritage-related subjects, the project empowered them to design and implement projects that would be both digitally enhanced and adapted to the needs of the curriculum, thereby facilitating an innovative learning environment.

Another pivotal aspect of the CultApp project was **augmented learning project work**, which fostered collaboration between teachers and learners from different participating countries, particularly Italy, Germany and the Netherlands. This collaboration was aimed at developing AR scenes narrating the history and potential futures of selected cultural assets in cities such as Florence, Bielefeld and Roermond. Working together, participants were able to share knowledge and insights, and be inspired by each other's pedagogies and insights.

In addition to collaboration between teachers, the CultApp project emphasised the importance of student engagement. By involving learners in the process of content creation, such as taking photos, making sketches, writing texts, and creating AR scenes, the project adopted a **student-centred pedagogical approach**. This approach contributed to the development of students' digital skills, in addition to fostering their creativity, teamwork and active learning.

The project also resulted in the production of awareness-raising materials such as **publications**, as well as an **online platform showcasing learner-generated content.** Dissemination materials further extended the project's outreach and impact, providing valuable resources for ongoing education in cultural heritage.

Results of the initiative

Outputs

One of the key outputs of the project was the development of an **open online teacher training programme**, designed specifically for art, history, graphic design and digital media educators. This programme included **education materials** showcasing the visual and textual materials produced by learners as a result of collaborative project work. These educational materials were designed to help teachers understand and leverage the pedagogical value of AR in their teaching methodologies – focusing in particular on cultural heritage subjects – and could be replicated or adapted for other educational needs. To practice these AR skills, **17 AR markers** were designed for use with the AR software Blippar to provide immersive, interactive learning experiences for users. Alongside this, the project facilitated **augmented learning project work**, an initiative that encouraged collaboration between teachers and learners from the project partner countries. Participants worked together to develop AR scenes reflecting the cultural heritage of selected locales, enhancing their educational experience through technology.

Outcomes

The CultApp project led to several positive outcomes that impacted both teachers and learners. One of its primary outcomes was the **enhancement of digital and pedagogical skills** among teachers, who learned to apply AR effectively in their teaching practices. This advance not only modernised teachers' instructional methods, but also made cultural heritage education more engaging and accessible to students. As a direct result of the project, learners experienced **increased engagement and the development of transversal skills** such as creativity, digital literacy and intercultural communication. This hands-on, immersive approach to learning, facilitated by AR technology, enabled students to interact with and understand cultural heritage in new and profound ways. In addition, the project fostered **strengthened collaboration** between VET institutions across Europe, enhancing their educational networks and providing a platform for sharing innovative teaching practices and cultural insights.

Impacts

One of the most significant impacts of the project has been the **modernisation of VET curricula** to incorporate AR and cultural heritage topics in order to meet the evolving needs of the digital age. This shift towards more interactive and technology-enhanced learning environments promotes a learner-centred approach, making education more appealing and

relevant for students. Furthermore, the project has been instrumental in **promoting common European cultural and historical values**, enhancing learners' understanding and appreciation of their shared heritage, and fostering a sense of European identity and unity. The CultApp project has also laid the groundwork for **innovative models** for **cooperation** between educational institutions, cultural organisations and the tourism industry. By demonstrating the effectiveness of integrating technology with cultural education, the project has paved the way for similar initiatives encouraging the adoption of AR, as well as other digital tools in various educational and cultural contexts.

Success factors

According to the project coordinator, at the core of the project's success was a **strong belief and commitment in the project vision** that was shared by all of the consortium members. This collective dedication, as well as the project's **adaptability and flexibility in the face of unforeseen challenges** such as the COVID-19 pandemic, was crucial to maintaining a clear focus on the project's objectives, fostering an environment of mutual support and goal-oriented collaboration.

Another significant factor was the project's thorough **understanding of the needs of its target audiences**. By actively engaging with teachers and learners within the VET sector, the CultApp initiative was able to tailor its content and methodologies to meet specific educational and developmental needs.

CultApp's success was greatly enhanced by the **seamless cooperation among educational institutions, vocational institutes and cultural organisations** across different countries. This collaborative spirit facilitated the exchange of ideas, best practices and constructive feedback, leading to a more integrated and cohesive approach to the project's execution.

Lastly, the project's focus on **sustainability and transferability** ensured that its outcomes would have a lasting impact beyond the immediate scope of the initiative. By developing educational strategies and resources that could be adapted for use in other contexts and sectors, CultApp set the stage for the wider adoption of AR in educational settings, contributing to the ongoing evolution of teaching and learning practices.

Challenges and barriers

One of the main challenges faced by the project was the need to adapt to the **COVID-19 pandemic**, which impacted the ability of students and teachers to engage in traditional, in-person educational activities. This sudden shift required rapid adaptation to online and remote learning environments, presenting logistical and technical challenges - particularly for participants unfamiliar with digital tools and platforms. Even though the project's methods and key activities were initially designed for a hybrid learning environment, the overall transition to online teaching was seen as a challenge by the consortium partners, as they mentioned in the interviews.

Another significant barrier was the **varying levels of digital literacy** and readiness among teachers and learners. Despite the project's focus on enhancing digital skills through the use of AR, the initial differences in technological proficiency required additional effort in terms of training and support to accommodate the diverse needs of all participants.

Engagement and motivation also presented challenges, especially in sustaining the interest of students and teachers in the project's activities. The novelty of AR technology, while initially appealing, required continuous effort to integrate it meaningfully into educational curricula and to ensure that it was not perceived as a mere gimmick, but as a valuable educational tool.

Lastly, the project encountered **difficulties in fostering collaboration across different cultural and institutional contexts**. Differences in educational approaches, communication styles and expectations among the partner institutions from various countries sometimes led to misunderstandings or misalignments in project objectives and implementation strategies. For example, the project coordinator noticed that in national settings where learning was traditionally teacher-centred, implementation of the project required some paradigmatic change, which was not always easy.

Lessons learned

According to the project partners, **CultApp** demonstrated the value of integrating real-world applications into educational curriculums. **Engaging with local environments such as nature parks and cultural sites provided the dual benefit of promoting these locales while enriching the learning experience**. This approach was instrumental in fostering a deeper connection between learners and their studies, allowing them to be both creative and practically involved in their learning process.

The project's success in collaborating with various stakeholders, including schools, tourism agencies and SMEs, highlighted **the importance of partnerships** in educational initiatives. Moreover, customising access to European studies and local culture enabled a more tailored and impactful learning experience. This was further enhanced through the creation of a publication that served as both a reflective tool and a guide for educators to adopt and valorise this pedagogical approach.

The involvement of a partner in Florence that specialised in tourism, underscored the **potential for geographical and sector-specific specialisation** to strengthen the educational trajectory and involve more SMEs in the process.

In essence, the project underlines the significance of practical engagement, stakeholder collaboration, and the adaptation of education to local contexts as key drivers for enriching vocational education and training.

Conditions for transferability

A key aspect of this project's success and transferability lies in the **strong belief and commitment shared by the project team** towards its vision. Making sure that all members are aligned in achieving common objectives is crucial not only for the maximisation of project results, but also for smooth implementation and the sustaining of partnerships.

Effective collaboration with vocational institutions has been a cornerstone of the project's implementation. Such partnerships not only facilitate the practical application of learning, but are also essential for integrating innovative pedagogical approaches within the VET framework.

The focus on active learning and student engagement implemented within the project offers a **flexible model that is adaptable across various educational contexts and disciplines**. The sustainability and long-term impact of the project are supported by the materials, tools and curricula produced, which have remained beneficial to participants and partner institutions beyond the project's conclusion

Another aspect ensuring transferability is the **tailoring of the project to the specific needs and expectations of the target audience**. In the case of CultApp, this meant bringing new technologies to the classroom while promoting the European Year of Culture agenda.

The project's **forward-looking use of digital technologies** such as AR, as well as its openness to exploring virtual reality (VR) and mixed reality, illustrates its commitment to incorporating current and emerging tech trends. This approach not only enhances learning experiences but also ensures that projects remain adaptable and relevant.

Customisation and flexibility in terms of both educational content and methodologies are key to the adaptability of the project for the needs of learners and to different sectors within VET. Future projects could benefit from adopting a modular design allowing such adaptability, ensuring that educational interventions are inclusive and effective.

