2027 Cedefop-OECD symposium

Apprenticeships in the age of AI: Rethinking pathways to qualifications, skills and work

27-28 May 2027, Cedefop, Thessaloniki, Greece

Call for abstracts

Cedefop and the OECD are seeking abstracts regarding:

- **the impact of artificial intelligence on apprenticeship content, delivery, level and enrolments, through evolving workplace tasks and roles, changing skill and qualification needs, shifting hiring patterns and learner preferences**
- **the ways in which apprenticeship can remain an effective education and training option in AI-impacted workplaces, providing the relevant skills and qualifications for changing occupations**

The call for abstracts will remain open until 15 October 2026.

You are invited to submit via apprenticeship-team@cedefop.europa.eu:

(a) abstracts of advanced, unpublished papers
(b) abstracts/links to published papers and reports

Cedefop and the OECD will assess submissions on the basis of (a) relevance, (b) evidence basis, (c) methodology and analytical approach and (d) appeal to an international audience.

Selected papers will be presented in the 2027 Cedefop/OECD symposium and/or included in a subsequent Cedefop-OECD publication.

The focus of the symposium: Apprenticeships and AI

Rationale

AI brings profound changes in workplace tasks and roles. Job descriptions across the board are being updated to include AI-related competencies and responsibilities. Graduates of VET and apprenticeships need to collaborate with AI for the execution of technical tasks and to adjust to agentic workflows. Apprenticeship curricula and qualifications need to be updated to match the evolving skill needs and improve future workers' capacity to work with AI-based technologies. More than that, AI takes over baseline tasks which were in many cases performed by apprentices or apprenticeship graduates who get entry-level roles once their programmes are completed. As apprenticeships continue to expand into new fields and occupations, they may also be exposed to a decline in entry-level openings. To date this contraction appears concentrated in white-collar roles, so the effect on apprenticeships is likely to be uneven and occupation-specific rather than uniform. One possible turn of events is that employers scale back their apprenticeship participation in certain occupations, since part of what apprentices learn in their programmes may no longer be performed by humans.

Conversely, apprenticeships can once again prove to be an agile and effective policy response for building the skills and qualifications needed in AI-impacted labour markets, where traditional education and training can struggle to keep pace with the rapid integration of AI at the workplace. Building on their core features — learning-by-doing and the combination of two learning venues — apprenticeships can develop both broad, baseline AI-related skills and the advanced skills needed in occupations at the heart of AI expansion. Whether AI is a net threat or a net opportunity for any given apprenticeship will depend largely on how quickly its content and level are upgraded — moving learners away from tasks that AI absorbs and towards tasks where AI complements human work. Beyond changing what apprenticeships teach, AI can also reshape how they are delivered: AI-supported learning can ease the load on instructors, help scale provision and expand the number of available places, potentially lowering the cost of delivering quality apprenticeships.

The 2027 joint Cedefop-/OECD apprenticeship symposium intends to capture how the changes in tasks and jobs affect company preferences and learner choices, what it means in terms of apprenticeship qualifications (content, level, purpose) and what enables apprenticeship to remain an effective education and training option in changing workplaces, and AI-impacted job markets. The symposium will provide an opportunity to gain insights from research on these topics from around the world.

The joint Cedefop-OECD apprenticeship symposia

Since 2019, the European Centre for the Development of Vocational training (Cedefop) and the Organisation for Economic Co-operation and Development (OECD) Centre for Skills have been jointly organising apprenticeship symposia. The symposia bring together policy-makers, social partners, practitioners and researchers from around the world, to gain insights from and discuss recent evidence on apprenticeship.

Each symposium has a thematic focus, which in previous years was:

- The next steps for apprenticeship (2019, Paris)

- Apprenticeships for greener economies and societies (2021, online)
- Apprenticeships and the digital transition (2023, Thessaloniki)
- New fields for apprenticeship (2025, Paris)

The symposia feature presentations of research papers, which are submitted to the organisers following a call for evidence. The paper presentations are complemented with panel discussions with key apprenticeship actors, as well as presentations of relevant international data and policy insights from international organisations.

The papers presented during the symposia are published as a joint Cedefop-OECD publication. Other materials from the symposia, such as the slides from the presentations, are made available on the symposium webpage.

