



XXI Adults

**Adaptation of the adult educational
system to the XXI Century**

The Good Practices Template



INSTITUTE for
ROMA and
MINORITIES
INCLUSION



**DIPUTACIÓN
DE VALLADOLID**



E-SCHOOL
EDUCATIONAL GROUP



EMPODERAR
DESENVOLVIMENTO ORGANIZACIONAL, SOCIAL, PROFISSIONAL E PESSOAL



Co-funded by
the European Union



Name of the Good Practice

ADaPT4Future – Adult People Create Technologies for Their Future

Summary of the Practice

Brief, easy-to-understand summary: What is the practice, for whom, and for what purpose?

ADaPT4Future was an Erasmus+ project helping adults and educators gain digital and creative skills through 3D printing. Partners created a toolkit with learning materials and guidelines, using practical tasks and Design Thinking. After an international training, local workshops were held for over 200 adults, including people facing social or digital barriers. Participants improved their skills in technology, teamwork, and creative problem-solving, applying these to everyday situations. The project supported community involvement, social inclusion, and sustainable innovation.

Description of the Practice – min. 2000 characters

1) Context / Background

What was the initial need or problem?

Who was the target group?

Was it part of a larger programme or project?

The *ADaPT4Future* project was initiated in response to a growing and significant gap in digital skills among adult populations, especially concerning new technologies such as 3D printing and digital design. At the outset, it was clear that many adult learners faced substantial barriers in accessing opportunities related to technological advancements. Adults—particularly those from vulnerable or disadvantaged backgrounds such as the unemployed, migrants, refugees, and older adults—often lacked not only the technical skills but also the confidence necessary to engage actively with digital tools. Furthermore, educators, including librarians and community workers, required targeted support to effectively integrate new technologies into their teaching and community activities.

Recognizing these challenges, the *ADaPT4Future* partnership decided to tackle the issue directly through practical, accessible, and engaging educational methods. The main target groups identified were adult educators working in public libraries, FabLabs, and local community centres, who would be trained to facilitate learning sessions effectively. Another equally important target group included adult learners—especially unemployed individuals, young adults not currently engaged in education or training (NEETs), and migrants or refugees who needed targeted support to overcome barriers to employment and integration.

This initiative was part of a broader Erasmus+ KA2 Strategic Partnership, bringing together organisations from Lithuania, Poland, and Italy. The collaboration aimed to develop a comprehensive methodological toolkit to facilitate hands-on learning of 3D printing technologies. The toolkit included practical materials for learners, clear guidelines for educators, and structured research tools to evaluate and continually refine the learning process. Workshops combined technical instruction with creative problem-solving, enabling





participants to address real-life challenges by designing and producing objects that were meaningful and practically useful to them.

In this way, ADaPT4Future addressed both immediate and long-term educational and social needs. Immediate needs included basic digital competencies and problem-solving skills, while long-term goals involved fostering social inclusion, employability, community participation, and confidence in using technology. The project placed special emphasis on sustainability, teaching participants not only how to operate digital tools, but also how to apply innovative thinking to solve everyday problems sustainably.

2) Objectives

What were the goals of the practice?

What did it aim to improve or change?

The ADaPT4Future project aimed to address the lack of practical digital skills and creative problem-solving abilities among adult learners, especially those facing social and economic barriers. Its main goal was to create an innovative and accessible methodology combining 3D printing technology and Design Thinking principles with adult education best practices. This methodology was intended to engage adults actively, helping them build technical competences while encouraging creativity and sustainable thinking.

A key objective was to strengthen the skills and confidence of adult educators working in community settings such as public libraries, FabLabs, and local centres. By providing comprehensive training and practical tools, the project aimed to equip these educators to deliver effective workshops independently, ensuring the sustainability and scalability of the practice beyond the project's lifetime.

The practice also sought to improve the participation and employability of vulnerable adult learners—including unemployed individuals, NEETs, migrants, refugees, and older adults—by offering them hands-on learning opportunities that are directly relevant to their lives. Participants were encouraged to use 3D printing for practical tasks such as designing and producing replacement parts for household objects, promoting problem-solving skills and innovation.

Finally, the project aimed to foster wider community engagement and social inclusion by disseminating its methodology and results through multiplier events, publications, and an online platform. This dissemination sought to inspire other organisations across Europe to adopt and adapt the approach, thereby creating a sustainable impact in adult digital education and community development.

3) Implementation / Methodology

How was the practice carried out step by step?

What activities or methods were used?

How long did it take?





The ADaPT4Future project was implemented through a carefully planned sequence of steps, combining international collaboration with local action. The process began with mapping the existing skills and needs of both adult educators and learners across the three partner countries—Lithuania, Poland, and Italy. This initial assessment helped tailor the learning materials and activities to the specific contexts and competencies of participants.