Sources

Desk research

- Cultapp project website
- Cultapp project on Erasmus + website

Interviews

- Interview with two representatives of the coordinating organisation (26 February 2024)
- Interview with a representative of a partner organisation (NGO) (27 February 2024)
- Interview with a representative of a partner organisation (VET organisation) (7 March 2024)

Case study 25

EUROPEAN SENIOR VOLUNTEERING THROUGH MENTORING FOR THE SOCIAL INCLUSION OF YOUNG PEOPLE IN DIFFICULTIES (EvolYou)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-IT01-KA202-007472
- **Duration**
  01 October 2019 to 31 January 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Primary: young people including migrants, VET students with special needs or economic problems, apprentices and VET students at risk of dropping out or NEETs.
  Secondary: senior population
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 244,427.50 (high)
- **Geographical scope**
  Belgium, Italy, France, Finland, Germany, Spain
- **Project coordinator**
  Volontariato Torino, Italy (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - Association Generale des Intervenants Retraites Agirabcd, France (non-governmental organisation/association/ social enterprise)
  - Echanges et Consultations Techniques Internationales, France (non-governmental organisation/association/social enterprise)
  - Immaginazione e Lavoro società cooperativa, Italy (school/institute/ educational centre – adult education)
  - Nestor Partners ry, Finland (non-governmental organisation/ association/ social enterprise)
  - Office Technique D'etudes et de Cooperation Internationales, France (non-governmental organisation/association/social enterprise)
  - Senior Experten Service, Germany (non-governmental organisation/association/ social enterprise)
  - Seniors Españoles para la Cooperación Técnica, Spain (non-governmental organisation/association/social enterprise)
  - The Confederation of European Senior Expert Service, Belgium (non-governmental organisation/association/social enterprise)

Brief description of the project

The EvolYou project focused on enhancing the key competences and employability skills of disadvantaged young people aged 15-30 through an intergenerational mentoring programme involving senior expert volunteers. Simultaneously, the project aimed to promote active aging by encouraging social engagement among the senior population.

Relationship to policy priorities

EvolYou was designed to address the challenge of increasing numbers of NEETs within the EU by focusing on providing inclusive training opportunities. The project was aligned with the policy goal of re-engaging young NEETs by offering them pathways back into education or the workforce. EvolYou specifically aimed to improve key competences of disadvantaged young people while involving senior volunteers in mentoring, as well as changing their attitudes towards active ageing.

Specific objectives covered

- Improving the level of key competences and skills among disadvantaged young people
- Developing a proposal for active ageing by fostering the social involvement of the senior population
- Scaling up the VeRa initiative – a good mentoring practice, successfully applied in Germany for more than 10 years – and adapting it to the national contexts and target groups in each of the EvolYou consortium members' countries

Type and scope of the project, methods used, and key activities

Type and scope of the project

The EvolYou project was an intergenerational initiative designed to increase the engagement of young people not involved in education, employment, or training (NEETs) and retired senior citizens. By leveraging the experiences and knowledge of senior expert volunteers, the project offered tailored mentoring schemes aimed at improving the key competences of young people, particularly those competences relevant to the labour market and social inclusion. Its innovative approach focused on creating sustainable pathways into VET, addressing the urgent need for inclusive education and proactive job-seeking behaviour. The scope of EvolYou was informed by the successful VerA mentoring model applied in Germany for many years. The approach involved direct support for individuals, and also contributed to broader policy discussions and systemic changes within education and employment systems, as well as active ageing. Through its dedicated training courses, Living Labs, and extensive dissemination activities, EvolYou aimed to create a lasting impact, which was sustained through three follow-up projects ('Mentoring Across Borders (MAB)','Objectif Réussir Apprentissage (ORA)', and 'European Senior Together (EST)').

Training for senior volunteers. Source: provided by project partner

Methods and key activities

The EvolYou project, which targeted disadvantaged young people aged 15-30, was designed around an innovative approach of intergenerational mentoring, in which senior expert volunteers contributed to the upskilling of youth, focusing in particular on employability and soft skills as well as self-esteem and motivation. This unique mentoring environment aimed not only to counteract the conditions of vulnerability and disadvantage among the young participants, but also to foster active ageing and social involvement among the senior population. EvolYou replicated the mentoring model of the German VerA initiative, adapting it to different national contexts and target groups across Italy, France, Finland and Spain, engaging with the vocational education institutions at a local level.

The project's implementation phase kicked off with a 'Winter School' of training for trainers in November 2019 in Bonn. This marked the beginning of the 'didactic experimentation' or pilot phase, which spanned from October 2019 to November 2021. This phase involved training courses and 'Living Labs' of mentoring in tandem, in which each mentee was paired with a mentor, fostering a direct and impactful learning and development process. The pilot specifically catered to differing target groups in each of the partner countries, from young migrants in Italy to VET students with special needs or economic challenges in Spain, apprentices and VET students at risk of dropping out in France, and migrants and low-qualified apprentices in Finland – thereby demonstrating the project's adaptability and responsiveness to the diverse needs of learners.

An integral part of EvolYou's strategy was its intensive recruitment of new mentors and mentees, ensuring the project's reach and impact extended beyond the immediate participant group. Through these coordinated activities and methodologies, EvolYou not only addressed the immediate needs of its target groups but also laid the groundwork for sustainable change in the systems of training and working, inspiring further projects on intergenerational mentoring in different parts of Europe.

Results of the initiative

Outputs

One of the key outputs of the EvolYou project was publication of a **methodological manual**, which was translated into six European languages. This manual provides comprehensive guidelines and models for implementing the new mentoring methodology, designed to facilitate the pairing and support processes between mentors and mentees.

To ensure the applicability of the project, **didactic experimentation** was conducted across four European countries. This included the **development of specialised curricula** tailored to the needs of targeted groups: in Italy, young migrants aged 18-30; in Spain, VET students aged 16-20 with special needs or economic problems; in France, apprentices and VET students at risk of dropping out or NEETs aged 15-25; in Finland, migrants and low-qualified apprentices aged 18-30. The pilot involved a first group of 20 mentors, who further transferred their knowledge to 90 more mentors. These

mentors in turn engaged with a total of 187 mentees (Finland: 12 mentors/22 mentees; France: 60 mentors/70 mentees; Italy: 13 mentors/40 mentees; Spain: 5 mentors/55 mentees).

Alongside these educational resources, **a set of recommendations** was compiled and translated to six languages. The recommendation paper was aimed at guiding policy improvements in the realms of volunteering, mentoring and intergenerational cooperation, and was intended engage with decision-makers involved in the processes of stimulating active employment policies, promoting orientation in the choices of professional training, and counteracting youth unemployment. These guidelines could also inform policymakers aiming to promote volunteering as a tool to strengthen the active role of older people in society.

Outcomes

Throughout the duration of the project, the 187 mentees received **targeted training and mentorship**, contributing to an improvement in their employability and soft skills. This was facilitated through the Living Labs and mentoring sessions, which provided practical, hands-on learning experiences. Mentors, who were also key participants, benefited from a **structured training programme** that prepared them to effectively support and guide their mentees. This **bilateral development** ensured that both mentors and mentees enhanced their competences and understanding, thereby fostering a mutually beneficial learning environment.

Impacts

By enhancing the skills and employability of NEETs, the project contributed to reducing youth unemployment and improving social inclusion within the EU. The project's dissemination activities and policy recommendation papers serve to influence ongoing political discussions, advocating for systemic changes that could promote more inclusive education and employment opportunities. In addition, by establishing a scalable and adaptable mentoring model, the project has the potential to impact future generations, facilitating a sustainable approach to vocational education and mentorship that could be implemented across different European contexts.

Success factors

As highlighted by the consortium members during their interview, the success of the EvolYou project can be attributed to several key factors. The primary factor emphasised by the project coordinator and supported by the other partners was the **enthusiasm of the senior experts and the younger volunteers**, underlining their commitment to the project's mission and their willingness to learn from each other. This collective drive and eagerness to transfer approaches to excellence was seen as the cornerstone of the project's success.

The project's **one-to-one mentoring approach** was effective. Initially designed for face-to-face interactions, it was shifted to online platforms as an adaptation to the conditions of the pandemic. Despite initial uncertainties, this transition to digital mentoring proved not only necessary but successful, laying the groundwork for a follow-up project involving online mentoring across countries. This adaptation highlighted the project's resilience and innovative capacity in the face of unforeseen challenges, demonstrating that motivation and personalised support could thrive in a virtual environment.

The project partners unanimously saw the **quality of the partnership and cooperation** as major success factors. Inspired by the German partners, the project ended up being expanded across more than 60 French départements through mutual learning. This growth was facilitated by spreading awareness of the project's potential to enhance opportunities for disadvantaged young people across Europe. Constructive and cooperative spirit within the partnership was sustained despite typical constraints such as budget limitations, and its focus remained on the shared objective of supporting young people. The ability to foster enthusiasm, maintain focused collaboration, and ensure a commitment to common goals among the European partners was identified as a crucial driver of the project's success.

EvolYou kick-off meeting. Source: provided by project partner

Challenges and barriers

One of the key challenges to the EvolYou project emphasised by the interviewees was **maintaining the continuity of engagement with mentees**. Despite a strong initial interest in beginning the mentoring process among many young individuals drop-out prior the end of the programme was a notable issue. Among other factors, this discontinuity could be attributed to disruptions caused by the COVID-19 pandemic, which required a shift to online interactions and may have impacted the sustained engagement of participants. The project, while offering the mentoring programme free of charge as an incentive and making it accessible to all without legal obligations, still encountered difficulties in ensuring that every mentor-mentee pair that was initiated reached the conclusion of their planned activities.

