

# Artificial intelligence in education, culture and the audiovisual sector

2020/2017(INI) - 19/05/2021 - Text adopted by Parliament, single reading

The European Parliament adopted by 623 votes to 12, with 61 abstentions, a resolution on artificial intelligence in education, culture and the audiovisual sector.

Members consider that the development, deployment and use of AI in the fields of education, culture and audiovisual media must fully respect the **fundamental rights, freedoms and values** enshrined in the EU treaties, in particular human dignity, protection of privacy and personal data, non-discrimination, freedom of expression and information, cultural diversity and intellectual property rights.

Education, culture and the audiovisual sector are areas where the use of AI and related technologies is sensitive, as they may affect fundamental rights and values. Members therefore stressed the importance of **respecting ethical principles** in these areas when developing, deploying and using AI and related technologies, including software and algorithms and the data they use and produce.

The Commission is invited to present a general regulatory framework, which applies to all applications of AI, and to complement it with sector-specific rules.

## *Education*

Parliament stressed the importance of ensuring EU-wide mastery of basic digital and AI skills by developing training opportunities for teachers. The Commission is called upon to make digital skills, media literacy and AI skills priorities in its action plan, while paying particular attention to children and young people in precarious situations who need special support in the field of digital education.

Members called on the Commission to include education in the regulatory framework for **high-risk AI systems**, given the particularly sensitive nature of data on pupils, students and other learners. They stressed that the deployment of AI applications in the field of education must not only allow for the participation of educators, learners and society at large, but also take into account the needs of each and the expected benefits, in order to ensure the appropriate and ethical use of AI.

The Commission is invited to take into account AI and robotics initiatives in the educational field in its forthcoming legislative proposals on AI. For their part, Member States should invest in digital equipment for schools and use EU funds for this purpose.

## *Cultural heritage*

Parliament stressed that AI technologies can play an important role in the preservation, restoration, documentation, analysis, promotion and management of tangible and intangible cultural heritage. AI technologies can increase the visibility of cultural diversity in Europe by offering cultural institutions new opportunities to create innovative tools to document cultural heritage sites and make them more accessible.

In this context, Members stressed the importance of exchanging best practices between Member States, educational and cultural institutions and other stakeholders.

## *Culture and creativity*

The resolution stressed the need to establish a coherent vision of AI technologies within the cultural and creative sectors at EU level. Member States are invited to focus more on culture in their national AI strategies to ensure that the cultural and creative sectors choose to innovate and remain competitive, and to ensure the safeguarding and promotion of cultural diversity at EU level in the new digital context.

Members stressed the importance of clarifying the conditions for the use of copyright-protected content as input data (images, music, films, databases, etc.) and in the production of cultural and audiovisual output data, whether created by humans with the help of AI or generated autonomously by AI technologies. They called on the Commission and Member States to address the issue of AI-generated content and the challenges it poses for authorship and copyright infringement.

### ***Audiovisual sector***

AI is often used to enable automatic decision-making algorithms to deliver and organise the cultural and creative content presented to users. These algorithms are opaque to users.

Members called for recommendation algorithms and personalised marketing to be easy to explain and transparent, to enable consumers to understand these processes in a correct and complete way, and to ensure that personalised services are not discriminatory. Consumers should be informed when they interact with an automated decision process and their choices and behaviour should not be restricted.

The Commission is invited to establish a clear ethical framework for the use of AI-based technologies in the media to avoid all forms of discrimination and to ensure access to culturally and linguistically diverse content across the EU, based on responsible, transparent and inclusive algorithms, while respecting individual choices and preferences.

### ***Online disinformation: deep-fakes***

Parliament stressed the importance of ensuring online and offline media pluralism to guarantee the quality, diversity and reliability of the information available. The Commission is called upon to assess the impact of AI-related technologies in the creation of deep-fakes, to establish appropriate legal frameworks to govern their creation, production or distribution for malicious purposes, and to propose recommendations for action against any threat using AI against the principle of free and fair elections and democracy.