Understanding apprenticeships

The joint Cedefop-OECD apprenticeship symposia focus on education and training that can truly be understood as a quality apprenticeship. Not all initiatives to introduce or reinforce work-based learning in VET programmes would fall under what is understood as apprenticeships.

Attention has turned into reinforcing and consolidating the core features of apprenticeships as a unique education and training option and into safeguarding its quality. Both the EFQEA (2018) and ILO Recommendation 208 (2023) set criteria or provisions for quality apprenticeship and offer an 'understanding' of the term. Apprenticeships are understood as:

Council recommendation on a European framework for quality and effective apprenticeships (2018)	**ILO Recommendation 208 concerning quality apprenticeships (2023)**
…apprenticeships are understood as formal vocational education and training schemes that: a) combine learning in education or training institutions with substantial work-based learning in companies and other workplaces, b) lead to nationally recognised qualifications, c) are based on an agreement defining the rights and obligations of the apprentice, the employer and, where appropriate, the vocational education and training institution, and d) with the apprentice being paid or otherwise compensated for the workbased component….	….(a) the term "apprenticeship" should be understood as a form of education and training that is governed by an apprenticeship agreement, that enables an apprentice to acquire the competencies required to work in an occupation through structured and remunerated or otherwise financially compensated training consisting of both on-the-job and off-the-job learning and that leads to a recognised qualification; ….

Therefore, training that happens purely on the job and does not involve an off-the-job learning component with an education and training institution is not covered by the symposium, nor is training that does not lead to a nationally (or regionally, depending on the governance) recognised qualification. Moreover, the work-based learning element needs to be substantial, i.e. going beyond a short internship, reaching or ideally exceeding 50% of the total programme duration. Papers may still refer to adjacent formats (such as short employer-led programmes or micro-credentials) where useful for comparison, provided the analytical focus remains on apprenticeships as understood here.

Call for papers

The organisers are seeking papers regarding the impact of Artificial Intelligence on apprenticeships, **in one or more of the following angles** (indicative and non-exhaustive list):

1. **AI implications for purpose, content and level of apprenticeship qualifications**

- If entry-level, routine tasks are further replaced by AI, what should be the purpose, content and level of apprenticeship qualifications? Are there signs of upgrading skill levels within curricula/qualifications? In a context of eroding entry-level jobs, can apprenticeships be a tool for preparing future workers in middle-level and higher-skilled roles?
- How can apprenticeships contribute to developing AI-related skills across occupations, to develop and/or to use and apply AI technologies? Are there examples of curriculum updates that allow better integration of AI-powered technologies in apprenticeship occupations?
- Are there apprenticeship programmes particularly addressed to AI-related occupations (e.g. AI engineers, prompt engineers, cybersecurity specialists)? What has been the process of introducing them? What are their labour market outcomes?

2. **AI exposure, labour market outcomes, impact on occupations and learner choices**

- Which apprenticeship occupations are more exposed to AI-driven transformation? Are occupations with a strong apprenticeship tradition relatively more resilient than others?
- How does AI affect labour market transitions of apprenticeship graduates? Are their employment outcomes (school-to-work transitions or career development) stronger than those of graduates from other education and training pathways?
- How do learner education choices change in relation to perceived AI threat and what does that mean for apprenticeships (in relation to e.g. general fields of study)? Are there differences in enrolments between more and less AI-exposed / automatable occupations, and what does that mean for apprenticeships?

3. **Responses and changes regarding workplace practices and system governance**

- Are there signals that employers (intend to) discontinue apprenticeship training with the assumption that entry-level, junior tasks are carried out by AI? What would be needed in response to such a development?
- How firms redesign apprentice roles when AI absorbs entry-level tasks, and what that means for the in-company training function? What workplace practices, investments and forms of work organisation would allow apprenticeships to remain an effective talent pipeline for companies undergoing AI-stemmed transformations? How does the role of in-company trainers/mentors and the company engagement in learning change?
- What measures and changes in apprenticeship system design, governance and stakeholder collaboration would help systems respond in case of dropping employer participation in programmes designed for (potentially eroding) entry-level jobs? What would help keep pace with AI-driven shifts in skill and qualification needs — for example, faster updating of curricula and qualifications, and stronger mechanisms for social partners to feed emerging AI-related skill needs into the system?

