



Erasmus+ Programme – KA2 NUMBER - 2021-1-IT02-KA220-HED-000032085

Technologies for STEAM Teaching

- towards adaptive teaching with digital tools in the STEAM field

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The Project



- In line with the Digital Education Plan 2021-2027
- Innovative and quality teaching/learning through new technologies
- Focus on **STEAM**-disciplines
- Focal points:
 - Co-development of a Learning Programme for training trainers
 - Development of digital, methodological, design and communikative-relational **competences**
- Link to Project-Website: https://project-test.unisi.it/de/home-5/



Project Objectives



- 1. Encouraging a **change of mindset** of university teachers to evolve into the role of the Adaptive Teacher
- 2. Stimulation of **concrete changes** in university pedagogical practices
- 3. Promotion of a methodological, technological and didactic **alignment** of a pool of teachers
- 4. Experimenting with the methodologies acquired





So what?









Selection Dimensions



Support Needs

Types of Learning Tasks

Types of Collaboration Tasks



The Learning Dimension (I)



Bloom's Taxonomy



EFMD GLOBAL International

ONFORM

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THE Samr Model

Dr. Ruben R. Puentedura



SUBSTITUTION

Technology acts as a direct substitute, with no functional change

AUGMENTATION

Technology acts as a direct substitute, with functional improvement

MODIFICATION

Technology allows for significant task redesign

REDEFINITION

Technology allows for the creation of new tasks, previously inconceivable



ENHANCEMENT

TRANSFORMATION

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The Learning Dimension (III)

(3)

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Source: https://designingoutcomes.com/english-speaking-world-v5-0/ CC BY-NC-SA 4.0

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The Learning Dimension (III)





Source: <u>https://designingoutcomes.com/english-speaking-world-v5-0/</u> CC BY-NC-SA 4.0

Co-funded by the European Unior

The Collaboration Dimension (I)





adapted from Johansen, Robert (2020-11-25), "User Approaches to Computer-Supported Teams", Technological Support for Work Group Collaboration, CRC Press, pp. 1–31



The Collaboration Dimension (III)



Media Synchronicity

Conveyance Processes Convergence Processes



adapted from Dennis, A.R.; Fuller, R.M.; Valacich, J.S. Media, tasks, and communication processes: A theory of media synchronicity. MIS Q. 2008, 32, 575–600



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https://bit.ly/4boKtCQ

https://project-test.unisi.it