In addition, the project faced **cultural challenges**. These indicated a learning curve in terms of understanding and integrating different cultural perspectives, and were particularly notable in the context of the follow-up MAB project, which expanded the scope of the scheme to Southeast Europe. This project aimed to foster an exchange of information and best practices across borders, drawing inspiration from the original idea in Germany and the positive experience of scaling up the initiative in France. When these practices were shared in countries such as Poland, Hungary and Italy, it was acknowledged that the approach was new for some and required adaptation to different national contexts. This scenario underlined the importance of not only initiating intercultural exchanges, but also navigating the complexities involved in adapting mentoring practices to diverse cultural backgrounds.

Lessons learned

A primary lesson learned in the course of EvolYou was the **resilience and adaptability of mentoring relationships** observed in the course of the shift from face-to-face to online interactions during the COVID-19 pandemic. This transition, initially met with scepticism, as partners indicated during the interview, ultimately showcased the project's innovative capacity to maintain engagement and effectiveness, even in a digital format. The one-to-one mentoring approach, whether in person or online, emerged as a powerful method to foster meaningful connections and personal growth among the participants. This adaptation not only sustained the project's continuity during unforeseen global challenges, but also opened up new avenues for cross-border mentoring, enhancing its scalability for further projects.

Another significant lesson learned was the importance of **enthusiasm, commitment, and cultural sensitivity among all of the project's stakeholders**. The dedication of the senior volunteers and their willingness to engage deeply with the mentees were fundamental to the project's success, cultivating an environment in which mutual learning and empowerment thrived. Simultaneously, navigating cultural challenges and adjusting the mentoring practices to fit various national contexts underlined the need for flexibility and an open exchange of best practices. These experiences highlighted the project's collaborative spirit and the value of incorporating diverse perspectives to enrich the mentoring process. Moreover, the project illustrated the critical role of continuous training and support for mentors, ensuring they could effectively bridge social and cultural divides in order to meet the diverse needs of mentees, thereby reinforcing self-confidence and resilience among youth facing barriers to employment and education.

Conditions for transferability

The transferability of the EvolYou project's successes to other contexts relies on project's inherent adaptability, as demonstrated by its successful adaptation from the initial German programme to the projects that followed on from EvolYou. This adaptability was also demonstrated during the course of the COVID-19 pandemic, when traditional face-to-face mentoring had to be shifted to an online format.

Another fundamental condition for the successful transfer of the EvolYou model was the deep engagement and commitment of all participants, from project partners to the mentors involved. The project highlighted the significance of enlisting passionate and dedicated senior volunteers who were willing to invest in their mentees' personal and professional development. Tailoring mentoring programmes to meet these diverse needs, while also providing ongoing training and support to enable mentors to navigate cultural differences, was crucial to replicating the project's success in new settings.

Sources

Desk research

- 'European senior Volunteering through mentoring for the social inclusion of Young people in difficulties' on Erasmus+ website
- 'EvolYou - European senior Volunteering through mentoring for the social inclusion of Young people in difficulties' on EPALE

Interviews

- Interview with representatives of three partner organisations from IT, DE, FR (14 March 2024)

Case study 26

INTRODUCING ARTIFICIAL INTELLIGENCE TO VOCATIONAL SCHOOLS IN EUROPE

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2020-1-LT01-KA202-078015
- **Duration**
  01 October 2020 to 31 July 2022
- **Field/sector**
  ICT
- **Target group(s)**
  IVET learners, ICT teachers in VET sector
- **Educational level(s)**
  IVET (for learners), CVET (for teachers)
- **Learning settings**
  School-based
- **Funding arrangement**
  EUR 191,361.00 (high)
- **Geographical scope**
  Finland, Germany, Lithuania, Malta
- **Project coordinator**
  VšĮ Robotikos mokykla, Lithuania (small/medium-sized enterprise)
- **Key partners involved**
  - IT4Kids e.V., Germany (non-governmental organisation/association/social enterprise)
  - Kauno informacinių technologijų mokykla, Lithuania (school/institute/educational centre – vocational training, secondary level)
  - Malta College of Arts Science and Technology, Malta (school/institute/educational centre – vocational training, tertiary level)
  - Seinäjoen koulutuskuntayhtymä, Finland (school/institute/educational centre – vocational training, tertiary level)
  - Turun kaupunki – Åbo stad, Finland (local public body)

Brief description of the project

This project aimed to address the increasing demand for artificial intelligence (AI) skills in the European labour market, particularly within VET sector. Recognising the scarcity of AI-related skills among ICT teachers and the absence of a relevant curriculum, the project focused on developing innovative study materials for an 'Introduction to artificial intelligence' course. Through its collaborative efforts, the project sought to integrate this study unit into national education systems, as well providing competence development for ICT teachers and learners, and disseminating its intellectual outputs across VET and other educational sectors.

Relationship to policy priorities

The project directly addressed the development of digital competences, with a specific focus on filling a skills gap in relation to AI. By targeting VET teachers and learners, the project aligned with broader policy objectives to equip the workforce with advanced digital competences, thereby responding to the growing demand for AI skills in the labour market. The initiative underlined the critical need to transition from traditional ICT training towards more specialised, future-oriented educational frameworks that include AI, aligning with European strategies to enhance digital literacy and competences across all sectors.

Specific objectives covered

- Developing lesson materials for an innovative study unit, 'Introduction to artificial intelligence'.
- Integrating the study unit into each partner country's formal education system, enabling the sustainability of the project's results and ensuring the incorporation of AI qualifications into national and European VET systems.
- Providing competence development for ICT teachers, as key actors in the acquisition and transference of new digital skills.
- Disseminating the project's intellectual outputs across VET and other educational sectors.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The project aimed to bridge a digital skills gap within the European tech sector, specifically addressing the scarcity of artificial intelligence (AI) expertise in the labour market. Its focus was on developing AI competences among VET students and ICT instructors. By creating and seeking to integrate an innovative study unit on AI into the curricula of the partners' countries, the project sought to enhance the readiness of the European workforce for Industry 4.0. The project aimed to equip ICT teachers and pupils with necessary skills and knowledge in AI, particularly in machine learning processes, which is crucial to closing Europe's digital and AI skills gap in comparison to global leaders such as the USA and China. The

comprehensive scope of the project encompassed the development of teaching materials, the development of educators' competences, and the incorporation of AI qualifications into national and European VET systems, thereby ensuring its sustainability and widespread impact.

Methods and key activities

The collaborative methodology and key activities of the project involved the development of lesson materials in partnership with schools in order to meet the specific needs of VET learners. A pilot phase involving pupils assessed the effectiveness of these materials in skills development, with revisions being made on the basis of feedback and survey results. In addition, a significant emphasis was placed on training ICT teachers to not only deliver the new curriculum, but also to disseminate their newly acquired knowledge to peers, thereby amplifying the project's impact. The project's implementation strategy included evaluating pupils' skills through the use of innovative formats such as scrum-based international hackathons, ensuring active engagement and the practical application of AI skills. The accreditation process for the study unit across partner countries was crucial to embedding the project's outcomes within the broader educational and technological ecosystems, as were a series of dissemination activities, including multiplier events.

Results of the initiative

Outputs

One of the key outputs of the project was development of a formally recognised **study unit, 'Introduction to artificial intelligence'**, tailored for EQF Level 4 ICT students and designed to impart knowledge about machine learning processes to learners with basic programming skills. The study unit consisted of comprehensive lesson materials covering 60 classroom hours across various AI technologies.

The implementation process saw the collaborative creation of these lesson materials with partner schools, ensuring their relevance and applicability to VET learners from the partner organisations. As a result of the piloting, an analysis of skills development was conducted, and adjustments were made on the basis of immediate feedback from participants and survey results. To implement the curriculum, more than 10 teachers received training, enhancing their ability to teach AI concepts effectively and to mentor their peers in the subject matter. These teachers subsequently trained more than 100 learners using the study unit.

Beyond its immediate educational impact, the project reached more than 70 stakeholders from various sectors during multiplier events, significantly broadening awareness of and the potential adoption of the project's outputs. These outcomes collectively signified a substantial step forward in addressing the digital skills gap in Europe and contributing to the VET sector's capacity to meet the evolving demands of the labour market in AI and related technologies.

Outcomes

As a result of the project piloting and implementation, **approximately 100 learners developed skills in machine learning** processes applied to practical areas such as game design, autonomous driving and computer vision. The teachers who were trained were empowered to pilot the AI curriculum with their pupils and to serve as trainers for other educators, **enhancing the pedagogical capacity within the VET sector**.

The AI study unit is in the process **being integrated into the formal education systems of the partner countries**, in particular in Malta and Germany. The project partners from Malta explained that implementing the full module was a priority for them, while the German partner only planned to incorporate certain components tat would provide a general introduction to the topic.

Impacts

The project directly **addressed and mitigated the digital skills gap in Europe**, particularly in the field of AI, contributing to competitiveness of VET employees in the European labour market. By embedding the AI curriculum into formal education systems and ensuring its accreditation, the project laid the **groundwork for the sustainable development of AI competences**, explored within a professional setting.

The project fostered collaboration among educational institutions and NGOs, contributing to a **culture of international cooperation and collaborative contribution to EU goals**.