4. **Pedagogies, assessment and inclusiveness**

- What are the implications of AI for inclusiveness in apprenticeships? Does the use of AI create new opportunities for participation of underrepresented groups, or does it risk widening inequalities because of the differences in digital skills, or access to technology?
- How is AI changing apprenticeship pedagogy and assessment? How are AI tools being used in off-the-job and workplace learning, and what does that mean for teaching methods, learner support, and the integrity and validity of assessment when learners work alongside AI?
- How can AI be used in the delivery of apprenticeships? Can it be a tool that supports adaptive learning and improves quality (e.g. AI tutoring, feedback on apprentice work)? Can AI-supported learning reduce delivery costs, ease reliance on instructors and help expand the number of available places, while maintaining quality?

Papers that originally cover the topic more broadly (e.g. overall labour market transitions in the context of AI, impact on all vocational education and training etc.) will need to be refocused/redrafted to examine this in relation to apprenticeships in specific.

Input can be based on:

- Insights from data (e.g. labour market statistics, online job advertisement data)
- Survey outcomes (e.g. preferences, behaviors of employers or apprentices)
- Case studies (e.g. cases of introducing apprenticeship programmes in AI-related fields)
- Analyses of quantitative or qualitative sources

Process

- **Deadline for abstract submission: 15 October 2026**
    - You are invited to share via apprenticeship-team@cedefop.europa.eu :
        a) abstracts of advanced, unpublished papers
        b) abstracts/links to published papers and reports
    - The abstract should include (a) the research question/key issue, (b) main findings / analytical points and how they address the question/issue at hand (c) overview of methodology/analytical approach, (d) conclusions or policy recommendations. Abstract length: up to 500 words (extended abstract)
    - The organisers will assess submissions on the basis of (a) relevance, (b) evidence basis, (c) methodology and analytical approach and (d) appeal to an international audience.
    - Within four weeks from the abstract submission deadline, the organisers will decide which abstracts are suitable for presentation and/or publication and invite their authors to submit full papers.
    - The organisers retain the right to invite authors/presenters on the basis of their own search
- **Deadline for full paper submissions: 15 January 2027**
    - Authors whose abstracts are accepted as described above will be asked to submit full papers by 15 January 2027

    - At this point, the organisers will accept published papers, reports, working papers, as well as finalised unpublished papers. Extended abstracts or unfinished papers will not be accepted.
    - The organisers retain the right to reject a paper, if its final version is not fully developed or does not meet what is described in the abstract.
    - Confirmation of papers to be presented: 22 February 2027
    - The organisers will provide feedback on papers and guidelines for presentation by 31 March 2027
- **Deadline for submitting draft symposium presentations**: 15 May 2027
    - The organisers will provide feedback on draft presentations, in relation to their focus, length, clarity, language
- **Symposium: 27-28 May 2027, Thessaloniki, Greece**
- **Deadline for submitting finalised papers for the publication** (based on organiser's comments and symposium feedback): **30 June 2027**
- Publication: December 2027 (tbc)

Publication terms

Terms applying to the joint Cedefop-OECD publication:

- Cedefop and the OECD will be cited as institutional authors and will hold the copyright to the collective publication
- authors who have submitted their paper retain the copyright to their original contribution ('Papers') and will be acknowledged as authors of the corresponding chapter of the collective publication
- authors grant Cedefop and the OECD the worldwide, non-exclusive, royalty free, licence to publish their contributions ('Papers') as part of the collective publication
- the collective publication shall be made available to the public under the Creative Commons BY 4.0 license
- the publication will be in English, in electronic format, and will be disseminated free of charge.
- submitted papers should be checked for plagiarism
- authors submitting papers should warrant that all necessary permissions and releases have been obtained and paid for, and none of their contribution is libellous, violate the right of privacy or publicity or infringe upon any copyright or other proprietary right of any other person or entity.

For papers that cannot be included in the publication, for example because they have already been published and cannot be reproduced, an extended summary can be included instead.