

Responsible, Effective & Sustainable Assessment Policies and Practices in Higher Education with AI

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Rheinische Friedrich-Wilhelms-Universität Bonn

Keynote Presentation on 27th of October 2026 online
UNESCO IITE Webinar on Assessment in Higher Education

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About myself

Coordinator ED&AI and Open Education, University of Bonn

Adjunct Professor, Korean National Open University

Advisory Professor, East China Normal University

Founder & Director, European Research Institute eLC

100+ research projects with 55+ Mio. € budgets

200+ scientific publications incl. 100+ peer-reviewed / SSCI

Creative design & training for 15,000 teachers & 5,000 schools

Elected Chair of ISO & CEN Standardization Committees



Selected awards

"Artificial Intelligence and Education Expert Group" Member appointed by the Council of Europe (CoE) since 2023



"Martin Wolpers' Lifetime Award" to excellence in research, education and significant impact in the society (2023)

"Global TOP 10 COVID-19 Publication in 2022" selected by the National Institute for Digital Learning, Ireland (2023)

"UNESCO OER Implementation Award for Excellence" (2021)

"Most innovative Erasmus+ Project" for my MOOQ (2018)

ICDE Chair in OER by ICDE Board (2017 - 2021)

Center for Life Ethics

The ethically good means
respecting or promoting
the unfolding, plenitude, beauty, and embeddedness
of all life.

What is AI?



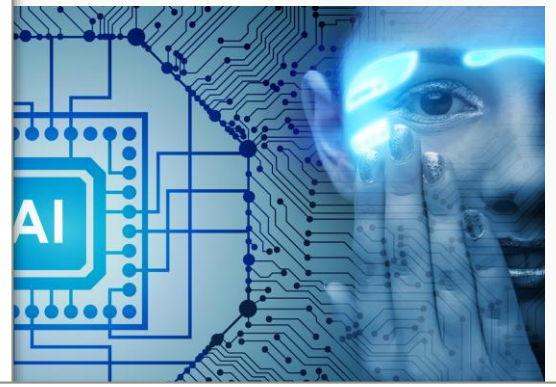
About Google DeepMind

Our mission is to build AI responsibly to benefit humanity

Empires of AI

The Rise and Fall of a New Global Order

USON,
SSEN,



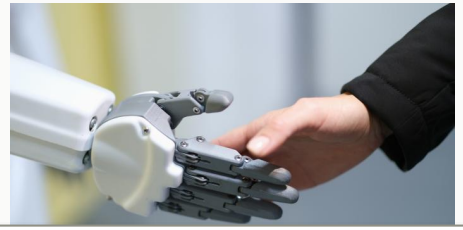
OpenAI Scraps Release of New AI Model Over Safety Concerns

Model dubbed GPT-6.1 Astra was due to make its debut inside ChatGPT and Codex in October

