

# The Agile2Learn Curriculum ([agile2learn.eu](http://agile2learn.eu)).

*Panos Fitsilis ([fitsilis@uth.gr](mailto:fitsilis@uth.gr))*

*Vyron Damasiotis ([damasiotis@uth.gr](mailto:damasiotis@uth.gr))*

*Evangeli Boti ([eboti@uth.gr](mailto:eboti@uth.gr))*

## Introduction

Agile2Learn Project (project number 2021-1-CZ01-KA220-VET-000025558) is an Erasmus+ KA2/ Innovative project aimed at transforming education through the development of an Agile-based curriculum. The developed curriculum is designed to empower educators in primary and secondary education to adapt to the demands of the 21st century and create a dynamic, efficient, and collaborative learning environment.

The primary objectives of the Agile2Learn curriculum are as follows:

- **Define New Learning Paths:** Create innovative learning pathways that cater to the evolving needs of students in the 21st century.
- **Develop 21st Century Skills:** Equip educators with the skills and knowledge necessary to foster 21st-century competencies in their students, including Agile methodologies.
- **Enable Effective Teamwork:** Foster collaborative teamwork among learners, whether in face-to-face or virtual settings, to address complex and contemporary challenges.
- **Enhance Project Efficiency:** Empower learners and educators to implement educational projects more efficiently and effectively.
- **Promote Team Collaboration:** Encourage educators to work collaboratively, leveraging the benefits of teamwork over traditional isolated teaching methods.
- **Facilitate Modern Tool Usage:** Enable the use of modern team collaboration tools to enhance teaching and learning experiences.

## Curriculum Vision:

The Agile2Learn curriculum responds to the evolving educational landscape by incorporating Agile methodologies into the classroom. It aligns with EU policy priorities by:

- Improving transversal competencies in education.
- Embracing innovative pedagogical methods grounded in Agile Project Management and Agile Pedagogy.
- Developing a training curriculum for primary and secondary education teachers to implement Agile methodologies effectively.
- Testing and validating the proposed methodology.
- Cultivating an innovative culture of training.

- Curriculum Learning Objectives:

The Agile2Learn curriculum focuses on five key Learning Objectives:

- Development of Transversal Competences: Equip educators with skills that transcend specific job roles, allowing them to adapt to various situations and challenges effectively.
- Development of Agile Competences: Train educators in Agile methodologies, including Scrum, Kanban, Lean Management, and XP, to foster adaptability and efficiency.
- Development of Digital Transformation Competences: Enable educators to use digital tools and resources effectively for teaching and collaboration.
- Developing People and Teams: Enhance educators' ability to work in self-managed teams, fostering collaboration, communication, and problem-solving.
- Developing an Innovative Culture of Training: Cultivate a culture of continuous learning and innovation among educators and students.

### Agile2Learn Competencies:

The curriculum identifies three groups of competencies with specific skills within each group:

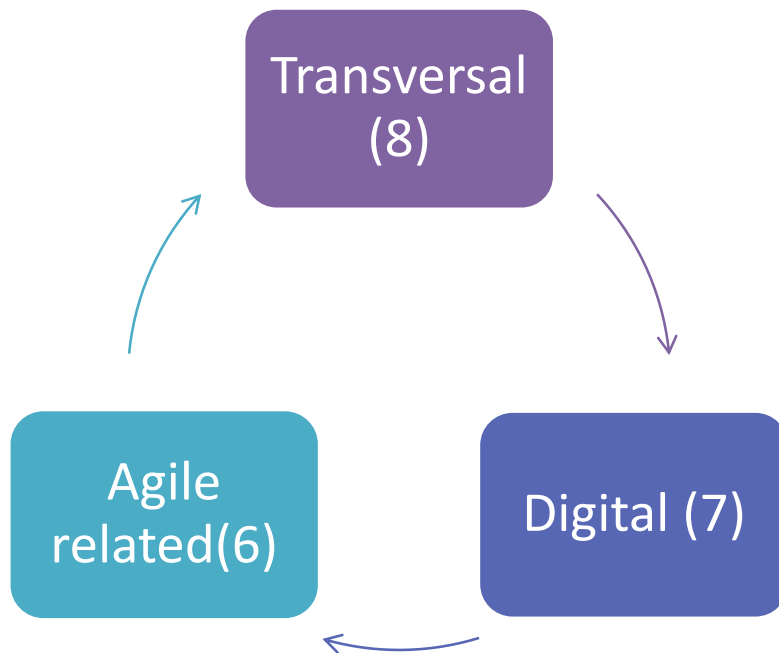


Figure 1: Agile2Learn project competences groups

### Agile Related Competencies

Six competences have been identified as agile competences. These are:

1. **Agile Methods Fundamentals:** This competency delves into the foundational understanding of Agile methodologies such as Scrum, Kanban, and Lean Management. Educators will learn how to apply these frameworks in educational settings to promote adaptability and efficiency.
2. **Entrepreneurial Thinking:** Entrepreneurial Thinking equips educators with the ability to identify market opportunities and creatively capitalize on them. It encourages educators to

think innovatively, work both individually and as part of a team, and take proactive, forward-looking approaches to teaching and learning.

3. **Project Inception (Planning):** This competence revolves around effectively planning and initiating projects within specified timeframes. It includes defining roles, facilitating communication, setting measurable objectives, identifying deliverables, and creating schedules. Educators learn to structure and manage educational projects efficiently.
4. **Self-Managed Teams:** Educators with this skillset can form and lead groups of students who collaboratively take full responsibility for delivering a service or product. Self-managed teams enhance students' teamwork and problem-solving abilities, fostering a sense of ownership and independence.
5. **Agile Artifacts:** Agile Artifacts refer to essential pieces of information that stakeholders and teams use to describe a product's development. Educators learn how to use artifacts like product backlogs and sprint backlogs to define and manage educational goals and progress effectively.
6. **Agile Ceremonies:** Agile Ceremonies are periodic meetings held to ensure projects are on track and meeting quality goals. Educators become proficient in conducting ceremonies like Sprint Planning, Daily Scrum, Sprint Review, and Sprint Retrospective, which enhance project management and team collaboration within the educational context.