Next, a comprehensive methodological toolkit was developed. This toolkit included slide presentations, guided and open projects using beginner-friendly software like Tinkercad, and more advanced tools such as Onshape. The materials introduced learners to 3D printing technology combined with Design Thinking, encouraging them to work on sustainable projects like designing and printing parts to repair or improve household items.

In September 2022, a five-day international training was held in Kaunas, Lithuania, where 20 adult educators and facilitators from partner organisations received hands-on training. They practiced using the toolkit, learned technical aspects of 3D printing, and developed facilitation skills based on adult learning principles. This training ensured that educators could confidently run workshops locally.

Between December 2022 and April 2023, the trained educators led over 20 local 3D printing workshops in their communities, involving more than 200 adult learners, many from vulnerable groups. These workshops combined theoretical instruction with practical activities, allowing participants to develop digital skills, creativity, and teamwork. The workshops lasted several weeks, depending on local schedules, providing ongoing support and engagement.

Throughout the project, data was collected via surveys and interviews to evaluate progress and impact. Dissemination activities, including multiplier events, publications, and online sharing, ran concurrently to ensure broad awareness and uptake of the methodology.

The entire implementation process spanned 2 years, from 2021 preparations to dissemination activities at the end of 2023, combining international expertise with local community engagement for sustainable impact.

4) Results / Outcomes

What were the concrete results?

How did the practice impact the participants?

The ADaPT4Future project delivered tangible and meaningful results for both adult learners and educators across Lithuania, Poland, and Italy. One of the most concrete outcomes was the development of a comprehensive methodological toolkit, which included practical learning materials, step-by-step guides, and project examples that enabled facilitators to run engaging 3D printing workshops tailored to adults with varying skill levels. This toolkit has been made publicly accessible on a Moodle platform, ensuring long-term usability and reach beyond the project's initial lifespan.

More than 200 adult learners participated in local workshops, many of whom belonged to vulnerable groups such as unemployed individuals, migrants, refugees, older adults, and those with limited digital literacy.





According to participant surveys, the majority significantly improved their 3D modelling and printing skills—before the workshops, almost half reported no or poor skills, while after, over 75% rated their abilities as good or excellent. Beyond technical skills, participants developed critical 21st-century competences including creativity, problem-solving, and teamwork, which they applied in real-life tasks such as designing and producing replacement parts for household items.

Adult educators also benefitted greatly: 20 facilitators underwent an intensive five-day international training, gaining both technical knowledge and adult education methods. This empowered them to deliver quality workshops and confidently support diverse learners. Surveys showed high satisfaction among educators regarding the training content and methodology.

In the months following the workshops, ex-post research revealed that many participants found the newly acquired skills useful in their personal and professional lives, with some reporting enhanced employability and increased motivation to pursue further learning. The project's broad dissemination—through events, publications, and online resources—ensured that the practice's impact extended beyond immediate participants, inspiring other organisations to adopt the approach.

Overall, ADaPT4Future fostered social inclusion, strengthened digital competences, and built a sustainable model for community-based adult education in emerging technologies.

5) Participants' Stories – optional

Short quotes, personal reflections or experiences shared by participant

6) Success Factors

What made the practice effective or innovative?

Were there any unique or creative elements?

The success of the ADaPT4Future project stemmed from several key factors that made the practice both effective and innovative. First, the combination of 3D printing technology with Design Thinking and adult education principles created a unique, hands-on learning experience tailored specifically to adult learners. This approach went beyond traditional digital skills training by encouraging creativity, problem-solving, and real-world application. Participants didn't just learn how to use software; they applied their skills by designing and printing tangible objects that addressed everyday needs, which boosted motivation and engagement.

Second, the project's strong focus on capacity building among adult educators was essential. The intensive five-day international training provided facilitators not only with technical expertise but also with effective teaching strategies suited to adult learners with diverse backgrounds. This empowerment of educators





We can identify five key success factors for the implementation of ADaPT4Future, each clearly supported by project documents and evaluation reports:

1. Educator Training

A comprehensive five-day training equipped facilitators with both technical and teaching skills, ensuring high-quality workshop delivery.

2. Learner-Centred Approach

Initial skills mapping allowed tailoring of materials and methods to meet the specific needs of diverse adult learners.

3. Methodological Toolkit

A detailed set of guides, presentations, and exercises was developed to support consistent and effective facilitation.

4. Accessible Venues

Workshops were held in community-friendly spaces like libraries and FabLabs to encourage participation and comfort.