Success factors

As the consortium members noted in interviews, one of the key success factors for the project was an **intrinsic motivation driven by the importance of the subject matter**. All of the participants recognised the critical need for AI skills in the European workforce, which kept motivation levels high throughout the project's lifecycle. This sense of purpose was complemented by a hands-on approach to learning, in which students gained practical experience using scaled-down versions of actual tools, enhancing the applicability and immediacy of the skills acquired. The involvement of partners in both the development and testing of materials allowed course content to be applied and immediately refined, ensuring its relevance and effectiveness.

Collaboration among partners who were genuinely interested in the topic fostered a rich, multi-faceted learning environment. In addition, strategic planning avoided redundancy in the course materials, and the thoughtful arrangement of modules ensured they were distinct and complementary. These factors, and the establishment of regular project meetings to provide feedback, all contributed to the project's smooth execution. These meetings not only facilitated clear

communication and coordination among the partners, but also ensured that each module's content was coherent and standalone, maximising the materials' educational impact and avoiding overlap. These factors combined to create a robust framework for AI education within the VET sector, demonstrating a model of successful collaboration and targeted educational design.

Challenges and barriers

The project faced a series of challenges that tested the resilience and adaptability of the team, underlining the complexity of integrating AI into the VET sector. One significant obstacle was the **availability and accessibility of equipment**, both in terms of the initial lack of a robust network among VET schools interested in AI and the limitations imposed by budget constraints. **Financial limitations** had an impact on the choice of hardware, too. The funds available to procure the most suitable platforms for AI training were limited, impacting the optimal delivery of technical skills.

Another challenge related to the substantive **difficulty of AI-related topics** such as neural networks, which presented a steep learning curve not only for students but also for the educational institutions aiming to adapt their curricula to include these advanced subjects. Moreover, the unforeseen onset of the **COVID-19 pandemic** further complicated matters, necessitating a pivot to online and physically isolated working arrangements at a time when little was known about the virus and its potential long-term effects. This situation required high level of flexibility to ensure the continuation of the project, which resulted in the successful hosting of a hackathon in May 2022, as restrictions began to ease.

Lessons learned

One of the lessons learned that was highlighted by the project coordinator was the value of **embracing subjects that are popular in the market**. The initiative revealed that delving into areas of high demand and interest not only provides an opportunity to produce relevant content, but also significantly boosts team motivation and engagement. The experience of the project advocates for the alignment of project themes with current market needs, without overcomplicating the decision-making process based on perceived saturation or complexity. At the same time, the project shed light on the **logistical and operational challenges associated with hardware requirements** and funding constraints, which are crucial considerations for the scalability of such initiatives.

The implementation of a hackathon was a pivotal moment in the project, highlighting the profound impact of **collaborative and practical engagement**. This gathering was especially crucial during the COVID-19 pandemic, as it transitioned participants from isolated working environments into a communal situation in which they could showcase their learning outcomes through diverse solutions. The event fostered valuable connections, both between educators and students, and among teachers. The inclusion of external community members in the jury and in dissemination events further enriched this experience, underlining the benefit of external perspectives in evaluating and promoting project outcomes.

Conditions for transferability

The project highlighted the necessity of considering the logistical challenges related to hardware and funding, indicating that **careful planning of resources and infrastructure** would be essential to replicating the project's success elsewhere. The experience of cross-European collaboration, which revealed the diverse ways in which schools adapt learning materials, points to the strength of accommodating regional differences in educational practices. Therefore, for a project to be transferable between different contexts, it must be **capable of being adapted to varying educational landscapes**, as well as engaging with current industry needs and fostering active participation among all stakeholders.

Sources

Desk research

- 'Introducing Artificial Intelligence to Vocational Schools in Europe' on Erasmus+ website
- Gaminu.eu website

Interviews

- Interview with a representative of the coordinating organisation (22 February 2024).
- Interview with a representative of a partner organisation (05 March 2024).

CASE STUDY 27

LEARN AND WORK EASY IN VIRTUAL AND AUGMENTED REALITY (VRAR)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2021-1-BG01-KA220-VET-000033294
- **Duration**
  01 November 2021 to 31 October 2022
- **Field/sector**
  Education
- **Target group(s)**
  VET students and teachers
- **Educational level(s)**
  IVET (for students), CVET(for teachers)
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 108,280.00 (high)
- **Project coordinator**
  Human Resources Development Agency, Bulgaria (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - 3D DESIGN MEDIA, Grafično oblikovanje, Žiga Novak s.p., Slovenia (small/medium-sized enterprise)
  - "Sociāli Orientētu Projektu Aģentūra" foundation, Latvia (non-governmental organisation/association/social enterprise)
  - Asociación Cultural LaOficina Producciones Culturales, Spain (non-governmental organisation/association/ social enterprise)
  - Magnetar Ltd, Cyprus (small/medium-sized enterprise))
- **Geographical scope**
  Bulgaria, Cyprus, Latvia, Slovenia, Spain

Brief description of the project

The VRAR Project – 'Learn and work easy in Virtual and Augmented Reality' –supported career guidance for people who had lost their jobs or wanted to change their professional field, allowing them to enter into the world of modern technologies. The project focused on advancing VET in the context of evolving EU policies, emphasising in particular digital skills and sustainable competitiveness. The project aimed to transform VET curricula, analyse the educational needs of various target groups, enhance capacity for international cooperation, and foster collaboration among stakeholders for change.

Relationship to policy priorities

The project contributed to the policy priorities of developing the digital skills of VET students, and engaging young people with VET and the labour market. VRAR explored the potential of digital technologies in education, fostering personal fulfilment, social cohesion and economic growth through a virtual environment. In doing so, the project supported the EU's ambition to improve digital literacy and skills while engaging vulnerable youth.

Specific objectives covered

- Creating conditions for a transformation in the curricula of VET institutions to adapt to the changing environment and the requirements of the labour market.
- Analysing the common needs of different target groups in the field of education and training.
- Building the capacity for working in an international environment on the part of the organisations participating in the project.
- Encouraging interactions between actors in different sectors who have a common interest in change.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The VRAR project represented a comprehensive initiative aimed at enhancing the digital competences of individuals within the VET sector across Europe, particularly in response to the shifting needs of the labour market and the digital transformation of society. Its scope extended beyond traditional classroom learning to incorporate online platforms and multimedia content in order to make vocational training more accessible, especially in remote and rural areas. Through a series of multiplier events and the establishment of an online training platform, the project aimed to disseminate its outcomes widely, ensuring that a broad audience could benefit from enhanced digital literacy and skills.

Methods and key activities

Central to the VRAR project's methodology was the development of a comprehensive **methodological framework**, tailored to the specific needs of job seekers and entrepreneurs in the digital sector. This framework was supported by in-depth quantitative and qualitative research, ensuring a solid evidence base for the project's outputs. The creation of a **VR and AR handbook** and the production of **training video tutorials** formed the core of the project's deliverables, providing practical and accessible learning materials. These were developed through a collaborative process that involved stakeholders from across the educational and digital technology sectors. Pilot testing sessions were conducted to validate and refine these resources, providing invaluable feedback for optimisation. The project's implementation phase also included a series of multiplier events, such as international and **local webinars**, designed to widely disseminate the project's findings and tools. These activities not only facilitated direct stakeholder engagement but also provided forums for discussion and exchange, further enriching the project's outcomes. The project employed ICT tools for internal communication and project management, ensuring efficient coordination across the transnational partnership. This blend of research-driven development, collaborative production and active dissemination ensured the project's relevance, impact and contribution to the VET sector's adaptation to the digital economy's demands

Results of the initiative

Outputs

A central output of the VRAR project is its **methodological framework**. This is laid out in a comprehensive guide for both job seekers and entrepreneurs, which providing a structured approach to acquiring the VR and AR skills essential for the modern workforce. Complementing this framework, a **detailed handbook for working in VR and AR environments** was also developed. This offers step-by-step instructions and insights for both learners and educators to effectively navigate the complexities of these technologies. In addition, **a series of training video tutorials** were produced, which serve as practical and accessible learning resources to complement the handbook's theoretical knowledge. These tutorials offered easy-to-follow, visual guidance on applying VR and AR technologies in various vocational contexts. Together, these outputs were disseminated through a strategic series of multiplier events, including **webinars** and workshops, ensuring the project's wide reach and engagement across Europe. This suite of carefully designed resources, together with the project's concerted dissemination efforts, represents a significant advance in the VET sector, aligning it more closely with the requirements and opportunities of the digital age.

Outcomes

One notable outcome of the project is heightened digital literacy among those job seekers who have engaged with the project's resources, including the **methodological framework**, **handbook** and the **training video tutorials**. These tools have empowered learners with the skills and confidence to navigate and leverage VR and AR technologies, opening up new opportunities for innovation and employment in high-demand sectors. Furthermore, the project stimulated an increase in the quality and adaptability of VET offerings, making them better aligned with the needs of the digital economy and appealing to a broader audience. The collaborative efforts and knowledge exchange facilitated by the project's multiplier events have strengthened networks among educators, technologists and industry leaders, fostering a community committed to continuous improvement and innovation in vocational training. Overall, the project's outcomes have contributed to a more dynamic, inclusive and forward-looking VET landscape in Europe, better equipped to support lifelong learning and career development in an increasingly digital world.

