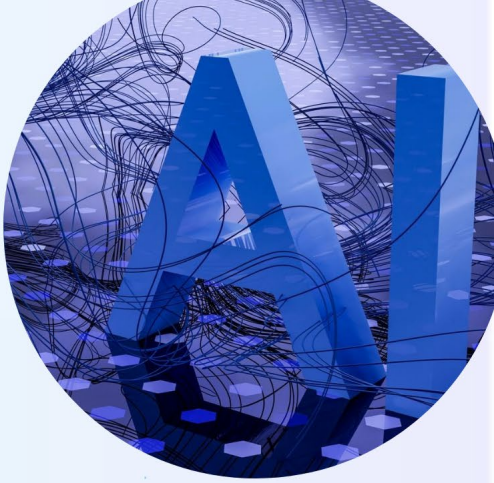
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EHEAII
AI IN HIGHER EDUCATION



Global and EU policies, recommendations and guidelines on AI use in higher education

ERASMUS+ COOPERATION PARTNERSHIP PROJECT
„Empowering Higher Education through Artificial Intelligence Integration – EHEAII",
Project nr. 2025-1-LV01-KA220-HED-000359026

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INTRODUCTION

The integration of artificial intelligence into higher education is increasingly shaped not only by technological developments and legal regulation, but also by a broad range of global and EU policies, recommendations and guidelines that articulate strategic priorities, ethical principles and institutional expectations. These instruments influence how AI is embedded into teaching, learning, research, governance, skills development and quality assurance, while seeking to balance innovation with responsibility, academic integrity and fundamental social values. Although most of these documents are not legally binding, they play a significant complementary role by translating high-level principles into strategic orientations, sector-specific recommendations and practical reference frameworks for higher education institutions.

This report maps and analyses the evolving landscape of global and EU policies, recommendations and guidelines on AI use in higher education. It is intended for higher education specialists, institutional leaders, administrative and academic staff, and researchers engaged in strategic planning, policy development, teaching innovation, research governance and AI-related capacity building. Its primary objective is to support a structured understanding of how these instruments frame AI adoption in higher education and to identify shared priorities, expectations and emerging challenges across the policy ecosystem.

The desk research underpinning this report is based on an analysis of sixteen EU-level and global policies, recommendations and guidelines. The selected documents reflect a broad policy ecosystem, including strategic initiatives of the European Commission, position papers and analytical reports from sector organisations such as the European University Association and the European Association for Quality Assurance in Higher Education, as well as global normative instruments developed by bodies such as UNESCO and OECD.

All documents were analysed in detail using a common analytical framework covering their purpose and scope, relevance to higher education, implementation mechanisms, ethical anchors, and identified gaps. Together, they provide a comprehensive and multi-layered picture of the current policy environment guiding the responsible, ethical, and strategic integration of artificial intelligence into higher education, spanning pedagogy, academic integrity, skills and talent development, research governance, data management, and institutional policy-making.

This overview report is based on desk research conducted within the Erasmus+ Cooperation Partnership project “Empowering Higher Education through Artificial Intelligence Integration – EHEAII” and draws on the analysis prepared by:

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ABOUT THE PROJECT

This report has been prepared within the framework of the Erasmus+ Cooperation Partnership project "Empowering Higher Education through Artificial Intelligence Integration – EHEAII".

Turiba University from Latvia in cooperation with 5 partner Universities from Lithuania, Spain, Germany, Italy and Slovenia began implementing the ERASMUS+ cooperation partnership project "Empowering Higher Education through Artificial Intelligence Integration" (EHEAII).The initiative aims to equip higher education institutions (HEIs) with tools and methodologies for the responsible and effective integration of Artificial Intelligence (AI) into teaching, learning, and institutional processes.

The project addresses the growing impact of AI on higher education, emphasizing that universities must adapt strategically to ensure AI supports, rather than replaces, essential cognitive and analytical skills. The consortium focuses on developing practical, ethical, and pedagogically sound approaches to AI adoption in academia.

The project delivers a concise set of practical outcomes that support the responsible integration of artificial intelligence in higher education, including an analytical overview of how AI is used in universities, the AI Maturity Test as a self-assessment tool for institutions and educators, guidelines for risk mitigation and cognitive skill development, a collection of best practices and ready-to-use teaching tasks across several disciplines, and a Moodle-based online course "AI Tools and Use in Teaching Process" that strengthens educators' skills, confidence, and ethical awareness in using AI in teaching.

Further information about the project and its partners is available at http://eheaii.eu

PROJECT PARTNERS:

Turība University · SMK College of Applied Sciences · Università di Genova · Univerza v Mariboru · Prevenció i Seguretat Integral Escola FUAB Formació · FH Aachen University of Applied Sciences

Overview of Analyzed Legal Documents

This report is based on a desk research analysis of sixteen EU-level and global policies, recommendations and guidelines that together define the strategic, ethical and operational context for the use of artificial intelligence in education, with a particular focus on higher education. The analysed documents were issued by European institutions, higher education stakeholder organisations and international bodies, including the European Commission, European University Association, European Students' Union, European Association for Quality Assurance in Higher Education, Coimbra Group, United Nations Educational, Scientific and Cultural Organization (UNESCO) and Organisation for Economic Co-operation and Development (OECD). While these instruments are not legally binding in the same way as regulations, they play a crucial role in shaping expectations, priorities and good practices for higher education institutions.