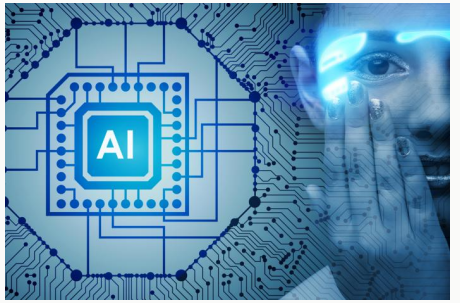
AI is diverse and a unique digital tool

AI is always a human-to-human relationship

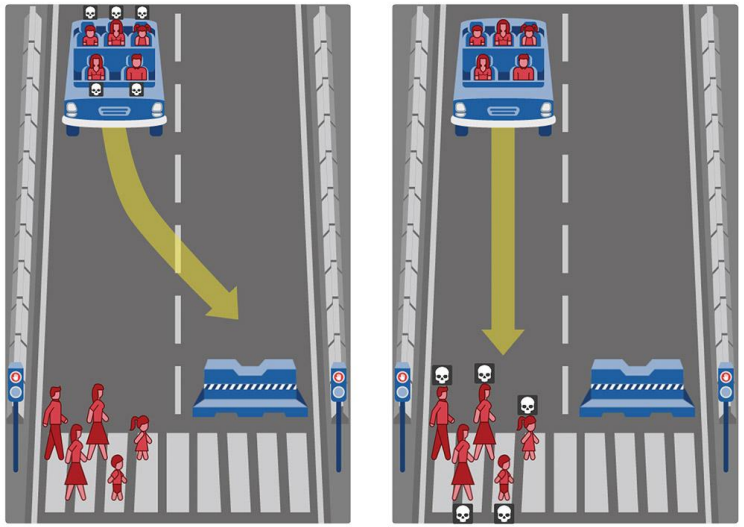
(in the responsibility)



Responsible AI?



Does AI already have human-level intelligence? The evidence is clear



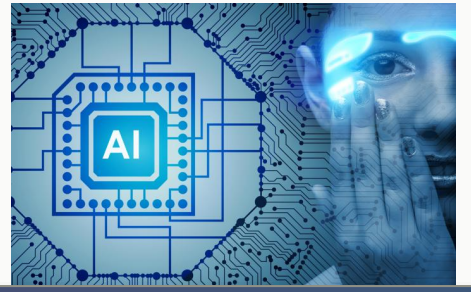
AI is Moving Fast. Traditional Governance Can't Keep Up.

