

Examples of artificial intelligence (AI) reaction areas in EU Member States (+UK)

Planning for AI

AT	In drawing up its AI strategy, an expert paper summarises five fields of action for the future of education and training: (i) strengthening MINT training and AI competence build-up; (ii) integrate AI into teacher training (iii) promote and further develop AI in research and teaching at higher education establishments (iv) application of AI by teachers and learners (v) promote cooperation between academic, business and society.
EE	In order to introduce AI-solutions on a wider scale, the Estonian biannual action plan for 2019-20 foresees that funding for AI R&D needs to be increased (the goal is 1% of GDP).
FI	The AuroraAI programme 2020-22 started being implemented on 1 January 2020. It aims to promote the public sector's digitalisation capabilities and develop public-private cooperation based on operating models of AI utilisation (the AuroraAI network).

Developing AI

DE	The Federal Ministry of Education and Research (BMBF) has been funding the pilot project 'KI Campus: the learning platform for artificial intelligence' since October 2019. The three-year pilot phase is dedicated to the research-oriented and flexible development of a digital learning platform specialised in AI, based on the ideas of openness and networking.
DE	With the adoption of the AI strategy in 2018, 'Innovation Spaces' (KI-Experimentierumgebung) have been implemented countrywide. The Federal Ministry of Labour and Social Affairs (BMAS) has created the prerequisites for the promotion of in-company 'learning and innovation spaces' for the operational application of AI-based systems, testing the human-centred application of AI in their companies and knowledge transfer.
BE	As part of its AI impulse programme, Flanders aims to invest EUR 32 million per year to focus on basic research, technology transfer and industrial application. A 'data and society' research centre will support actors in including the ethical dimension into the implementation of AI driven applications.
SI	On 25 November 2019 the UNESCO general conference confirmed that the first global centre for AI (IRCAI) under the auspices of UNESCO will be located in Ljubljana at the Josef Stefan Institute. The IRCAI will focus on global, open, transparent projects in the field of AI. It will develop training programmes and networks for exchange of AI research and knowledge.

Learning (about) AI

ES	The School of Computational Thinking and AI is one of the main actions promoted to address AI in the educational field as well as some other initiatives for teachers' continuous professional development (CPD). It targets teachers' AI training at all
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	levels, from early childhood (e.g. understanding algorithmic logic) to secondary education (e.g. integrating AI solutions in applications development projects).
BE	The Flemish Ministry for Innovation and Employment in collaboration with VDAB (public employment service) and partners such as Robovision and Google Belgium presented an online course (Iedereen mee met AI) focused on learning about AI.
FI	The University of Helsinki and Reaktor created the <i>Elements of AI</i> course (MOOC), a free online course that aimed to teach at least 1% of citizens about the basics of AI. Sweden and Estonia joined the course's pledge, and it has been endorsed recently by the European Commission.
PL	Some free educational tools have been developed to assist understanding of the implications of AI. For instance, the 'Sztuczna inteligencja' is an educational portal operated by the National Research Institute and the Ministry of Science and Higher Education, presenting information on AI in an easily understandable format for adults.
Applying AI	
ES	For the purposes of career guidance, a new tool is being designed based on analysis of existing data in Public Employment Services, using AI technologies. The aim is to offer targeted information to guidance practitioners for decision-making based on previous success stories.
FR	Among all projects selected in 2019 as part of the Regional skills investment plans, six dealt with the use of job data and AI to develop regional skill-forecasting, create open data tools and new training offers for jobseekers.
Adapting vocational education and training to AI	
AT	The AI Academy of the adult education institution WIFO NO was set up in November 2019 and is designed as a four-stage continuing education and training course with a focus on AI issues.
BE	BeCode, Microsoft and collaborators have joined forces to set up a new type of partnership and open the first AI training centre in Belgium. They aim to bridge the skills gap and unfilled vacancies in the job market. The training is divided into two phases, a seven-month period of full-time on-site learning followed by a three-month contract in one of the partnership companies.
ES	To overcome the shortage of AI experts in the country, the AI strategy recommends the hybridisation of sciences, technologies and humanities, moving from STEM to STEAM studies.
FR	The Ministry of Higher Education, Innovation and Research is committed to doubling the number of students training in AI, particularly at doctoral level.
SI	The X5gon project co-financed by Horizon 2020 tries to create a solution that will help users/students find what they need in Open Education Resource (OER) repositories and across all OER on the web, using AI solutions. The solution will adapt to users' needs and make customised recommendations through a truly

	interactive learning experience, based on aggregation, curation and personalisation of learning content.
CZ	The Techambition start-up project aims at interconnecting the worlds of AI and education in secondary schools. In the framework of the project, AI in the form of an algorithm evaluates data from self-assessment activities of students in their maths class. This AI advises teachers how to group students in class, whom to appoint as group leader and the group's level of difficulty.
LU	To build a workforce that can feed AI and strengthen society, Microsoft, along with Devoteam Luxembourg, Digital Luxembourg and the Ministry for the Civil Service, partnered to launch Luxembourg's first AI Academy. The initiative offers three training modules: a business programme for public and private decision-makers; a six-week intensive session for technical professionals and an advanced 22-week training for data scientists and research engineers.
<i>Coping with AI</i>	
DE	With the Qualification Opportunities Act adopted in December 2018 and coming into force in January 2019, all people in work are granted the right to have access to CVET funding regardless of qualifications, age, company size, and especially if they have been affected by automation or digital structural change.
UK	A 'National Retraining Scheme' supporting people affected by automation to re-skill was announced in 2017, with an investment of GBP 100 million and led by a multi-stakeholder 'National Retraining Partnership'. The plan helps affected adults understand their skills gaps and explore alternative occupations with the support of a dedicated advisor, signposting them to relevant courses. After a first testing phase, the scheme is planned to expand to national coverage in 2020. The expectation is that the course will offer online and blended learning and on-the-job technical retraining.

Source: [Cedefop \(2020\). VET for the future of work](#), ReferNet country thematic perspectives.