The landscape they represent is multi-layered. At European Union level, strategic direction is articulated through policy initiatives and ethical guidelines that frame responsible AI use, skills development, research capacity and alignment with emerging regulatory frameworks. Sector-level organisations translate these orientations into higher education-specific recommendations, addressing teaching and assessment practices, academic integrity, institutional governance, quality assurance and digital and AI competences.

At global level, international organisations provide normative recommendations and guidance emphasising human-centred AI, equity, inclusion, academic integrity, transparency and international cooperation. These documents position AI in education within broader agendas such as sustainable development, human rights and responsible innovation, complementing European priorities and supporting international coherence.

Across the sixteen documents, AI is addressed in relation to interconnected domains relevant to higher education - teaching and learning, assessment and academic integrity, student support and learning analytics, research and research assessment, digital and AI skills development, data governance and institutional decision-making. Collectively, they promote a whole-institution approach, encouraging universities to integrate AI into strategies, policies and practices in a coherent, responsible and context-sensitive manner.

ANALYZED DOCUMENTS

No.	Document Title	Issuing institution and year	Type	Content, relevance to AI in higher education	Link
1	Ethical Guidelines on the Use of AI and Data in Teaching and Learning for Educators	European Commission, 2022	Guidelines	Provides practical guidance on integrating AI ethically into education, addressing misconceptions and emerging competences.	Link
2	AI Continent Action Plan COM(2025) 165	European Commission, 2025	Action Plan	The AI continent action plan explains how to harness the untapped potential of EU researchers and industries. It aims to shape the next phase of AI development, boosting economic growth, and strengthening EU competitiveness in areas such as healthcare, cars, science and more.	Link
3	Artificial intelligence tools and their responsible use in higher education learning and teaching	European University Association (EUA), 2023	Position paper	A policy-oriented European document with a specific focus on the AI use in Higher Education. The document provides position on the responsible, ethical, and transparent use of AI tools in university learning and teaching.	Link
4	The role of universities in the European Union's ambitions for AI	European University Association (EUA), 2025	Position paper	Response to European Commission consultation on AI strategy for science. Highlights importance of equitable access to AI infrastructure, distributed approach with transparent access modes, and public funding for research-related AI activities.	Link

5	Statement on Artificial Intelligence	European Students' Union (ESU), 2024	Statement	This statement outlines ESU's position on Artificial Intelligence (AI) in higher education, aiming to articulate the students' perspective on what impact it may have, how it could be put to good use, which are the currently existing pitfalls or worrisome developments and how they could be mitigated.	Link
6	Working group report: academic integrity	European Association for Quality Assurance in Higher Education ENQA, 2024	Report	The report brings together the outcomes of the research carried out by the ENQA Academic Integrity Working Group and summarizes what has been revealed and recommends what could be acted on going forward. Report outlines the educational environment across Europe (and beyond), how the multi-dimensional culture of academic integrity is able (or not) to thrive in this landscape, and what can be done by quality assurance agencies to further enhance this.	Link
7	AI and Digital Competence through Higher Education	The Coimbra Group, 2025	Position paper	The paper outlines the key competencies needed in this context and presents actionable recommendations for strengthening digital education in higher education. The document stresses that generative AI and other digital technologies are reshaping our societies, economies, and labor markets. To respond effectively, digital competence must be seen as a foundational skill, relevant across all academic disciplines.	Link

8	A whitepaper on reforming research assessment for a digital and AI-driven science future	Coalition for Advancing Research Assessment, (CoARA) working group, 2025	Whitepaper	This whitepaper presents a strategic framework for advancing Responsible Research Assessment (RRA) across the European digital research ecosystem. A common roadmap to transition from outdated, publication-centric evaluation towards inclusive, transparent, and context-sensitive practices is proposed.	Link
9	Guidance for Generative AI in Education and Research	UNESCO EDUCATION SECTOR, 2023	Global Guidance	First global framework for GenAI in education; offers policy recommendations, ethical considerations and practical advice for universities and research institutions on responsible GenAI adoption and academic integrity.	Link
10	Beijing Consensus on Artificial Intelligence and Education	UNESCO EDUCATION SECTOR, 2019	Report	Global principles and recommendations linking AI and SDG4; emphasises curriculum redesign, capacity-building, ethics and national strategies, all relevant for universities developing institutional AI policies.	Link
11	Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development	UNESCO EDUCATION SECTOR, 2019	Report	Examines AI applications (learning analytics, adaptive systems, intelligent tutoring), alongside risks to equity, privacy and quality. Provides insights valuable for HE digital transformation.	Link
12	Recommendation of the Council on Artificial Intelligence (OECD AI Principles)	OECD, 2019	Global Recommendation	Widely adopted international AI principles (transparency, robustness, fairness, accountability). Useful for HE institutions to benchmark governance, research ethics.	Link