Impacts

By providing job seekers and entrepreneurs with targeted, practical tools and knowledge about VR and AR, the project has contributed directly to **enhancing employability and innovation** in sectors in which digital competences are increasingly critical. Together, the methodological framework, handbook, and training video tutorials have facilitated a **more dynamic and engaging learning environment**, enabling learners to acquire and apply digital skills in real-world contexts. This approach has not only improved the quality and relevance of VET, but has also made it more accessible and appealing to a diverse range of participants. Moreover, the project's multiplier events have fostered a broader **awareness and understanding of the potential of VR and AR technologies**, stimulating dialogue and collaboration among stakeholders across the educational, technological and employment landscapes. The long-term impacts of the project are expected to include a more digitally competent workforce capable of driving innovation and growth in the green and digital economies, thereby contributing to Europe's competitiveness, social fairness and resilience.

Success factors

The project's emphasis on creating a methodological framework for job seekers and entrepreneurs engaging with VR and AR technologies ensures its **direct relevance to current and future industry needs**, addressing the significant skill gaps in the digital domain and increasing unemployed learners' chances of maximising their labour market opportunities. Critical to the project's success is its **collaborative partnership model**. This enabled the transnational exchange of expertise and best practices, which not only enriched the project's content but also fostered a robust network for ongoing collaboration towards innovation in VET. The project's comprehensive approach, which combined quantitative and qualitative research with **targeted primary data collection**, ensured that the project's outputs were grounded in real-world needs and scenarios. The development and pilot testing of a **VRAR handbook**, alongside the creation of **training video tutorials**, offered tangible, accessible resources for learners, enhancing their digital competences and employability.

Challenges and barriers

Despite its innovative approach and alignment with EU policy goals, VRAR faced several challenges and barriers. A key obstacle was ensuring the relevance and applicability of its VR and AR methodological framework and training materials across diverse regional contexts within the EU, where digital infrastructure and access to technology vary widely. **Bridging the digital divide**, especially in rural and remote areas, remains a critical barrier to achieving widespread digital literacy and inclusion.

Another barrier was the **rapid pace of technological advancement in VR and AR**, which required continuous updates to the training content to keep it current and effective. Additionally, engaging a wide range of stakeholders, from job seekers to entrepreneurs and educators, in adopting and utilising these new learning tools required **overcoming scepticism and resistance** to change, particularly in traditional vocational training environments.

Addressing these challenges demanded a flexible, adaptive project management approach and a commitment to ongoing collaboration, innovation and advocacy to ensure the project's objectives were met and its impacts sustained.

Lessons learned

An important insight provided by the project concerns the value of inclusive and accessible education strategies which consider the diverse needs and starting points of learners across Europe, highlighting the need to bridge digital divides and ensure equitable access to learning opportunities. The project demonstrated the power of transnational collaboration, revealing how shared knowledge and resources can amplify the impact of educational initiatives, despite logistical challenges. Engaging stakeholders from various sectors early and often emerged as a key strategy for ensuring the alignment of educational outcomes with labour market needs. Lastly, the project's experience reinforced the importance of robust dissemination and engagement strategies to ensure the visibility and sustainability of results.

Conditions for transferability

The transferability to other VET sectors or regions of the VRAR project's outputs –in particular, that of its **methodological framework**, **VR and AR handbook**, and **training video tutorials** –hinges on several critical conditions. These include the accessibility of digital infrastructure, and the relevance of educational backgrounds. In addition, partnership with local VET institutions is key, both in terms of piloting the learning modules and ensuring their reusability after the end of the project. Furthermore, ongoing professional development for educators and trainers in the use of VR and AR technologies is necessary to support effective implementation. This includes not just technical skills, but also pedagogical strategies for integrating digital tools into vocational training. Lastly, ensuring the sustainability of the project's impacts requires attention to be paid to the evolving landscape of digital technologies and the labour market, with regular updates to the training content to maintain its relevance and effectiveness.

Sources

Desk research

- 'Learn and work easy in Virtual and Augmented Reality ' on European Commission website
- 'Learn and work easy in Virtual and Augmented Reality' website
- 'Learn and work easy in Virtual and Augmented Reality' on Facebook
- 'Learn and work easy in Virtual and Augmented Reality' on Youtube

Case study 28

LOG-IN: LOGISTICS VET GOES INTERNATIONAL

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for vocational education and training
- **Project reference number**
  2019-1-DE02-KA202-006483
- **Duration**
  01 November 2019 to 31 August 2022
- **Field/sector**
  Logistics
- **Target group(s)**
  VET students and teachers
- **Educational level(s)**
  IVET (for studets), CVET (for teachers)
- **Learning settings**
  School-based
- **Funding arrangement**
  EUR 277,992.66 (high)
- **Geographical scope**
  Croatia, Germany, Netherlands, Poland
- **Project coordinator**
  BGZ Berliner Gesellschaft für internationale Zusammenarbeit mbH, Germany (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - OSZ Lotis, Germany (school/institute/ educational centre – vocational training, secondary level)
  - Politechnika Poznańska, Poland (higher education institution, tertiary level)
  - Skola za cestovni promet, Croatia (school/institute/educational centre – vocational training, secondary level)
  - Stichting STC group, Netherlands (school/institute/educational centre – vocational training, secondary level)
  - Sveučilište u Zagrebu Fakultet prometnih znanosti, Croatia (higher education institution, tertiary level)
  - Zespol Szkol Nr 2 im. Przyjazni Polsko-Norweskiej w Ostrzeszowie, Poland (school/institute/educational centre – vocational training, secondary level)

Brief description of the project

The LOG-IN project aimed to enhance the integration of digital technologies into VET, particularly for professions in the logistics industry, which are experiencing increased digitalisation and automation. The project focused on strengthening the acquisition of job-related digital competences, expanding the methodological skills of teachers and preparing young professionals for the demands of a digital working world. The project successfully achieved its goal of providing innovative concepts for the integration of digital technologies into logistics professions, developing transferable learning materials, and fostering collaboration between VET institutions and universities to improve the quality of education in the logistics sector.

Relationship to policy priorities

The LOG-IN project contributed to developing the digital skills of VET trainers by assisting them in creating and implementing a teaching unit in the digital environment. Through these learning units, students were able to more closely familiarise themselves with the logistics industry by means of virtual reality.

Specific objectives covered

- Strengthening the acquisition of job-related digital competences in training within the logistics sector.
- Expanding the methodological competences of teachers to prepare young professionals for the requirements of a digital world.
- Strengthening the development of VET institutions' capacities and promoting their internationalisation.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The LOG-IN project aimed to bring innovation into pedagogy within the logistics sector to meet the evolving digital demands of the industry. In targeting the global logistics industry – an area critically influenced by digital progress - the project sought to facilitate the transition of VET institutions towards more computer-based, personalised and autonomous teaching methods. The scope of the LOG-IN project extended to incorporating cutting-edge educational tools such as simulations and virtual reality into the VET curriculum. These tools were intended to enable learners to apply theoretical concepts in real-life scenarios. The project's ambition was not only to elevate the quality of vocational training in order to align with labour market needs, but also to bolster the digital competences of future logistics professionals, thereby contributing significantly to the sector's digital transformation.

Methods and key activities

The LOG-IN project employed a comprehensive approach to embedding digital technologies within vocational education for the logistics sector. The project involved a SELFIE assessment survey, designed to evaluate the readiness and capabilities of participating schools and institutions in terms of legal, technical, financial and human resources, thereby laying the groundwork for the project's interventions. The survey was followed by the development of a competence matrix tailored to digital logistics, establishing a framework for the skills and knowledge necessary in the digitalised logistics landscape.

The project then created specific learning units (for basic and more advanced levels) and a model of a digital learning environment focusing on digital logistics, equipping learners with the knowledge and competences for modern professions in the logistics sector. To support this pedagogical shift, a digital training course for teachers was developed, with the aim of transitioning educators from their traditional roles to become facilitators of self-directed learning. This upskilling strategy was complemented by activities aimed at creating a digital learning environment, providing a practical context for the application of digital skills.

A digital warehouse connected to a digital inventory management system was set up as a real-world application of digital logistics concepts. An app was co-designed with the VET teachers involved in the project, and created an experiential learning environment for both educators and learners. Further integration with the logistics industry was supported through extensive networking with stakeholders in the sector, who were highly supportive of the project. At the end of the project, recommendations were drafted for educational stakeholders and decision-makers, aimed at guiding future policy and practice. Lastly, dissemination activities, including multiplier events, were crucial in disseminating the project's findings and outcomes, ensuring a broad impact on the vocational training landscape in logistics.