5. Hands-on Learning

Focus on real-life projects, such as printing replacement parts, helped learners apply skills practically and stay engaged.

9) Lessons Learned - optional

Biggest surprises, obstacles or key takeaways during implementation.

10) Photos illustrating the described practice

Please attach at least 3 photos related to the described good practice







Source: ADaPT4Future. (n.d.). ADaPT4Future project: 3D printing in adult education. Retrieved June 23, 2025, from <https://adapt4future.gaminu.eu>

PRACTICE PROFILE – CLASSIFICATION CHECKLIST

Please tick all categories that apply to your described practice. You may choose more than one.

TYPE OF THE PRACTICE

- | | |
|-------------------------------------|----------------------------|
| ☒ | Learning by doing |
| ☐ | Intergenerational learning |
| ☐ | Community-based learning |
| ☒ | Digital / blended learning |
| ☐ | Peer learning |
| ☐ | Mentoring / coaching |




☒ Cultural / creative approaches

☒ Collaborative / partner-based

☐ Other (specify):

TARGET GROUP
☒ Adults with low qualifications

☒ NEETs (Not in Education, Employment, or Training)

☒ Migrants / Refugees

☒ Older adults

☐ Women

☐ People with disabilities

☐ Other vulnerable groups

☒ General adult population

LEARNING ENVIRONMENT
☐ Formal

☒ Non-formal

☒ Informal

SKILLS / COMPETENCES DEVELOPED
☐ Literacy (reading, writing, comprehension)

☐ Numeracy (maths, logical thinking)

☒ Digital skills

☐ STEM (science, technology, engineering, mathematics)

☒ Personal, social and learning to learn

☐ Civic competences

☐ Entrepreneurship

☐ Cultural awareness and expression

☐ Language skills

☐ Job-related / vocational skills

☐ Green competences

☐ Other (specify):

POTENTIAL USERS
☒ Teachers / Educators

☐ Administrative staff

☒ School / Centre management

☐ Policy makers / Public administration

☒ NGOs / Community organizations

☐ Other (specify):

Glossary of Categories (Explanation of Checklist Items)




Type of the Practice

- Learning by doing – learning through hands-on activities, practice-based methods such as workshops or real tasks.
- Intergenerational learning – activities involving participants from different age groups learning from each other.
- Community-based learning – learning that takes place within the local community, often through real-life engagement.
- Digital / blended learning – education using digital tools (online), or a mix of online and face-to-face methods.
- Peer learning – learning among participants of similar status or experience, supporting each other.
- Mentoring / coaching – one-to-one support from a more experienced person to help learning and personal growth.
- Cultural / creative approaches – use of arts, music, theatre, storytelling etc. as learning tools.
- Collaborative / partner-based – practices involving cooperation between organisations or groups.
- Other (specify) – any other method not listed above.

Target Group

- Adults with low qualifications – adults who have low levels of formal education or basic skills.
- NEETs – people Not in Education, Employment, or Training (often young adults).
- Migrants / Refugees – individuals who moved from another country, often facing integration challenges.
- Older adults – Adults aged 65+
- Women – practices specifically addressing women's needs.
- People with disabilities – individuals with physical, sensory, intellectual, or mental health disabilities.
- Other vulnerable groups – groups at risk of exclusion (e.g. long-term unemployed, homeless).
- General adult population – average adults not in specific categories.

Learning Environment

- Formal – learning within official education systems, certified courses (e.g. schools, universities).
- Non-formal – organised learning outside the formal system (e.g. workshops, community training).
- Informal – learning through everyday experiences, without a structured course (e.g. volunteering, family).





Skills / Competences Developed

- Literacy – reading, writing, and understanding texts (including functional texts like forms).
- Numeracy – using mathematics and logical reasoning.
- Digital skills – using digital tools e.g. CV creation, online tools, online platforms.
- STEM – science, technology, engineering, and mathematics.
- Personal, social and learning to learn – self-awareness, motivation, teamwork, lifelong learning skills.
- Civic competences – active citizenship, understanding of democracy and social responsibilities.
- Entrepreneurship – creativity, innovation, project management, risk-taking.
- Cultural awareness and expression – appreciation and creation of cultural content (e.g. arts, music).
- Language skills – ability to communicate in one or more foreign languages.
- Job-related / vocational skills – practical skills useful in specific jobs or professions.
- Green competences – knowledge and behaviours supporting sustainability and environmental care.
- Other – any other skills developed (please specify).

Potential users – groups who could benefit from applying, adapting, or being inspired by this practice in their work context.

Note: These categories follow EU frameworks such as the Key Competences for Lifelong Learning (2018), the Action Plan on Basic Skills (2025) and the Erasmus+ Programme Guide 2025 – Glossary





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