13	Trustworthy Artificial Intelligence (AI) in Education: Promises and Challenges	OECD, 2020	Working Paper / Report	Analyses benefits and risks of educational AI (adaptive learning, analytics, intelligent tutoring). Offers a conceptual framework to assess trustworthy AI systems in universities.	Link
14	Principles for the Ethical Use of Artificial Intelligence by the United Nations System	UN System Chief Executives Board (UN-CEB), 2023	Ethical Principles	Establishes ten global principles for safe, transparent and rights-based AI use; universities can adapt them into institutional AI governance and research ethics frameworks.	Link
15	Recommendations on the ethics of Artificial Intelligence	UNESCO, 2023, last update: September 2024	Recommendations	UNESCO's first-ever global standard on AI ethics – the 'Recommendation on the Ethics of Artificial Intelligence', adopted in 2021, is applicable to all 194 member states of UNESCO.	Link
16	Opportunities, guidelines and guardrails for effective and equitable use of AI in education	OECD, 2023	Discussion paper	This document provides an accessible set of policy-oriented positions, guidelines, and "guardrails" for the development and use of artificial intelligence (AI) and digital technologies in education.	Link

GUIDELINES

1. Ethical Guidelines on the Use of AI and Data in Teaching and Learning for Educators, EC

Published by the **European Commission** in 2022, the document provides educators with ethical guidance on the responsible use of artificial intelligence and data in teaching, learning, and assessment, helping them understand related opportunities and risks while promoting informed, human-centred and trustworthy adoption of AI in schools.

The Ethical Guidelines are dedicated for schools, but they provide directly applicable frameworks for universities, as HEIs face similar challenges: AI-enabled learning analytics, LLMs, automated assessment, and data governance.

Scope:

- Focuses on education, especially primary and secondary, but its principles extend to all learning environments, including higher education.
- Builds on the Digital Education Action Plan 2021-2027, the EU's Ethics Guidelines for Trustworthy AI, GDPR, and the proposed EU AI Act.
- Provides practical tools (guiding questions, examples, competencies) for educators and school leaders.
- This is an educator-oriented ethical framework rather than a regulatory act.

The guidelines introduce a holistic ethical AI-use framework built around f**our ethical considerations** and s**even requirements for trustworthy AI**.

Ethical Considerations: 1. Human agency (autonomy, responsibility), 2. Fairness (equity, non-discrimination), 3. Humanity (well-being, dignity, human connection), 4. Justified choice (transparency, evidence-based decisions).
Requirements for Trustworthy AI: 1. Human oversight, 2. Transparency & explainability, 3. Diversity, non-discrimination, accessibility, 4. Societal & environmental well-being, 5. Privacy & data governance (GDPR compliance), 6. Technical robustness & safety, 7.Accountability.

The document provides a structured, human-centred ethical framework for AI use in education, grounded in EU Trustworthy AI principles, GDPR, and digital education policy. Its main strength is the clear operationalisation of ethics through guiding questions, practical examples, and a competence framework aligned with DigCompEdu. The strong emphasis on human oversight, transparency, bias mitigation, accountability, and data governance makes it highly transferable to higher education institutional policies and AI maturity assessments.

However, the guidelines are primarily school-focused and do not sufficiently address higher education–specific issues such as AI in research, academic governance structures, or LLM-related risks including hallucinations, authorship, citation integrity, and academic misconduct. Academic integrity is not treated as a central pillar.

Link

2. AI Continent Action Plan COM(2025) 165

The AI Continent Action Plan COM(2025) 165, published by the **European Commissio**n in 2025, sets out a comprehensive strategy to position the European Union as a global leader in artificial intelligence development, deployment, skills and governance. The Action Plan aims to strengthen European competitiveness, boost economic growth and technological sovereignty, while ensuring that AI development remains aligned with EU democratic values, fundamental rights and the AI Act framework

Although not education-specific, the Action Plan has significant implications for higher education. It establishes a broad, economy-wide framework covering infrastructure, data, innovation ecosystems, talent development and regulatory support. Universities are positioned as central actors in AI research, advanced skills provision and innovation partnerships.

Scope:

- Broad, economy-wide framework covering **infrastructure, data, innovation, skills, and regulation.**
- Not education-specific, but contains major implications for **AI talent development**, university research, and scientific AI use.
- Strongly tied to the **AI Act,** Digital Europe Programme, Horizon Europe, and the EU skills agenda.

The Action Plan is structured around five core domains.

First, AI computing **infrastructure** - the expansion of AI Factories and the creation of Gigafactories increase universities' access to advanced supercomputing and strengthen AI research capacity through major EU investment.

Second, **data availability** - the Data Union Strategy and Data Labs improve access to high-quality, interoperable datasets, reinforcing research data infrastructures and cross-border scientific collaboration.

Third, **innovation and sectoral uptake** - initiatives such as Apply AI and GenAI4EU accelerate AI adoption across strategic sectors, creating opportunities for university–industry cooperation and applied research.

Fourth, **skills and education** - the AI Skills Academy and expanded AI degree programmes position universities at the centre of AI talent development, advanced digital skills and lifelong learning.

Fifth, **regulatory compliance** - support mechanisms linked to the AI Act clarify expectations for research ethics, procurement, high-risk AI management and institutional governance alignment with EU standards.

