

Erasmus+ Projects AI Pioneers & AI4ED

Use cases of artificial intelligence in vocational
education and training

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Agenda

- The AI-Pioneers Project
- The AI4ED Project
- Needs and Challenges

AI-Pionners

Project aims

- Researching, promoting and evaluating the use of AI in VET.
- Supporting the development of new initiatives and projects that use AI.
- Establish a network of pioneers from the education sector for the field of artificial intelligence (AI).
- Focus on policy recommendations, toolkits and implementation rules for AI in education

Use Cases AI-Pioneers

- The topic of AI in form of working groups or additional qualifications
- Collaborative robotics and ChatGPT
- New pedagogical form in German VET schools
- Critical thinking becomes more relevant for Teachers and learners when dealing with AI-supported learning opportunities



AI4ED

Project aims


- Promote key, transversal and future skills
- Develop new tools, methods and assessment systems that respond to the new reality.
- Definition of the AI strategy in educational processes.
- Identification of data structure for the implementation of AI.
- Capacity Building for teachers and students
- Toolkit development and Use Case Implementation

Use Cases AI4ED

- Concept for the data basis for the implementation of an AI
- Teacher training modules by moodle.
- The course has a focus on educational methods, covering pedagogical practices and their integration with AI.
- The importance of active learning, personalized tutoring and dropout prevention is emphasized through the combination of pedagogy and artificial intelligence.

Home Dashboard My courses

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Module	Progress %
1	19
2	23
3	0
4	0
5	0
6	0
7	0
7	0
*	0

Overall progress % 10



Needs and Challenges

- Some AI projects in schools, but these have not yet reached the entire teaching staff and should therefore be regarded as pilot projects.
- German vocational school teachers are quite open to the use of AI-based learning applications in vocational schools. Students are still rather skeptical about the topic and use of AI.
- Strong interest in good practice examples with experimental “hands-on learning” phases and based on students' self-activity.
- Skills development for teachers and learners who need to develop critical thinking, adaptability and creativity.

Feel free to contact us!



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AI PIONEERS

Artificial Intelligence in education & training

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The Institute Technology and Education

- a central scientific institution of the University of Bremen with a focus on VET research
- an interdisciplinary institute
- Artificial intelligence (AI) extends across various sectors, including education.
- what impact AI will have on learning, teaching and (European) policy?



Influence of AI in VET

- (1) requires increased competence requirements (Kock & Schad-Dankwart, 2010)
- (2) action- and design-oriented learning models are required,
e.g. AI laboratories (Burchert et.al.2021, Euler & Wilbers, 2020)
- (3) A further development of the quality of the learning offerings (Attwell et al., 2021)
- (4) effectiveness of digital teaching/learning spaces (Siemer, 2023)