

Call for Papers:

From Cradle into Space – The Revolution of Artificial Intelligence in Vocational Education

Introduction

The integration of Artificial Intelligence (AI) into vocational education and training (VET) is rapidly transforming the landscape of professional training and skill development worldwide. As AI technologies such as machine learning, generative AI, and automated assessment tools continue to evolve, they present both opportunities and challenges for the future of VET. In light of these advancements, we invite international researchers, practitioners, and policymakers to submit proposals that explore AI's role in reshaping vocational education.

This call for papers aims to address the transformative potential of AI in VET, with a particular focus on innovative pedagogies, methods, and practices that can support competency development, teacher adaptation and conducive learning environments in this new era. At the same time, it includes the perspective of young people being challenged to adapt to the technological and societal shifts and perceiving the contemporary world to be in a perpetual state of crisis.

We invite submissions on the following themes, which explore the multifaceted role of AI in vocational education:

AI in Pedagogical Design and Learning Models

- AI's role in facilitating personalized and competency-based learning pathways, especially for developing critical skills such as complex thinking, problem-solving, and communication
- Development of AI-driven instructional strategies tailored to VET, with a focus on helping youth impacted by the pandemic
- Ethical considerations of AI in VET, especially in terms of inclusivity and fairness
- Assessments and examinations, designed to benefit from AI and avoid potential challenges

Methodological Innovations

- AI supporting the creation of adaptive learning systems that address the challenges faced by students recovering from pandemic-related or other disruptions
- Use of AI in data-driven decision-making for curriculum design, particularly for fostering communication and teamwork skills
- Teacher training methodologies and the integration of AI tools in VET to improve instructional practices and meet diverse learner needs
- New research methodologies for evaluating AI's impact on vocational learning environments, especially for vulnerable and underserved youth

Practical AI Applications in Vocational Training

- AI-powered simulations and virtual/augmented reality applications that develop key competencies, including problem-solving and teamwork
- AI in workplace-based learning and apprenticeships, supporting emotional and cognitive development of students
- The integration of automation and robotics in VET programs to enhance technical and critical thinking skills
- Case studies of successful AI adoption in specific vocational sectors, particularly in addressing post-pandemic educational gaps

SPONSORED BY THE

Supporting VET Trainers and Teachers

- Strategies for using AI to enhance professional development for VET instructors, helping them respond to evolving student needs
- Addressing the challenges of teaching communication, collaboration, and problem-solving in post-pandemic VET environments
- The role of AI in helping VET educators support students' emotional and academic recovery from the effects of the pandemic
- Teacher training frameworks for developing AI literacy and teaching competencies in VET educators

Submission Guidelines

We invite submissions of full papers, short papers, and practitioner reports that focus on AI's transformative potential in vocational education. Abstracts should be no longer than one page (approximately 400-500 words) and should emphasize innovative AI applications, pedagogical approaches, and solutions for both students and educators in VET systems. We particularly encourage research that addresses the psychological and developmental challenges posed by the pandemic and cumulating global crises, and how AI can support the development of key skills. **We will accept first publications of research findings, project reports and policy approaches.** We will accept a **maximum of 15.000 signs (plus abstract of 800 signs).**

Please consult the **attached author guideline** for further remarks.

Submission Details:

Abstracts and papers are to be submitted in English. Submissions will undergo a double-blind peer review process.

Who Should Submit?

This call is open to researchers, practitioners, and educators from the fields of vocational education, AI, and educational technology, as well as industry professionals, policymakers, and those working in workforce development. We also invite submissions from those focusing on the challenges faced by youth in the post-pandemic era and solutions for VET educators. Contributions from bilateral partners countries of the German Ministry of Education (BMBFSFJ) are particularly encouraged; however, the call is expressly open to the global community of experts.

Publication Process

When the review process has been completed and contributions have been selected, they will be proofread, professionally typeset and published as an anthology in the series "BIBB SPECIALIST PAPERS ON VET." BIBB will cover the production costs. The anthology will be made available for free download under the Creative Commons license CC BY-SA (open access). Therefore, each author is required to grant BIBB the simple right of use for the reproduction and distribution of their work. In addition, a printed edition of the anthology will be available through a media service provider. Each author will receive a free copy.

Key Dates:

- Abstract Submission Deadline: 08.03.2026
- Notification of Acceptance: 07.04.2026
- Final Paper Submission Deadline: 01.07.2026
- Publication of full volume: Mid of 2027

Use of artificial intelligence:

As per BIBB guidelines, the use of generative AI must be disclosed and content must be labelled as such. For statements generated using AI, include a footnote containing information about the provider, name and version of the AI (software) and date of response generation. Example: OpenAI, ChatGPT (Version 5.0), 1 August 2025.

Please also disclose in a general footnote, if you have used AI for translations, background research, sources etc. and indicate the provider, name, version of the AI and date of response generation.

Besides the BIBB institutional agreement, we rely on the guidelines communicated by the European Union¹, amongst others these are recommendations (excerpt):

1. Researchers remain ultimately responsible for scientific output.
2. Researchers should use AI transparently.
3. Refrain from using generative AI tools substantially in sensitive activities that could impact other researchers or organisations (for example using generative AI to search background info for a review is not a substantial use, while delegating the evaluation or the assessment of a paper is a substantial use)

Contact Information:

Julia Olesen (julia.olesen@bibb.de), +49 228 1071516, or Hanna Kress (kress@bibb.de), +49 228 1071927

We look forward to receiving your contributions and advancing the global dialogue on AI's transformative role in vocational education and training.

¹ See also European Commission (2025). Living Guidelines on the Responsible Use of Generative AI in Research. URL: https://research-and-innovation.ec.europa.eu/document/download/2b6cf7e5-36ac-41cb-aab5-0d32050143dc_en?filename=ec_rtd_ai-guidelines.pdf