STIAEM — Open Educational Resource (OER) Repository for AI

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OER 1.1.2

Key Competencies and Pedagogical Framework of the STIAEM Learning Ecosystem

Identifier	OER 1.1.2
Title	Key Competencies and Pedagogical Framework of the STIAEM Learning Ecosystem
Creator	University of Foggia - Italy
Description	The resource sets out the theoretical matrix of the STIAEM learning ecosystem, combining the Slow Tech paradigm, the ARTE model (Agency, Reflection, Transformation, Ethics) and the principles of Universal Design for Learning. It connects these frameworks to the DigCompEdu competence areas and to the AI-Explicit and AI-Implicit descriptors of DigComp 3.0, turning them into criteria for selecting and adapting AI tools. The pedagogical focus is on preserving teacher agency and ethical supervision while AI works as accessible cognitive scaffolding.
Keywords	learning ecosystem; pedagogical framework; Slow Tech; ARTE model; Universal Design for Learning; DigCompEdu; DigComp 3.0; teacher agency
Language	EN (English)
Affiliation	University of Foggia - Italy
Contributor	STIAEM Transnational Scientific Board (peer review, Rhodes validation protocol)
Media Format	Text; Infographics
Genre	Training Manual; Educational Guide
URL	https://www.stiaemproject.eu/?oer_download=OER-1.1.2
References	University of Foggia. (2026). *Key Competencies and Pedagogical Framework of the STIAEM Learning Ecosystem* [Educational guide]. Slow Tech Innovation: AI, Ethics, and New Teaching Methods (STIAEM), 2025-1-IT02-KA220-SCH-000365213.
Citation	CAST. (2024). Universal Design for Learning Guidelines version 3.0. CAST. https://udlguidelines.cast.org/ Cosgrove, J., & Cachia, R. (2025). DigComp 3.0: European Digital Competence Framework - Fifth edition (Report No. EUR 40491, JRC144121). Publications Office of the European Union. https://doi.org/10.2760/0001149 Crompton, H., Burke, D., Bozkurt, A., & Miao, F. (2026). A framework for generative AI policy and guidelines in K-12 education. Journal of Research on Technology in Education, Article in press. https://doi.org/10.1080/15391523.2026.2661641 European Commission. (2020). Digital Education Action Plan 2021-2027: Resetting education and training for the digital age. Publications Office of the European Union. European Commission. (2022). Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators. Publications Office of the European Union. https://doi.org/10.2766/153756 European Parliament. (2024). Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence (Artificial Intelligence

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Educational Level	Secondary School
Associated Module / MOOC Video Lesson	Module 1 - Project Introduction and Pedagogical Model / Video 1.1 - Presentation of the STIAEM project
Learning Objectives	Articulate the theoretical matrix of the STIAEM ecosystem, understanding how the Slow Tech paradigm and the ARTE model reconfigure the teacher's role within a triangular pedagogical relation. Select, adapt and critically evaluate artificial intelligence tools for teaching, linking them to the DigCompEdu competence areas (Redecker, 2017) and to the DigComp 3.0 learning descriptors. Design classroom pathways according to the principles of Universal Design for Learning (CAST, 2024), employing AI as accessible and inclusive cognitive scaffolding. Preserve ethical

	oversight, decision-making autonomy and professional responsibility (human-in-the-loop approach), averting passive cognitive disengagement and standardisation.
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