Results of the initiative

Outputs

Central among LOG-IN's outputs was the development of a comprehensive **matrix of professional competences for digital logistics**, which laid the foundation for identifying and addressing the digital skills gap within the industry. A **model of a digital learning environment** was established to facilitate immersive training in logistics professions, complemented by tailored learning units (for **basic** and **more advanced** levels) that delved into digital applications specific to the logistics field. To support educators in adapting to these innovations, an **e-learning module** was created, which focused on the effective use of blended learning in logistics courses. The project also formulated **recommendations for the design of training in logistics**, offering strategic guidance to institutions looking to modernise their curricula. To disseminate these insights and foster broader engagement, **four multiplier events** were organised, bringing together stakeholders from across the education and logistics sectors to explore the project's findings and implications for the future of logistics training.

Outcomes

The main outcome of the project was the **enhancement of digital competences among learners**, particularly in areas critical to digitalised logistics processes such as the digital control and monitoring of supply chains. Educators underwent a transformative shift, adopting **new pedagogical approaches that emphasise self-directed learning**, thereby enriching the educational experience with digital tools and resources. Lastly, **VET institutions strengthened their capacity** to offer relevant digital logistics education, aligning their programmes more closely with the current demands of the labour market.

Impacts

By aligning VET offerings with the needs of the logistics industry, the project played a pivotal role in **preparing young professionals for the digital work environments** they will encounter, ensuring they possess the necessary digital competences for success. It also promoted the **internationalisation of VET education**, fostering exchanges and networking opportunities among partner institutions within the project consortium. The recommendations developed by the project for educational stakeholders and policymakers aimed to **influence the direction of VET policies and**

practices, placing greater emphasis on education in digital logistics. Through these comprehensive efforts, the LOG-IN project laid a solid foundation for the ongoing **evolution of digital education within the logistics sector**, marking a significant step forward in preparing the workforce for the challenges and opportunities of the industry's digital future.

Digital learning environment. Source: shared by project partner

Success factors

Cross-border cooperation and mutual learning among the partner organisations were mentioned as being among the key strengths of the project. According to interviewees from a VET institution, one pivotal moment was a visit to partners in the Netherlands, where participants were exposed to a wide array of technologies and simulators. This hands-on experience not only broadened their understanding of the practical applications of digital tools in logistics education, but also inspired ideas for future enhancements in teaching and learning environments. The integration of such technologies into classrooms was not just conceptual, but provided tangible insights into the potential for advancing education through the use of digital tools.

Another key factor in the success of the project was **interest from industry stakeholders**, who were attracted to the project's final conference. The involvement of companies – in particular, the positive reception they gave to the presentation of warehouse equipment by teachers and students – underscored the project's relevance and applicability to the logistics sector. This event facilitated the establishment of successful post-project collaborations, in which students gained opportunities to apply their knowledge in real-world settings through work placements or apprenticeships in new partner companies. In addition, cooperation with local higher education institutions marked a fruitful beginning for sustained collaboration, leading to the development of further projects and deepening the relationships between vocational education providers and the broader educational ecosystem.

Challenges and barriers

The LOG-IN project encountered several challenges that tested the resilience and adaptability of its implementation strategy. These primarily stemmed from **disparities in the availability of equipment across the partner countries**. The varying availability of necessary technologies presented difficulties in standardising training and ensuring equitable access for the learners. This disparity in equipment underscored the need for flexible and adaptable training materials that can cater to a range of technological infrastructures, highlighting the challenge of maintaining consistency in educational quality across diverse settings.

Lessons learned

Participation in projects such as LOG-IN is seen as essential by the project partners, due to the role such projects play in modernising education, enhancing teaching methodologies and fostering partnerships. A key lesson learned is the **necessity for teachers and educational institutions to stay up to date** in their respective fields, in order to adequately prepare the future workforce. This necessitates a dynamic approach to education – one that involves close cooperation with industry innovations, ensuring that VET remains relevant and responsive to the needs of the labour market. Collaboration with companies is essential to this process, providing a practical, applied context to the educational content and enriching learners' experience by exposing them to real-world applications and expectations.

For educators, the project illuminated the **benefits of international collaboration and exchange**. The opportunity to observe and learn from colleagues abroad provided fresh perspectives and innovative approaches to

classroom instruction, enhancing the quality of the education provided. Such cross-border exchanges not only facilitate the sharing of best practices but also foster a culture of continuous learning and improvement among educators. The dissemination of new ideas and methodologies within their home institutions also serves to elevate the overall teaching standard. These lessons reinforce the significance of Erasmus+ projects in driving educational innovation, highlighting the importance of collaboration – both with industry partners and with international educational counterparts – in cultivating a highly skilled, adaptable and future-ready workforce.

Conditions for transferability

Understanding and mapping the specific digital competences required in the target profession is crucial for transferability. In the LOG-IN project, this involved the development of a competence matrix for digital logistics, but the specific means could be altered depending on the field to which a particular project is adapted. This underlines the importance of sector-specific research and stakeholder consultation in identifying and addressing competence gaps.

Furthermore, the **creation of an adaptable digital learning environment**, complemented by tailored learning units that bridge theoretical knowledge with practical digital applications, can help to replicate the project in new contexts. Effective transferability depends on the engagement and upskilling of educators through targeted training programmes, enabling them to facilitate self-directed learning as well as blended learning strategies.

Lastly, **establishing strong partnerships between educational institutions, industry and policy makers**, as well as **involving trainees in the development and testing phases**, ensures the relevance and applicability of project outcomes. Elaborating networks not only increases the sustainability of a project's results via dissemination, but contributes to the creation of a co-creative environment for follow-up projects.

Sources

Desk research

- 'LOG-IN: Logistics VET goes international' on Erasmus+ Website
- 'LOG-IN: Logistics VET goes international' website

Interviews

- Interview with a representative of the coordinating organisation (03 April 2024).
- Interview with a representative of a partner organisation (07 March 2024).
- Interview with two representatives of a partner organisation (25 March 2024).

Case study 29

SUPPORTING TECHNIQUES FOR THE ACQUISITION OF ICT COMPETENCES (TAACTIC)

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2019-1-FR01-KA204-063046
- **Duration**
  01 November 2019 to 31 August 2022
- **Field/sector**
  Transversal, suitable for all sectors
- **Target group(s)**
  Educators, trainers and training professionals
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, online learning
- **Funding arrangement**
  EUR 257,541.00 (high)
- **Geographical scope**
  Belgium, France, Italy, Spain
- **Project coordinator**
  Association de Gestion des Fonds Européens, France (non-governmental organisation/association/social enterprise)
- **Key partners involved**
  - A idées formation, Belgium (non-governmental organisation/association/social enterprise)
  - Actions Intégrées de Développement, Belgium (non-governmental organisation/association/social enterprise)
  - Consorzio di cooperative sociali EVT, Italy (non-governmental organisation/association/social enterprise)
  - Fundación Esplai Ciudadanía Comprometida, Spain (foundation)
  - Société Coopérative d'Intérêt Collectif SENSCOP, France (non-governmental organisation/association/social enterprise)

Brief description of the project

The TAACTIC project addressed the digital gap affecting low-skilled adults and jobseekers, particularly those distanced from employment, who struggle to adapt to rapid changes in the labour market. Focusing on the enhancement of pedagogical practices in adult education, TAACTIC aims to identify, develop and promote basic digital skills learning through practical solutions. The project sought to improve social inclusion, facilitate training pathways and ensure long-term, quality employment for low-skilled and vulnerable learners.

Relationship to policy priorities

The TAACTIC project directly addressed the policy priority of enhancing digital skills. By focusing on low-skilled adults who are distant from both employment and the digital world, the project aimed to bridge the digital gap, fostering social inclusion, access to quality employment and adherence to the principles of free movement and fair mobility within the European Union. TAACTIC developed practical tools and activities to improve the digital literacy of vulnerable adults, aligning closely with the broader policy objective of equipping the European workforce with essential digital competences for the modern labour market.

Specific objectives covered

- Creating a digital skills assessment process.
- Defining a common reference framework for basic digital skills training
- Developing innovative, standardised and easy-to-use learning activities for education and training professionals and their learners.
- Elaborating recommendations for digital skills training by carrying out a screening of digital jobs of the future, a questionnaire and a study.
- Gathering together the most relevant educational resources for digital skills training.

Type and scope of the project, methods used, and key activities

Type and scope of the project

The TAACTIC project was designed to bridge a significant gap in digital competences, especially highlighted during the COVID-19 pandemic among low-skilled adults removed from employment and the digital world. Its aim was to provide these individuals with the fundamental digital skills needed to enter the labour market, thereby reducing their digital vulnerabilities and aiding their job search.

To achieve this, the project targeted key digital competences, including understanding the computer environment, communication, information management, content creation, file management, and security. These competences were carefully chosen in line with the DigComp 2.0 and 2.1 frameworks, with the goal of fostering digital literacy among participants, thereby facilitating their integration into the workforce.

A crucial aspect of the TAACTIC project was its emphasis on creating simple content. The idea was to develop training materials that were as straightforward as possible, adhering to the principle that starting from simplicity allows scalability in learning. This approach not only made the content more accessible to those with limited digital skills, but also provided a solid foundation upon which to build more advanced competences.