From an ethical perspective, the Action Plan builds on the EU's human-centric AI foundations. It emphasises fundamental rights, safety, security, non-discrimination and trust, anchored in the risk-based approach of the AI Act. For universities, this implies that AI use in teaching, assessment, research and administration must integrate transparency, accountability and human oversight mechanisms within institutional strategies.

Link

POSITION PAPER

3. Artificial intelligence tools and their responsible use in higher education learning and teaching

Published by the **European University Association** in 2023, this position paper sets out a higher education–specific stance on the responsible, ethical and transparent use of artificial intelligence tools in university learning and teaching. It responds to the rapid uptake of generative AI and other AI-based tools in academic environments and calls on universities to engage proactively with these technologies rather than attempt prohibition.

Scope:

- Focuses specifically on the use of artificial intelligence tools **in higher education learning and teaching** contexts.
- Articulates a concise, **high-level sector position** that defines principles and institutional responsibilities rather than prescribing concrete implementation models.
- As a high-level **position paper**, it lacks operational frameworks or detailed procedural guidance.

The document focuses explicitly on teaching and learning in higher education. It recognises both opportunities – such as personalised learning, feedback support and efficiency gains – and risks, including academic integrity challenges, data bias, privacy concerns and overreliance on automated systems. The paper emphasises that universities must safeguard academic standards, critical thinking and institutional autonomy while integrating AI into pedagogical practice.

Rather than providing detailed regulatory guidance, the paper articulates key principles: institutional responsibility, transparency, ethical awareness, and alignment with university missions and values. It encourages institutions to develop clear strategies for AI use in learning and teaching, support academic staff in adapting assessment practices, and promote open dialogue about acceptable and responsible AI use.

However, as a high-level position paper, it lacks operational frameworks, practical toolkits or detailed implementation procedures. It also pays limited attention to structured AI literacy development pathways for educators and students, leaving questions of systematic competence-building insufficiently elaborated.

Link

POSITION PAPER

4. The role of universities in the European Union's ambitions for AI

This **European University Association** document is published in June 2025 as a response to the European Commission's consultation on an AI-in-Science Strategy. This position paper outlines universities' expectations for the development of a European AI research ecosystem. It focuses primarily on AI for scientific research, infrastructure, data policy and governance, positioning universities as central actors in shaping Europe's AI ambitions.

Scope:

- Concentrates on AI in r**esearch and research infrastructure** rather than teaching and learning.
- Addresses **EU-level policymakers**, advocating a university-led and publicly accountable AI ecosystem.
- Provides **strategic principles** and governance recommendations rather than operational tools.

The document supports the development of AI Factories and Gigafactories but calls for equitable, distributed and transparent access mechanisms to ensure that researchers across disciplines and institutions can benefit. It stresses the need for strong public-interest funding, warning against over-reliance on private investment and vendor dependency. Academic leadership is presented as essential, with proposals for scientific councils to oversee infrastructure governance, access decisions and ethical oversight.

The paper also highlights European values, sovereignty and Open Science principles. It calls for alignment with the AI Act, protection of publicly funded data as a public good, and safeguards for text and data mining in research.

A key strength lies in its clear defence of academic autonomy, transparent governance and equitable infrastructure access. However, the focus remains largely on research governance and risk, with limited attention to teaching, academic integrity in learning contexts or structured AI literacy development. The document also lacks concrete mechanisms to ensure that smaller or less research-intensive universities can fully benefit from large-scale AI infrastructures.

Link

STATEMENT

5. Statement on Artificial Intelligence

Adopted in 2024, this statement presents the position of the **European Students' Union** on the role, risks and opportunities of artificial intelligence in higher education. It articulates the student perspective on how AI affects learning, assessment, academic integrity, governance and students' rights, and calls for responsible, transparent and inclusive approaches to AI adoption in universities.

Scope:

- Focuses on AI in higher education **from the student perspective**, particularly learning, assessment and rights protection.
- Addresses universities, policymakers and quality assurance actors at European level.
- Provides normative and **advocacy-oriented recommendations** rather than technical or operational frameworks.

The statement recognises the transformative impact of generative AI and other AI tools on study practices, assessment formats and access to information. It stresses that AI should support learning processes without undermining critical thinking, academic standards or fair evaluation. Particular attention is given to academic integrity, transparency in AI use, and the need to avoid surveillance-based or punitive responses to student use of AI tools.

The document also highlights concerns related to data protection, algorithmic bias, accessibility and equality of opportunity. It calls for clear institutional policies on acceptable AI use, meaningful student involvement in AI governance, and safeguards to ensure that AI systems used in education do not disadvantage specific groups of learners. Digital and AI literacy is presented as a key priority, with students requiring structured support to understand both the capabilities and limitations of AI technologies.

A key strength of the statement lies in its strong rights-based and equity-oriented perspective, foregrounding student agency, transparency and fairness. However, as an advocacy document, it remains relatively high-level and does not provide detailed implementation models or institutional governance mechanisms. Its focus is primarily on learning and student experience, with less attention to research governance or broader infrastructural aspects of AI in higher education.

Link

REPORT

6. Working group report: academic integrity

Published in 2024, this report presents the outcomes of the **ENQA (European Association for Quality Assurance in Higher Education)** Academic Integrity Working Group and aims to strengthen academic integrity cultures across higher education systems. It provides guidance for quality assurance (QA) agencies and institutions on fostering integrity, addressing misconduct and responding to emerging threats, including generative AI and commercial cheating services.