Power concentration, monopolism and manipulation

Never allow final decision making by AI!



Sustainable AI?



NEWS | APRIL 14, 2026

xAI built an illegal power plant to power its data center

Written by Eric Hilt

We're suing the company for endangering local communities by violating the Clean Air Act.



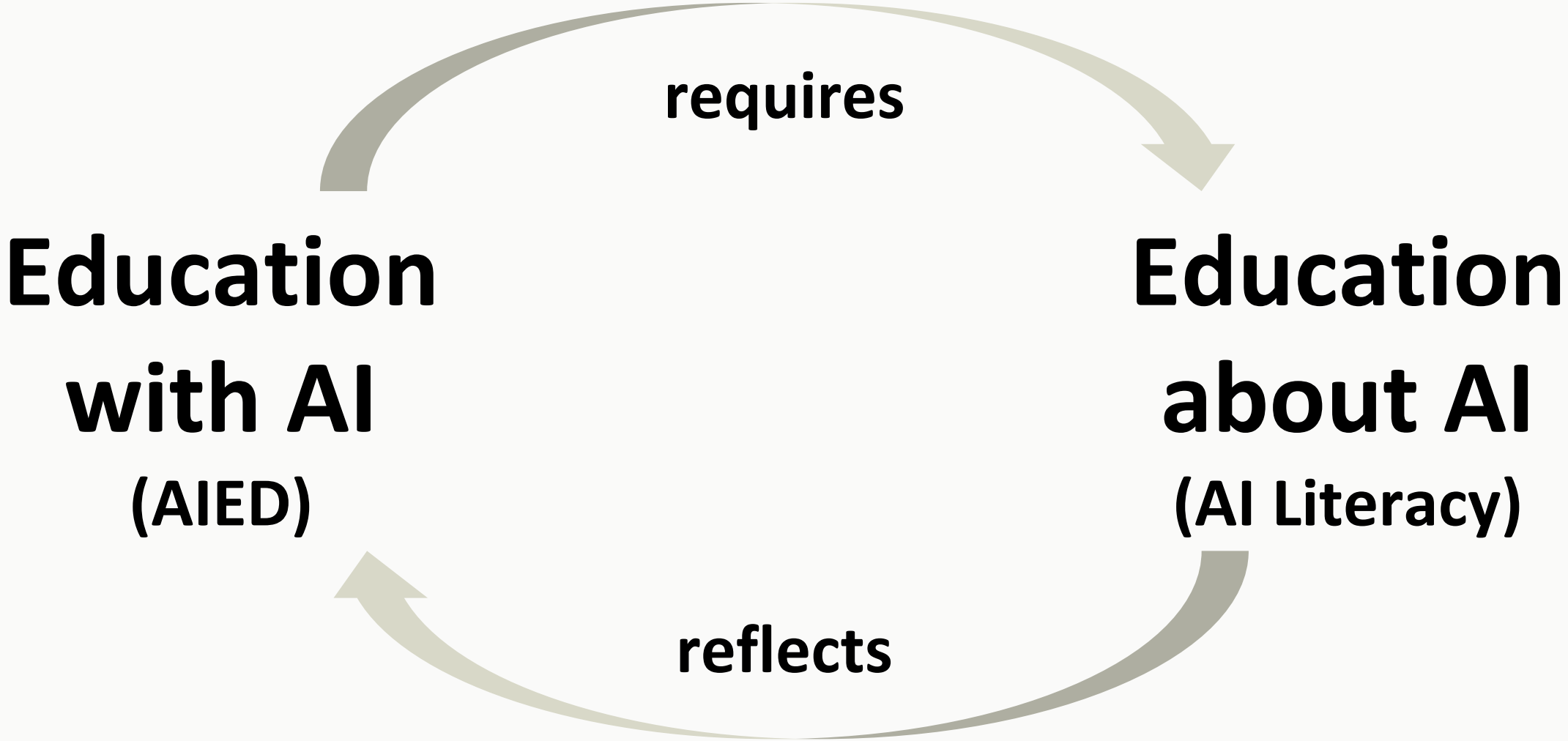
selc.org/news/xai-built-an-illegal-power-plant-to-power-its-data-center