The scope of the project was transnational, including four partner countries from Western Europe.

Methods and key activities

To execute the TAACTIC project effectively, a comprehensive approach was adopted that encompassed a variety of key activities and methods. These included transversal activities fundamental to the project's success: **coordination and implementation**, **quality control and continuous evaluation of the process** and the **dissemination and exploitation of the project's results**. The TAACTIC partnership harnessed **innovative tools** through diverse activities such as research, analysis, field experiments and the creation of tools, tapping into both internal resources within the organisations and the partnership, as well as external resources, notably by including platforms such as **Electronic Platform for Adult Learning in Europe (EPALE).**

Given the project's focus on assisting vulnerable individuals with low digital competences, the project's strategy for content creation was tailored to their needs. This prioritised **simplicity and accessibility**, developing content that could be easily understood by the target audience. A significant portion of the project's resources was dedicated to producing **video content** that was engaging and accessible to those who might find reading a challenge. This approach allowed learners to acquire necessary training through both **visual and auditory means**, thereby catering to a broader range of learning preferences and ensuring that the content was inclusive and comprehensible by individuals with very basic digital knowledge.

This methodological approach, centred around the creation of easily accessible video content and supported by a wide range of activities for tool development and knowledge dissemination, was key to reaching and effectively assisting the project's target group of vulnerable individuals with limited digital skills.

Results of the initiative

Outputs

The **digital skills positioning tool** is based on the European framework of digital skills for citizens, DigComp, levels 1 and 2, and tackles the five main areas of digital competences, namely: information and data; communication and collaboration; digital content creation; security; and problem solving. This makes it possible to highlight the digital skills that low-skilled adults have or have not acquired, in order to assess their skills and build their professional project and training pathway.

The **common reference framework for basic digital skills training** defines and details the main axes for areas of competence, as well as various levels of autonomy and mastery of the digital competences.

Pedagogical activities for training in basic digital skills is aimed at the acquisition of competences that can be easily used by both professionals and learners. A total of 15 resources have been developed, arranged into five main areas of digital competences.

Recommendations for training in digital occupations includes hints and recommendations to foster, in the medium and long term, the development of innovative training courses geared towards the realities and expectations of employment, in order to better equip low-skilled people for sustainable integration into employment or into specialised training courses.

Educational resources for training in digital occupations is a compendium of more than 70 useful resources for training providers to train the public towards digital professions and to organise relevant actions and training courses for this purpose. This collection of innovative educational resources has been designed in the form of a dynamic platform allowing simple search by keywords, making it quicker and easier to find the resources.

Outcomes

The TAACTIC project began by providing basic outputs and presentations aimed at testing its concepts with the target groups, laying the groundwork for a more detailed exploration and understanding of their needs. Over time, this initial approach evolved into the **delivery of more sophisticated resources**. These included **training modules**, **booklets** and **digital platforms**, all meticulously designed and tailored to meet the specific requirements highlighted by the associated partners and training centres. This evolution from basic to refined resources underlines the project's commitment to adapting its offerings in order to best serve the needs of its target audience.

Furthermore, the partnership did not just focus on the immediate educational needs of individuals, but also ventured into **enhancing training practices within new digital professions**. This strategic move was driven by a desire to closely align the project's outcomes with the current demands of the market. By fostering collaborations with a variety of

partners and experts, the project succeeded in developing training materials that were both relevant and effective. This collaborative effort played a pivotal role in bridging the digital skills gap, thereby facilitating the integration of vulnerable groups into the workforce.

Impacts

The TAACTIC project has made a notable contribution to significant developments in France, particularly in the realm of digital skills training. Building upon the insights and findings of the project, two key programmes were developed: a **certification training programme** and a **coding and technical training programme**.

The certification training programme represents a major stride towards enhancing digital literacy and competences within the target groups. Alongside this, a diploma-certified coding and technical training programme was established, leveraging the foundational work of the TAACTIC project in creating a comprehensive digital training framework. These programmes not only offer structured pathways for individuals to acquire essential digital skills, but also provide formal recognition of their competences through certification. These initiatives were implemented successfully and continue to be used, demonstrating their effectiveness and the sustained impact of the project.

Success factors

A **well-written project plan**, a **cooperative and experienced partnership**, and **significant commitment from all of the parties involved** were crucial to the successful implementation of the project. The project's timing was especially critical, as it **addressed the urgent needs arising from the COVID-19 pandemic**, significantly fostering active participation and engagement across the board. The project stood out as **one of the first to tackle the challenges presented by the pandemic**.

Conditions for transferability

The tools created during this project offer a **high level of transferability**. The outputs of the project are available in **four languages**, which makes them easily usable by people from various countries.

Challenges and barriers

One of the significant challenges encountered during the project was **adapting the training content to the varied needs** of diverse target groups across different countries. Ensuring the training was appropriately tailored from the outset presented a considerable challenge. **More direct involvement** with these groups was crucial to customise the training materials accurately to their specific needs and circumstances.

A particularly challenging aspect was **addressing the foundational digital skills** – or lack thereof – among certain segments of the target audience. For older individuals or those with no prior engagement with basic digital technologies, even starting with basic competences posed a significant hurdle. This was especially true when selecting competences from frameworks such as DigComp, where some learners struggled with fundamental tasks such as reading information on a computer due to a lack of linguistic skills.

Lessons learned

According to the interviewee, one of the main lessons learned in the TAACTIC was that the **definition and skill levels of low-skilled adults varied across partner countries**. Despite falling under the same umbrella, participants had different needs in each country. In response, a decision was made to balance the needs of every target group from the various countries involved. This effort was essential for inclusivity and project's overall effectiveness. However, achieving this balance proved complex, particularly when coordinating among partners to adapt the training content to suit each target group.

Sources

Desk research

- 'Supporting techniques for the acquisition of ICT competences' on Erasmus+ website
- 'Supporting techniques for the acquisition of ICT competences' website

Interviews

- Interview with one representative of the coordinating organisation (19 March 2024)

Case study 30

STOP BEING COUCH POTATOES! DEVELOPING SOCIAL AND ENTREPRENEURIAL SKILLS FOR NEETS

SUMMARY

- **Erasmus+ programme type**
  Strategic partnerships for adult education
- **Project reference number**
  2018-1-SK01-KA204-046335
- **Duration**
  01 October 2018 to 30 June 2021
- **Field/sector**
  Entrepreneurship
- **Target group(s)**
  Young adults, NEETs
- **Educational level(s)**
  CVET
- **Learning settings**
  Non-formal learning, hybrid learning
- **Funding arrangement**
  EUR 139,862.00 (high)
- **Geographical scope**
  Czechia, France, Poland, Romania, Slovakia, Spain
- **Project coordinator**
  TRANSFER Slovensko, Slovakia (school/institute/educational centre – adult education)
- **Key partners involved**
  - Asociatia Young Initiative, Romania (non-governmental organisation/association/ social enterprise)
  - Eurocircle Association, France (non-governmental organisation/association/social enterprise)
  - Fundación Universitaria San Antonio, Spain (higher education institution, tertiary level)
  - Fundacja Leze i Pracuje, Poland (foundation)
  - Genderove informacni centrum NORA, o.p.s., Czechia (non-governmental organisation/association/social enterprise)
  - Wojewodzki Urzad Pracy w Katowicach, Poland (regional public body))

Brief description of the project

This transnational project aimed to enhance learning methods for social and entrepreneurial skills dedicated towards NEETs. The project's intellectual outputs included comparative analyses, the creation of a network of mediators, and practical experiences. 'Stop being couch potatoes!' involved researching the access points for NEETs, creating a network of local influencers and selecting good practices, as well as developing scenarios for local workshops, a toolkit for trainers and NEETs, CV videos, a 'success story' film, and webinars, all aimed at improving teaching methods and communication through innovative tools including an online collaborative platform.

Relationship to policy priorities

By targeting young adults aged 18 to 35 who are not in education, employment or training, the project addressed a critical societal challenge: integrating marginalised or disengaged youth into productive educational and employment pathways. The project aligned with policy priorities aimed at reducing youth unemployment, fostering entrepreneurship, and ensuring that all young people have the skills and opportunities to participate fully in society. This initiative underlined the importance of VET as a flexible and relevant educational pathway, capable of addressing diverse needs and providing valuable skills for the labour market, thereby reinforcing inclusive growth and social cohesion.

Specific objectives covered

- Sharing practical experiences and finding the best solutions for learning methods in the field of social and entrepreneurial skills dedicated to NEETs.