Scope:

- Fully centred on higher education, with strong focus on assessment, QA systems, institutional policy frameworks and staff/student development.
- Addresses AI as part of a broader academic integrity landscape, particularly in relation to generative AI, contract cheating and AI-enabled misconduct.
- Functions as a quality assurance and governance-oriented framework rather than an AI policy document.

The report identifies several core themes shaping the contemporary integrity landscape. It highlights systemic changes in higher education – massification, digitalisation, international mobility and online learning – which increase both opportunities and risks. AI is framed as a major disruptor, expanding possibilities for automated content generation and complicating misconduct detection.

A central concern is the lack of shared definitions, consistent data collection and evidence-based monitoring of academic misconduct. The report calls for clearer terminology, improved reporting systems and stronger research on integrity trends. It also emphasises professional development, recommending systematic training for staff and students, as well as the appointment of dedicated integrity officers within institutions.

Significant attention is given to the commercial contract cheating industry, described as a global and increasingly AI-amplified threat. The report advocates cross-border cooperation, stronger QA mechanisms and, where appropriate, legislative measures to counter predatory business models.

For higher education institutions, the implications are concrete. Universities are expected to develop comprehensive academic integrity policies that explicitly address AI-generated content, authorship, disclosure and data misuse. Assessment design must be rethought to enhance authenticity and reduce replicability, and integrity considerations should be embedded throughout QA cycles. Students require continuous education in ethical academic behaviour and responsible AI use, following a “cradle to grave” approach.

A key strength of the report lies in its systemic approach, linking assessment design, institutional governance, QA processes and policy development. However, its focus is primarily on preventing misconduct rather than supporting constructive, pedagogically grounded AI integration. It offers limited guidance on how universities can embed AI positively in teaching and learning, and does not provide detailed models for AI-inclusive integrity policies, leaving operationalisation largely to institutions.

Link

POSITION PAPER

7. AI and Digital Competence through Higher Education

Published in 2025 by the **Coimbra Group, *AI and Digital Competence through Higher Education*** is a position paper that highlights the rising impact of generative AI and other digital technologies on societies, economies and labour markets, and outlines the key digital competencies needed for higher education to respond effectively. The document presents actionable recommendations to strengthen digital education across all academic disciplines, positioning digital competence as a foundational skill for students, educators and institutions alike.

Scope

- Focused on higher education's role in AI and digital competence development.
- Addresses teaching, curriculum reform, staff training, labour-market relevance, lifelong learning, digital infrastructure, and investment needs.
- Covers both general digital competence and field-specific AI skills.

The paper outlines how higher education institutions can strengthen AI and digital competences in response to the rapid development of generative AI and the EU's Union of Skills agenda. It positions universities as central actors in preparing society and the future workforce for digital transformation, emphasising that digital competence must be treated as a foundational skill across all disciplines. The scope covers curriculum reform, staff training, labour-market relevance, lifelong learning, digital infrastructure and investment needs, addressing both general digital literacy and field-specific AI skills.

The document identifies key priorities for policy and investment. It calls for stronger European funding support through programmes such as Erasmus+, Digital Europe and Horizon Europe, particularly to enable research-based pedagogical innovation. High-quality teaching and structured staff upskilling are highlighted as essential, given existing workload pressures and limited AI training. The paper stresses that AI competence must be grounded in research-based education and interdisciplinary collaboration, and that all students should acquire foundational ICT, data literacy, critical thinking, explainability and ethics-related competences. At the same time, it recognises that AI transformation varies by discipline and requires field-specific integration in study programmes.

For higher education institutions, the implications are direct and systemic. Curricula must embed both transversal and discipline-specific AI competences, teaching approaches must evolve towards AI-informed pedagogy, and academic staff require structured professional development. Universities are expected to invest in digital infrastructure, support interdisciplinary research capacity and align programmes with labour-market needs, including AI literacy, data governance, ethics and problem-solving skills. Overall, the paper frames digital and AI competence development as a strategic, institution-wide responsibility essential to Europe's digital transition.

The document provides limited discussion of academic integrity, plagiarism or AI misuse in higher education contexts. It also does not address the issue of cognitive balance, particularly the risks of overreliance on AI tools in relation to the development of students' independent analytical and critical skills.

Link

WHITEPAPER

8. A whitepaper on reforming research assessment for a digital and AI-driven science future

Coalition for Advancing Research Assessment (CoARA) Working Group, 2025 – Whitepaper

Published in 2025, this whitepaper proposes a strategic framework for transforming research assessment in Europe in response to digitalisation and the rapid integration of AI into scientific practice. It directly responds to the European Commission's call for a European Strategy for AI in Science and argues that traditional, publication-centred evaluation models are no longer adequate for an AI-driven research environment.