## Transversal Competencies

After a project-based research endeavor, eight competences have been identified, each playing a pivotal role in shaping the success of individuals in diverse contexts. These competences, often referred to as transversal or transferable competences, hold immense value in today's rapidly changing world.

Transversal competences transcend specific job roles, academic disciplines, or areas of knowledge, making them universally applicable and indispensable in various situations and work settings.

**Communication:** Effective communication is crucial for educators to convey ideas, instructions, and feedback clearly to students and colleagues. It also involves active listening and understanding the diverse communication dynamics in various contexts, fostering positive learning environments.

1. **Creativity:** Cultivating creativity empowers educators to approach teaching and problem-solving in innovative ways. It encourages thinking beyond conventional boundaries, finding connections between ideas, and fostering a creative learning atmosphere that inspires students.
2. **Teamworking:** Teamworking skills enable educators to collaborate effectively with colleagues and guide students in collaborative learning experiences. Emphasizing the strengths of each team member and leveraging diverse perspectives enhances the learning process.
3. **Social Skills:** Social skills encompass a range of competencies that facilitate effective interaction and communication with others. Educators learn to develop skills such as conflict resolution, empathy, and active listening, which are essential for building positive relationships in the classroom.
4. **Handling Ambiguity:** This skill equips educators to navigate uncertain and ambiguous situations with confidence. It includes making decisions in unpredictable circumstances, testing ideas and prototypes, and adapting swiftly to change, ultimately fostering resilience in the face of uncertainty.

5. **Critical Thinking:** Critical thinking encourages educators to actively and skillfully analyze, evaluate, and synthesize information. It equips them to guide students in developing analytical and reasoning skills, enabling deeper understanding and problem-solving.
6. **Problem Solving and Decision Making:** Problem-solving skills help educators identify challenges, analyze them, and find effective solutions. Decision-making skills enable thoughtful and objective choices, enhancing educators' ability to make informed decisions for their students' benefit.
7. **Time Management:** Time management skills empower educators to use their time productively and efficiently. Prioritizing tasks, scheduling, and organizing activities allow educators to optimize their teaching and administrative responsibilities, ensuring a balanced workload.

## Digital Competencies

In today's digitally interconnected world, the value of digital competences cannot be overstated. Proficiency in digital skills is not just a necessity but a powerful enabler for success in education, the workplace, and daily life. These competences empower individuals to navigate the digital landscape with confidence, harnessing technology to communicate effectively, solve complex problems, access vast information resources, and create innovative solutions. Moreover, in an era where digital transformation is reshaping industries and economies, digital competences are the gateway to numerous opportunities and a key driver of personal and professional growth. Whether in education, careers, or simply staying connected in the modern age, digital competences are the currency of the digital era, offering individuals the tools to thrive in an increasingly digitalized world. Based on Digicom Agil2Learn identified 7 digital competences:

1. **Digital Collaboration at Professional and Learning Level:** Proficiency in digital collaboration equips educators to effectively use technology for professional networking and collaborative learning environments. It enables them to leverage digital tools for communication, cooperation, and knowledge sharing, fostering a global community of learners.
2. **Selecting Digital Resources:** Educators with expertise in selecting digital resources can identify, assess, and choose appropriate digital materials for teaching and learning. They consider factors such as learning objectives, pedagogical approaches, and learner characteristics when making resource selections.
3. **Creating and Modifying Digital Resources:** This competence empowers educators to adapt and create digital educational materials, enhancing their teaching resources. They can modify existing resources to suit specific learning needs or create new content, providing personalized and engaging learning experiences.
4. **Managing, Protecting, and Sharing Digital Resources:** Educators proficient in managing digital resources organize and make them accessible to learners while ensuring data privacy and copyright compliance. They understand the importance of protecting sensitive digital content and can effectively share resources with students, parents, and colleagues.
5. **Actively Engaging Learners:** Educators with expertise in actively engaging learners use digital technologies to foster students' active participation and creativity in the learning process. They employ pedagogical strategies that encourage transversal skills, deep thinking, and creative expression.
6. **Digital Content Creation:** This competence involves incorporating digital means for students to express themselves and learn. Educators guide students in creating and manipulating

digital content in various formats, teaching them about copyright, licensing, and proper source referencing.

7. **Digital Problem Solving:** Educators skilled in digital problem-solving incorporate activities that require students to identify and solve technical problems or apply technological knowledge to novel situations. This competency prepares students to tackle real-world challenges in a digitally driven society.

## Conclusions

In conclusion, the Agile2Learn curriculum stands as a beacon of innovation and adaptability in the field of education. Its overarching goal is to equip educators with a holistic skill set and a deep reservoir of knowledge that transcends traditional teaching methods. By nurturing a profound understanding of Agile methodologies, transversal competences, and digital proficiencies, this curriculum empowers educators to be dynamic catalysts for change in the learning process. The aim is not merely to impart knowledge but to foster a mindset of continuous growth and adaptability, preparing educators to navigate the ever-evolving educational landscape. Through the Agile2Learn curriculum, educators are poised to create learning environments that mirror the dynamism of the 21st century, where students are not just equipped to face challenges but are inspired to become active contributors to a rapidly changing world. It is a transformative journey that promises to reshape education and, in doing so, shape the future.

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