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BYOD-Learning

BYOD – Learning: Learning at Any Time, at Any Place, via Any Device

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Implementation period: 1 January 2022 – 31 December 2023

Training course for supporting teachers and educators to digital transformation through the development of digital readiness, resilience and capacity, using the BYOD method

Module Number and Area/ Topic: Module 10 – Education 4.0 – BYOD-Learning as part of the STEAME School of the Future

Module Owners: CyMS

Introduction and Broad Description of the Context and Goal of the area/ topic addressed:

This module examines the historical and prospective outlook on education, utilizing a progressive framework that encompasses Education 1.0 through Education 4.0. The material delves into the influence of technological advancements and the evolving landscape of education for young learners.

Learning Objectives and Learning Outcomes: With the completion of this module the trainees will be able to

1. Understand the concepts of learning evolution from Education 1.0 to 4.0
2. Understand the differences between knowledge, competence and skill
3. Understand the IPL and PBL methods in relation to STEAME activities and learn how to support students working in groups both physically or hybrid

Content and Resources (providing information on the various constituents/ dimensions of the topic under consideration):

- Pedagogical strategies from Education 2.0 to Education 4.0
- Importance of video learning in today's society and learning needs
- Presentation of the school of the future

Methodology and approaches for the module training presentation:

The instructional method involves utilizing a PowerPoint (PPT) presentation that is enriched with interactive links to different tools, promoting active engagement among the participants. Furthermore, the PPT incorporates a blend of informative text and visually stimulating images,

complemented by video links to capture the trainees' interest. Subsequent to the video presentations, guided discussions will take place.

Instruments/ Tools/ Supporting Material/ Resources to be used:

- PPT
- Links
- Videos
- All of the above are saved in the same digital folder named: Learning in the future
- www.steame.eu, www.steame-hybrid.eu , www.byod-learning.eu , www.facilitate-ai.eu , <https://onlife.up.krakow.pl/> , <https://ecovem.eu/> , <https://www.metis4skills.eu/> , https://thalescyprus.com/?page_id=3386, www.steame-academy.eu

Pedagogical/Learning Sequencing and Activities Plan:

PART 1	Introductory Activities (creation of interest, reference to real value issues, relation to background experiences, etc.)
Learning Objectives	Ice-breaking activity to encourage trainees to think critically and imaginatively about the future of educational institutions. This activity promotes active participation and encourages reflection on the existing deficiencies within schools.
Learning Outcomes	The activity promotes critical thinking, creativity, effective communication, collaboration, reflection, and active engagement, enabling trainees to envision and express their ideas for future educational institutions. It encourages them to develop a deeper understanding of the current education system while fostering a sense of ownership over their learning process.
Competences	Critical thinking, creativity, imagination, collaboration and sharing, communication, expression, reflection and awareness, engagement and participation
Content, Resources and Tools	Link to www.menti.com use WORDCOUNT in mentimeter
Activities	The trainees are asked to reply to the following question through Mentimeter: <u>What do you want to see in a future school or university that you do not see today?</u>
Estimated Time	10 minutes

PART 2	A.Development Activities
Learning Objectives	Trainees will gain knowledge about the different stages of educational development, from Education 1.0 to Education 4.0. They will analyze and evaluate the statements presented by the trainer, identifying the key characteristics and implications of each educational era. Trainees will engage in reflective thinking and

	discuss their observations and interpretations of the presented statements, sharing insights and perspectives.
Learning Outcomes	Understand the evolution of education from Education 1.0 to Education 4.0. Analyze the characteristics and implications of each educational era and foster critical thinking and reflective skills in relation to the evolution of education.
Competences	Reflective thinking, cognitive skills (analytical and evaluative abilities), communication skills (by engaging in discussion)
Content, Resources and Tools	Slides and pictures with characteristics of each level
Activities	Teacher presents Education 1.0 to 4.0 statements and asks trainees to reflect and discuss
Estimated Time	20 minutes

PART 2	B.Development Activities
Learning Objectives	Trainees will understand the principles and benefits of STEAME (Science, Technology, Engineering, Arts, Mathematics, and Entrepreneurship) learning. They will explore the concept of Project Based Learning (PBL) as an effective pedagogical approach and reflect on the application and potential of STEAME and PBL in various contexts.
Learning Outcomes	Trainees will acquire a solid understanding of the STEAME framework, its components, and the integration of project-based learning within this approach. They will critically reflect on the potential advantages and challenges of implementing STEAME and PBL, considering their relevance, effectiveness, and applicability to different educational settings. They will also explore how STEAME and PBL foster creativity, innovation, and problem-solving skills, recognizing the value of these skills in today's and the future's workforce.
Competences	Knowledge and understanding, critical thinking, interdisciplinary connections, creativity, innovation
Content, Resources and Tools	PPT slide and links to websites for examples
Activities	STEAME learning through Project Based Learning explored: Trainer presents and trainees reflect
Estimated Time	20 minutes