Scope

- Focused on research assessment.
- Deep integration of AI, open science, metadata standards, and digital infrastructures into research evaluation.
- Introduces two flagship tools:
  - EAAM – Ethics Assessment Alignment Matrix
  - MAC – Modular Assessment Configurator

The whitepaper calls for participatory and inclusive research assessment systems that move beyond publication-based metrics and recognise diverse outputs such as datasets, software and AI-generated artefacts. It promotes flexible, modular and context-sensitive evaluation models supported by interoperable open infrastructures and a four-tier architecture integrating identifiers, metadata and analytics layers. Ethical foresight is embedded through the Ethics Assessment Alignment Matrix, which incorporates values such as openness, responsibility and AI-specific safeguards including bias and explainability. The Modular Assessment Configurator operationalises these principles through a configurable, transparent and machine-actionable assessment platform aligned with international frameworks such as DORA and FAIR.

For universities, this implies a shift towards broader and more transparent research evaluation practices, increased emphasis on AI literacy for both researchers and evaluators, adoption of interoperable open science infrastructures, and stronger institutional governance structures. The document also highlights the need to integrate research assessment literacy into doctoral training and academic career development.

The whitepaper is not focused on teaching, classroom AI use or student learning processes, as its primary emphasis lies on research assessment reform. In addition, the proposed digital infrastructures and modular assessment systems may be complex to implement, potentially exceeding the technical, financial and administrative capacities of smaller or less research-intensive higher education institutions.

Link

9. Guidance for Generative AI in Education and Research

UNESCO – Global guidance - published in 2023. This document represents the first global policy framework addressing the risks, opportunities and governance implications of generative AI in education and research. It responds to the rapid diffusion of tools such as large language models and examines their impact on academic integrity, teaching practices, scientific production and institutional governance. The Guidance provides policy recommendations, ethical considerations and practical advice to support responsible adoption of generative AI in universities and research institutions.

Scope

- Applies across primary, secondary and higher education, as well as research institutions.
- Covers governance, ethics, teacher competence, digital inclusion and risk mitigation in relation to generative AI.
- Places explicit emphasis on academic integrity and responsible AI use within universities and research contexts.

The Guidance is structured around several key pillars that frame responsible generative AI integration in education and research. It calls for the development of ethical and human-centred GenAI ecosystems grounded in transparency, explainability, human oversight and harm prevention. Strong emphasis is placed on data governance and safety, requiring clear institutional frameworks to protect learner and researcher data. Capacity-building is another central element, highlighting the need to strengthen AI literacy and pedagogical competence among teachers and researchers. The document also foregrounds equity and inclusion, warning against the amplification of digital divides and linguistic marginalisation. Academic integrity is addressed explicitly through recommendations on assessment redesign, disclosure of AI use and safeguards against plagiarism and misuse.

For higher education institutions, the implications are direct. In teaching and assessment, universities are encouraged to redesign evaluation practices to incorporate transparency requirements, verification mechanisms and authenticity safeguards. In research, the Guidance provides direction on citing, validating and auditing GenAI use in scientific outputs. Institutions are expected to invest in staff development, ensuring educators and researchers are equipped with critical AI literacy, bias awareness and responsible use skills. At governance level, universities are advised to adopt comprehensive GenAI policies covering procurement, risk classification, data management and ethical oversight.

The document provides limited operational tools or implementation models compared to OECD frameworks. It also places less emphasis on infrastructure development and interoperability mechanisms.

Link

REPORT

10. Beijing Consensus on Artificial Intelligence and Education

UNESCO, 2019 – Report

This report presents global principles and policy recommendations linking artificial intelligence in education with Sustainable Development Goal 4 (SDG4). It analyses concrete use cases of AI in education and examines their broader implications for equity, quality and sustainable development. The document emphasises the need for curriculum redesign, capacity-building, ethical safeguards and coherent national strategies, offering guidance relevant for universities developing institutional AI policies.

Scope

- Examines AI applications such as learning analytics, adaptive learning systems, intelligent tutoring and automated assessment.
- Addresses risks including privacy concerns, algorithmic bias, lack of transparency and the potential amplification of inequality.

The document outlines a global policy framework linking artificial intelligence to Sustainable Development Goal 4 and emphasises curriculum redesign, capacity-building and ethical governance. It promotes the use of AI for learning enhancement through adaptive systems, intelligent tutoring and learning analytics, while stressing that deployment must be grounded in robust regulatory and data-protection frameworks. Strong attention is given to teacher capacity-building, ensuring educators can interpret AI-generated insights and integrate them pedagogically. Equity and inclusion are central principles, with safeguards against bias, discrimination and widening digital divides.

For higher education, the report supports digital transformation through evidence-based analysis of AI applications and highlights governance responsibilities related to student data, transparency and accountability. It provides considerations for AI use in assessment and learning analytics and encourages institutions to address structural inequalities and data ethics in AI-enabled systems.

Key strengths include a balanced treatment of benefits and risks and a strong governance focus. However, the guidance remains high-level, with limited operational detail for universities, and is primarily oriented toward system-wide policy rather than institutional implementation.