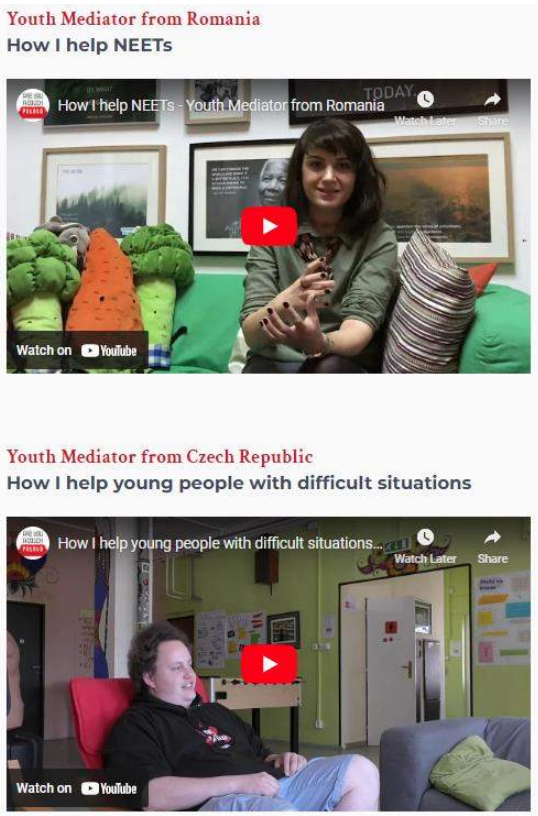
Type and scope of the project, methods used, and key activities

Type and scope of the project

The 'Stop being couch potatoes!' project aimed to address the pressing challenge of integrating NEETs back into society and the labour market. The project's core mission was to enhance social and entrepreneurial competences among vulnerable young people, thereby increasing their employability and active participation in society. By leveraging a range of digital and interactive tools, including online platforms, practical workshops and collaborative scenarios, the project aimed to modernise educational approaches within the VET sector, making them better aligned with the dynamic needs of the labour market and the realities of the digital age. This transnational effort was marked by a comprehensive approach to understanding the specific needs of NEETs through detailed research and analysis, followed by intellectual outputs and practical experiences that were designed to reengage and empower the target demographic.

Methods and key activities

The project applied the approach of a transnational partnership, involving educational institutions, NGOs, labour offices and universities from several countries, with the aim of sharing experiences and developing effective learning methodologies for excluded young adults. Key project activities involved comparative research to understand the NEET demographic and their needs; developing and disseminating a toolkit for trainers and NEETs; and leveraging modern IT tools to create an online collaborative platform that facilitated the modernisation of teaching methods. **Local workshops** provided hands-on opportunities for skills development in both social and entrepreneurial domains, based on carefully crafted scenarios. Furthermore, the project made innovative use of multimedia, including **webinars**, **CV videos** and **success story films**, to motivate and educate NEETs. Regular partner meetings ensured the continuous exchange of knowledge and best practices, while the extension of the project's duration due to the COVID-19 pandemic allowed its flexible adaptation to changing circumstances. The project's comprehensive approach, which combined research, direct engagement, digital tools and collaborative learning, embodied the its methodology, contributing to its success in developing vital social and entrepreneurial skills among its target group.



Examples of motivational videos. Source: project website

Results of the initiative

Outputs

Among the most notable outputs of the project were the **comprehensive comparative analyses** that provided deep insights into the NEET demographic, laying the groundwork for targeted interventions. The project also developed a practical toolkit for trainers and NEETs, which included a practical handbook for teachers and a manual for students. These encapsulated the methodologies and learning materials needed for effective skill development. An innovative online collaboration platform was launched to facilitate modern teaching methods and interactive learning, while the **CV videos** and **motivational success story films** were created to inspire participants. **Local workshops**, underpinned by carefully designed scenarios for both social and entrepreneurial skills development, offered hands-on learning experiences. In addition, the project established a network of mediators and identified best practices in the field, enabling the sharing of effective strategies and approaches.

Outcomes

One of the most significant outcomes of the project was **enhanced engagement and skills development** among the NEET population across multiple countries, evidenced by the successful delivery of local workshops and the widespread use of the project's toolkit by trainers and NEETs alike. The project also facilitated the **creation of a sustainable network of mediators and stakeholders committed to supporting NEETs**, which fostered ongoing collaboration and support beyond the project's lifespan. Moreover, the adoption and integration of digital tools and platforms not only expanded the reach of the project but also **modernised the approach to teaching and learning social and entrepreneurial skills**, setting a new benchmark for similar initiatives. The successful pilot studies and tangible improvement in participants' abilities to navigate the labour market and entrepreneurial opportunities underlined the effectiveness of the project.

Motivational posters for social media dissemination. Source: Facebook page of the project

Impacts

For the NEET participants, the project provided **essential social and entrepreneurial skills**, empowering vulnerable youth to break the cycle of unemployment or disengagement from education and training. This empowerment was evidenced by learners' enhanced readiness to enter the labour market or to pursue educational opportunities, thus significantly impacting individual lives and contributing to a reduction in the NEET phenomenon. At an institutional level, the project fostered a collaborative network among educational institutions, NGOs and governmental bodies across Europe, promoting the exchange of knowledge and best practices that is set to continue beyond the project's duration. The **innovative methodologies and digital tools** developed and utilised throughout the project have also set new standards for the engagement and education of hard-to-reach populations, demonstrating the effectiveness of blending traditional and digital learning environments. Furthermore, the project's outputs, including the toolkit for trainers and NEETs, the online collaboration platform, and the comprehensive research findings, have become valuable resources for stakeholders working with NEET populations, and are likely to influence policy and practice in the field of youth engagement and education for years to come.

Success factors

Among the success factors of the project was the **strong collaboration and commitment** of its diverse consortium of partners, including educational institutions, NGOs, labour offices and universities across Europe, which fostered a rich exchange of ideas and best practices. The project's methodical approach – namely, **understanding the needs of NEETs through comprehensive research**, and the subsequent development of **tailored resources** such as the toolkit for trainers and NEETs – as well as the **innovative use of an online collaboration platform**, significantly contributed to its effectiveness. In addition, the **adaptability of the project team**, especially in extending the project's timeline in response to the COVID-19 pandemic, ensured that the initiative remained relevant and impactful despite external challenges. **Regular and focused partner meetings** played a crucial role in maintaining the momentum and coherence of the project's activities, ensuring that all participants were aligned with the project's objectives and outcomes.

Challenges and barriers

One of the main obstacles to the project identified by the interviewee from a partner organisation was the **heterogeneity of the NEET population**, which encompasses a wide range of backgrounds, motivations and barriers to employment or education. This diversity made it challenging to design programmes that were universally applicable and engaging for all participants.

In addition, the **COVID-19 pandemic** posed significant difficulties, necessitating an extension to the project's timeline and a pivot to more digital and remote engagement strategies. This sudden shift tested the project's adaptability and required the rapid development and deployment of online learning tools and resources, which might not have been as accessible or effective for all target participants. Engaging NEETs, particularly those who are disengaged or lacking motivation, proved to be a continuous challenge, requiring innovative outreach efforts and the use of social media and other platforms to reach and engage this elusive group.

Lastly, while the inclusion of multiple international partners was a strength, it also presented **logistical and communication challenges** in terms of coordination, requiring meticulous planning and constant communication to ensure alignment and effective collaboration. Addressing these challenges required a flexible, responsive approach and a willingness to adapt strategies and methodologies to meet the evolving needs of the project and its participants.

Lessons learned

One key lesson of the project is the importance of a **deep understanding of the needs and features of the target demographic**. The project's initial research phase was crucial in tailoring approaches to effectively reach and engage the diverse NEET population, thereby supporting its interventions with a solid, empirical understanding.

Another significant lesson learned was the **power of collaboration** across diverse organisations and countries. The transnational partnership facilitated a rich exchange of ideas, practices and experiences, enhancing the quality and impact of the project. However, this also highlighted the need for clear communication and coordination mechanisms to manage such collaborations effectively.

Furthermore, the project illustrated the effectiveness of **combining traditional educational methods with innovative digital tools** and **social media** in order to engage hard-to-reach populations. This blended approach can enhance accessibility and participation, particularly among younger demographics accustomed to digital interaction.

Lastly, the project underlined the importance of **practical, hands-on learning experiences** in developing social and entrepreneurial skills. The workshops and scenarios provided real-world contexts for participants to apply their learning, highlighting the need for experiential learning opportunities that relate directly to participants' lives and aspirations.

Conditions for transferability

Successfully transferring the 'Stop being couch potatoes! Developing social and entrepreneurial skills for NEETs' project into other contexts relies on a careful consideration of several critical conditions. First, a deep and nuanced understanding of the target group and its unique needs and challenges is necessary for effective the customisation of approaches to effective engagement. Second, the establishment of robust and diverse partnerships spanning educational institutions, NGOs, government entities and the private sector is vital, as these collaborations bring a wealth of perspectives, resources and expertise essential for adapting the project to different environments. Third, flexibility and adaptability with regard to project design and implementation are crucial, allowing real-time adjustments in response to unforeseen challenges or opportunities. In addition, the leveraging of digital tools and platforms must be approached with a focus on accessibility and inclusivity, ensuring that technological solutions do not inadvertently exclude participants.

Sources

Websites

- 'Stop being couch potatoes! Developing social and entrepreneurial skills for Neets' on Erasmus+ website
- 'Stop being couch potatoes! Developing social and entrepreneurial skills for Neets' website
- 'Motivation from the Couch' on Facebook

Interviews

- Interview with a representative of a partner organisation (14 March 2024).

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