PART 2	C.Development Activities
Learning Objectives	Trainees will gain an understanding of emerging trends and concepts related to future learning spaces and explore the potential benefits and implications of innovative learning environments.
Learning Outcomes	Trainees will acquire knowledge about the characteristics, features, and emerging trends in future learning spaces, including advancements in technology, flexible design, and collaborative learning environments. They will critically reflect on the presented learning spaces, considering the potential benefits and challenges associated with their design and utilization. They will engage in creative thinking by envisioning how future learning spaces can enhance engagement, collaboration, and innovation in educational settings. In addition, trainees will develop an awareness of how evolving learning spaces align with and support shifts in pedagogy, such as student-centered learning, project-based approaches, and personalized instruction.
Competences	Knowledge acquisition, critical reflection, creative thinking, awareness of pedagogical shifts
Content, Resources and Tools	Slides and links to designs, photos and videos
Activities	Trainer presents the Learning Spaces of the future and trainees reflect
Estimated Time	20 minutes

PART 3	D.Development & Practicing Activities
Learning Objectives	Familiarize trainees with additional elements in the evolution of learning, such as STEAME-Hybrid, BYOD-Learning, Facilitate-AI, and STEAME-Academy, encourage trainees to reflect on the presented elements and their potential impact on education and facilitate trainees' self-assessment of adaptable competencies through the ONLIFE online assessment tool.
Learning Outcomes	Trainees will acquire knowledge about emerging elements and concepts in the evolution of learning, expanding their understanding beyond the previously presented concepts. They will critically reflect on the presented elements, analyzing their implications, benefits, and challenges in relation to teaching, learning, and educational environments. Moreover, trainees will develop an awareness of how emerging technologies, such as AI, are influencing and shaping the future of education. Finally, trainees will engage in a self-assessment process using the ONLIFE online assessment tool, identifying and evaluating their adaptable competencies and areas for further development.
Competences	Knowledge and understanding, critical thinking and analysis, technological literacy, self-assessment and reflection

Content, Resources and Tools	PPT slide, links to websites, photos, videos, online self-assessment
Activities	The teacher presents more elements in the evolution of learning (STEAME-Hybrid, BYOD-Learning, Facilitate-AI, STEAME-Students, STEAME-Academy etc) and trainees reflect. Trainees are asked to do an online ONLIFE self-assessment for adaptable competencies.
Estimated Time	20 minutes

PART 4	Evaluation of Learning Outcomes
Learning Objectives	At this stage trainees will measure the impact they had from the module.
Learning Outcomes	Self-reflection and measure attitude and beliefs
Competences	Analytical and critical thinking, self-reflection, self-evaluation
Content, Resources and Tools	Link to www.menti.com use WORDCOUNT in mentimeter
Activities	The trainees are asked to reply again to the question through Mentimeter: <u>What do you want to see in a future school or university that you do not see today?</u> Comparison and discussion of the two word-counts, pre and post.
Estimated Time	15 min

Reflection and Closure activity:

PART 5	Reflection and Closure Activity
Learning Objectives	Encourage critical thinking and reflection among trainees, foster collaborative discussion and idea generation for future challenges, enhance the ability to formulate and articulate thoughts and opinions.
Learning Outcomes	Trainees will engage in analysis and reflection, considering the challenges and opportunities presented for the future of education. They will explore different perspectives and evaluate potential solutions. They will also actively participate in discussions, exchanging ideas, sharing insights, building upon each other's contributions. they will collaborate to generate creative and practical solutions to the challenges posed by the trainer. Through the discussions and exploration of future

	challenges, trainees will develop problem-solving skills, identify innovative approaches, and propose viable solutions.
Competences	Critical thinking, communication, collaboration, creative thinking, problem-solving
Content, Resources and Tools	PPT and menti-meter tool
Activities	Reflection through discussion or use of menti-meter with new question set by trainees: The trainer will set challenges for the future and support discussion between trainees
Estimated Time	15 minutes