Link

REPORT

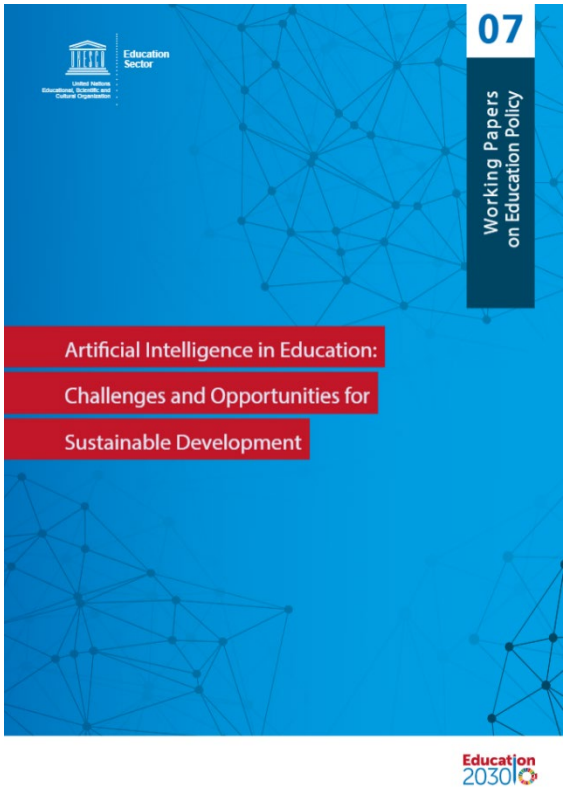
11. Artificial intelligence in education: challenges and opportunities for sustainable development

Published by **UNESCO's Education Sector** in 2019, this report analyses the emerging role of artificial intelligence in education and explores both its transformative potential and associated risks in the context of sustainable development. It examines concrete AI applications such as learning analytics, adaptive learning systems, intelligent tutoring and automated assessment, while assessing their implications for quality, equity and inclusion. The report situates AI within the broader agenda of Sustainable Development Goal 4 and highlights the need for governance, ethical safeguards and strategic planning.

Scope

- Reviews AI applications including learning analytics, adaptive systems, intelligent tutoring and automated assessment.
- Addresses risks related to privacy, algorithmic bias, transparency deficits and the potential amplification of inequality.

The report highlights AI's potential for learning enhancement through adaptive systems and analytics, while emphasising the need for strong governance, data protection and ethical safeguards. It stresses teacher capacity-building to ensure meaningful use of AI-driven insights and prioritises equity to prevent harm to disadvantaged learners. For higher education, it supports digital transformation with evidence-based analysis of AI tools, underscores responsibilities for student data governance and algorithmic transparency, and encourages institutions to address bias, data ethics and responsible use of AI in assessment and learning analytics.



Link

12. Recommendation of the Council on Artificial Intelligence (OECD AI Principles)

Adopted in 2019, the OECD AI Principles constitute one of the most widely endorsed international frameworks for responsible artificial intelligence. The Recommendation establishes cross-sectoral policy standards applicable to education, research and public governance, providing guidance on fairness, transparency, robustness and accountability in AI systems. Although not education-specific, it offers a normative benchmark for institutions integrating AI into teaching, research and administration.

Scope

- Applies across sectors, including education and research.
- Sets international policy standards for human-centred values, transparency, robustness, accountability and responsible data governance.

The core principles promote human-centred values and fundamental rights, transparency and explainability of AI systems, technical robustness and safety, and clear accountability mechanisms. The Recommendation also calls on governments to strengthen international cooperation, data governance frameworks and responsible innovation ecosystems.

For higher education institutions, the OECD AI Principles provide a reference framework for research integrity, responsible AI-enabled research practices and ethical procurement of AI tools.

As a high-level global framework, it is not education-specific and offers limited actionable guidance for pedagogical contexts or classroom AI integration.

Link

REPORT

13. Trustworthy artificial intelligence (AI) in education

Published as an OECD Education Working Paper in 2020, this report analyses the benefits and risks of AI applications in education and was prepared to support the G20 dialogue on trustworthy AI. It examines how AI can enhance educational processes at both classroom and system levels, while highlighting policy challenges related to trust, privacy, bias and governance. The paper situates AI in education within the broader framework of the G20 AI Principles and emphasises the need for trustworthy, human-centred implementation.

Scope

- Analyses AI applications for instruction, including personalised learning, adaptive systems, intelligent tutoring and learning analytics.
- Examines system-level uses such as predictive analytics to reduce dropout and AI-enabled assessment of complex skills.
- Explores policy challenges related to trust, transparency, accountability, privacy and data security.

The report presents AI as a tool to personalise learning, support students with special needs and enhance formative and summative assessment. At system level, it highlights predictive models and dashboards that can support school management and early-warning systems. At the same time, it stresses that AI must be trustworthy – not only technically robust, but also used responsibly by humans. Transparency, explainability and accountability are identified as essential, particularly when AI informs high-stakes decisions.

For higher education institutions, the working paper provides a conceptual framework for evaluating AI systems in line with principles of trustworthiness. It supports the development of governance models addressing student data protection, algorithmic transparency and responsible deployment of AI in learning analytics and assessment.

Link

14. Principles for the Ethical Use of Artificial Intelligence by the United Nations System

Adopted by the UN Chief Executives Board in 2022 and published in 2023, this document establishes a system-wide ethical framework for the design, development, deployment and use of AI across the United Nations system. It sets out ten global principles to ensure that AI is used in a safe, transparent, human rights–based and sustainable manner, aligned with the UN Charter and international law. Although developed for UN entities, the principles provide a comprehensive governance reference that universities can adapt to institutional AI policies, research ethics frameworks and digital governance structures.

Scope:

- Applies across all stages of the AI system life cycle – from design and procurement to deployment, monitoring and termination.
- Establishes ten ethical principles grounded in human rights, sustainability, accountability and data responsibility.
- Provides a governance-oriented framework rather than sector-specific operational guidance.

The principles include “do no harm”, defined purpose and proportionality, safety and security, fairness and non-discrimination, sustainability, privacy and data governance, human autonomy and oversight, transparency and explainability, responsibility and accountability, and inclusion and participation. The framework emphasises continuous risk assessment, impact monitoring, human oversight in high-stakes decisions, and robust governance mechanisms to ensure ethical accountability.

For higher education institutions, the document offers a strong normative foundation for AI governance, particularly in relation to research ethics, student data protection, procurement standards and human oversight in automated decision-making. However, as a global and cross-sectoral ethical framework, it is not education-specific and does not provide detailed pedagogical guidance or implementation models tailored to university teaching and learning contexts.

Link

15. Recommendations on the ethics of Artificial Intelligence

Adopted by **UNESCO** Member States in 2021, this Recommendation constitutes the first global normative instrument on the ethics of artificial intelligence. It establishes a comprehensive, human rights–based and values-driven framework for the development, deployment and governance of AI across all sectors, including education, research, health, culture, employment and the environment. The instrument aims to ensure that AI systems respect human dignity, fundamental freedoms and sustainable development principles.

Scope

- Global and cross-sectoral, addressed to UNESCO Member States, policymakers, institutions and stakeholders involved in AI development and use.
- Provides a comprehensive ethical and human rights–based governance framework rather than sector-specific regulation.
- Applies across the full AI life cycle, from design and development to deployment, monitoring and oversight.

The Recommendation articulates fundamental principles including human dignity, human rights, fairness, non-discrimination, privacy, data protection, transparency, accountability, safety, sustainability and environmental protection. It introduces the principle of proportionality and "do no harm", requiring that AI systems be necessary and appropriate to legitimate aims, and that potential harms to individuals, communities or ecosystems be assessed and prevented. Strong emphasis is placed on risk assessment, human oversight, transparency and access to trustworthy information, including measures to combat misinformation and discrimination.

For higher education institutions, the Recommendation provides a robust normative foundation for developing institutional AI governance frameworks. It supports the design of AI policies in teaching, research, administration and student services, anchored in human rights, fairness and accountability. It also encourages integration of AI ethics, digital and data literacy, sustainability and human-centred design into curricula, promoting interdisciplinary and socially responsible AI education.

As a global framework, it offers strong ethical justification for institutional policies that prevent bias, protect student rights, ensure transparency and promote social responsibility in both research and educational AI use. However, the Recommendation is non-binding and relies on national and institutional implementation. It does not provide detailed domain-specific operational guidance for higher education contexts, such as assessment practices or student data management, requiring complementary sectoral or institutional policies.

Link

16. Opportunities, guidelines and guardrails for effective and equitable use of AI in education

Adopted by **UNESCO's** General Conference on 23 November 2021 at its 41st session, the Recommendation on the Ethics of Artificial Intelligence is the first global normative instrument on AI ethics agreed by Member States. It establishes a comprehensive, human-rights-based framework to guide the development, deployment and governance of AI across sectors, including education, science, culture, communication, health and the environment, promoting AI that advances human dignity, justice and sustainability.

Scope:

- Global and cross-sectoral – addressed to UNESCO Member States and applicable across public and private sectors.
- Covers the entire AI system life cycle – from design and development to deployment, use, monitoring and oversight.
- Provides values, principles and policy action areas to guide legislation, governance frameworks and institutional implementation.

Although formulated at system level, the guidelines are directly relevant for higher education institutions. They emphasise equity and access, encouraging universities to ensure that all students and staff benefit from reliable connectivity and access to high-quality AI-enabled learning tools. They underline the importance of capability development, pointing to the need for academic staff to build digital and AI-related competences as an integral part of professional practice. The document also stresses ethical and responsible use, highlighting transparency, explainability and careful oversight when AI is applied in learning, assessment or student support services. At the same time, it reinforces a human-centred approach, advocating the retention of human judgement and the availability of alternatives when automated systems are used in teaching or administration.

However, these are guidelines rather than enforceable standards, meaning implementation depends on national and institutional policy choices. The document remains high-level and does not provide domain-specific or granular operational guidance, for example on assessment integrity or detailed student data governance. It also recognises that evidence on the effectiveness of many AI tools in education is still limited, underscoring the need for ongoing research and evaluation.

Link

17. Useful sources

AI in Higher Education: Mapping Key Guidelines & Recommendations (Futurium — European AI Alliance community)

This source will help you to identify and summarise existing European and international AI policy, guidelines, and strategic frameworks that are relevant to Higher Education (HE).

LINK



General-Purpose AI (GPAI) Code of Practice (European Commission – *Shaping Europe's Digital Future*)

The General-Purpose AI (GPAI) Code of Practice is a voluntary framework developed by the European Commission under the AI Act framework to guide providers of general-purpose AI models in ensuring transparency, risk management, safety, copyright compliance and responsible deployment within the European Union.

LINK