The EU spends billions on AI, but can anyone track the money?

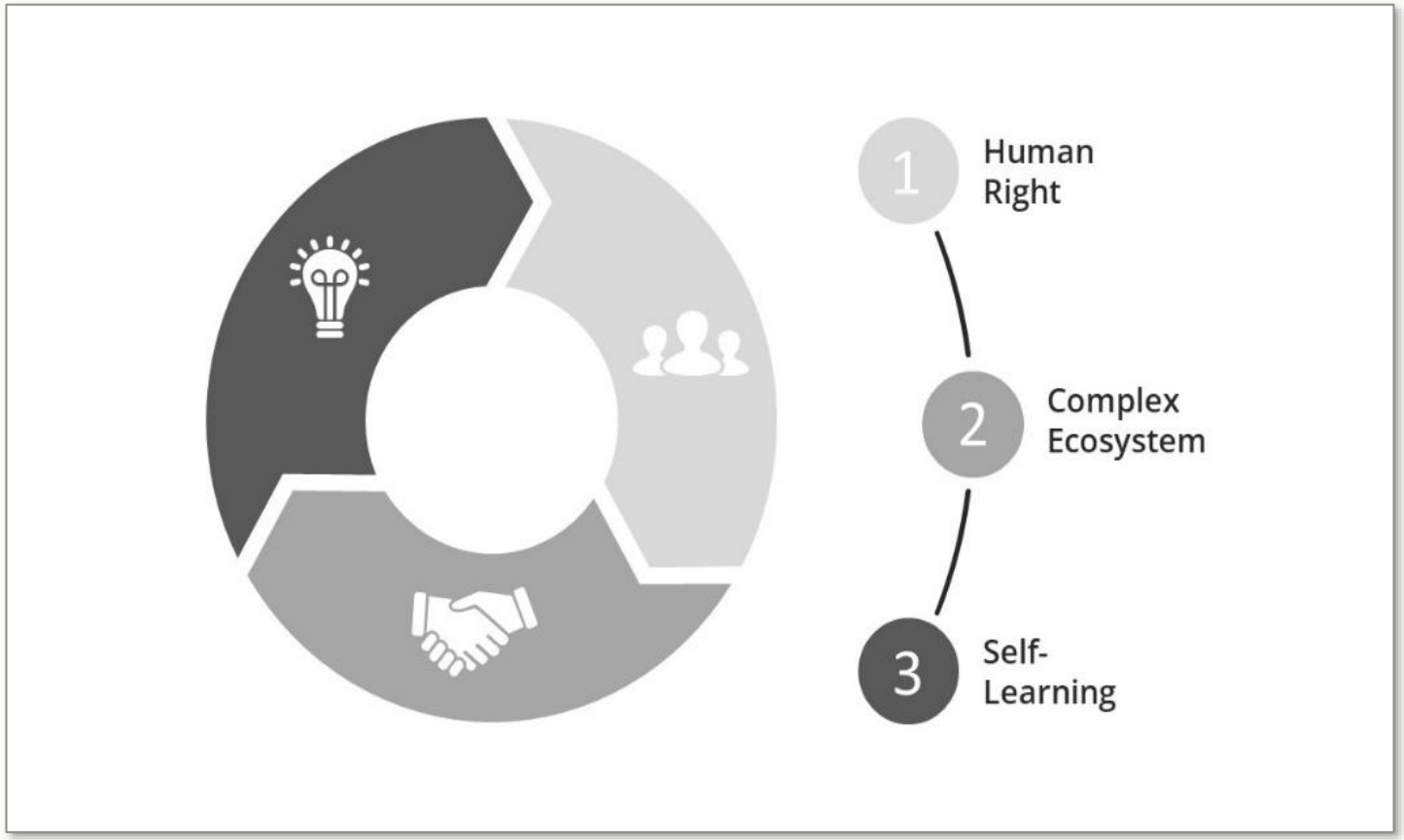
Sustainability related:

- **Resources**
- **Investments**
- **Epistemology**
- **Society**

ED&AI = Education with + about AI



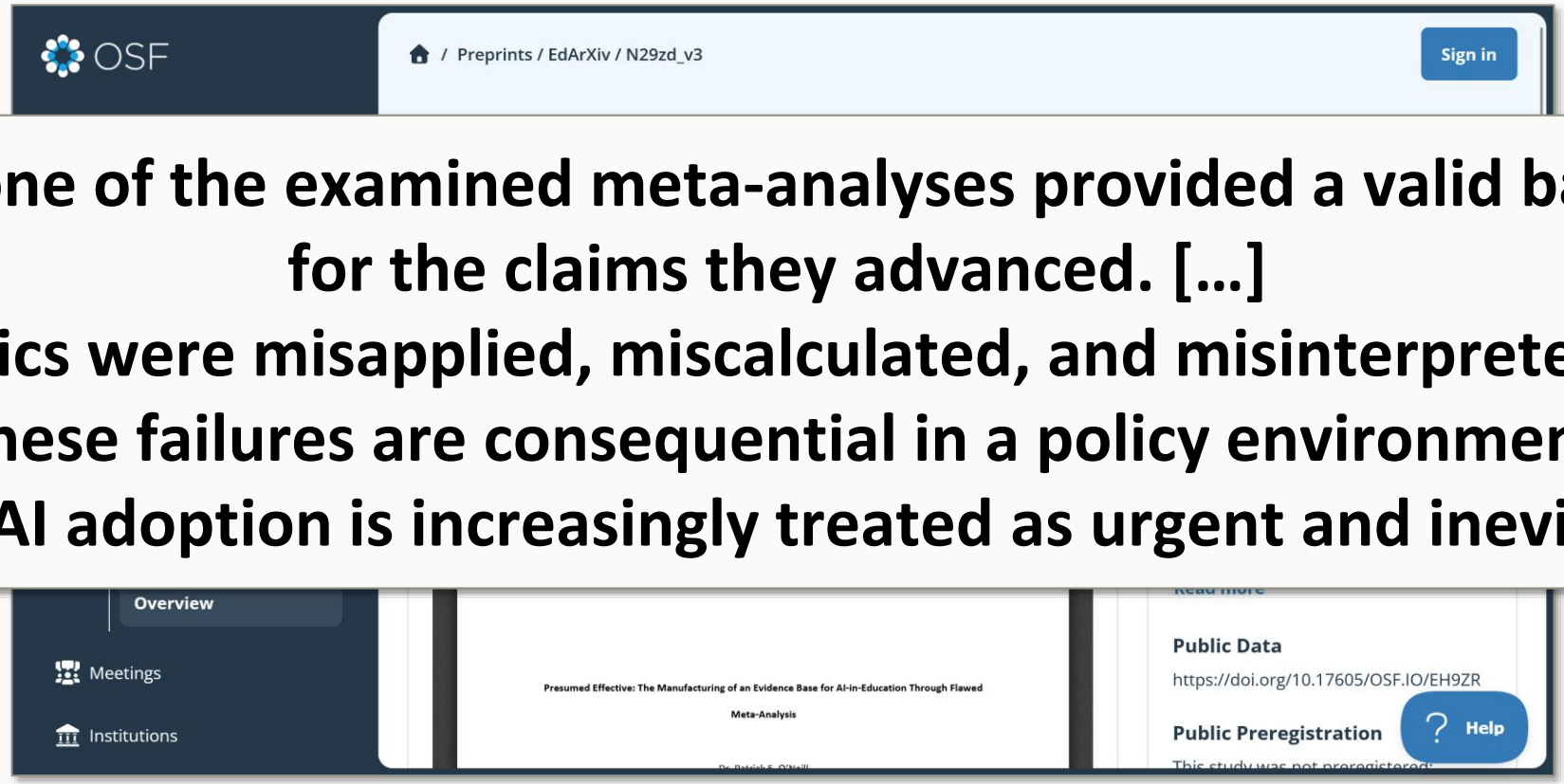
AI & the Special Case of Education



Stracke (2026a): https://doi.org/10.1007/s43681-026-01092-5 & Stracke (2026b): https://doi.org/10.1515/9783111586458-011

Effective ED&AI?

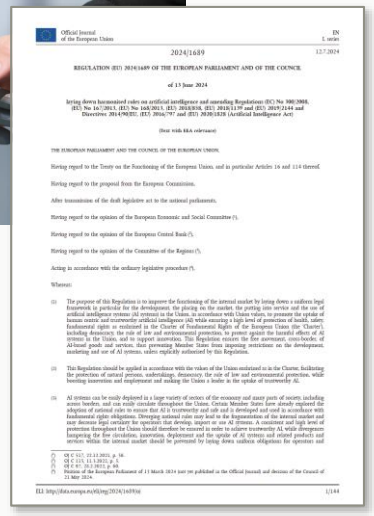
Many Meta-analyses and Meta-meta-analyses



"None of the examined meta-analyses provided a valid basis for the claims they advanced. […]
Statistics were misapplied, miscalculated, and misinterpreted. […]
These failures are consequential in a policy environment where AI adoption is increasingly treated as urgent and inevitable."

https://doi.org/10.17605/OSF.IO/EH9ZR





Official Journal of the European Union — EN — L series — 12.7.2024

2024/1689

REGULATION (EU) 2024/1689 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 13 June 2024

laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Articles 16 and 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee (1),

Having regard to the opinion of the European Central Bank (2),

Having regard to the opinion of the Committee of the Regions (3),

Acting in accordance with the ordinary legislative procedure (4),

Whereas:

(1) The purpose of this Regulation is to improve the functioning of the internal market by laying down a uniform legal framework in particular for the development, the placing on the market, the putting into service and the use of artificial intelligence systems (AI systems) in the Union, in accordance with Union values, to promote the uptake of human centric and trustworthy artificial intelligence (AI) while ensuring a high level of protection of health, safety, fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union (the 'Charter'), including democracy, the rule of law and environmental protection, to protect against the harmful effects of AI systems in the Union, and to support innovation. This Regulation ensures the free movement, cross-border, of AI-based goods and services, thus preventing Member States from imposing restrictions on the development, marketing and use of AI systems, unless explicitly authorised by this Regulation.

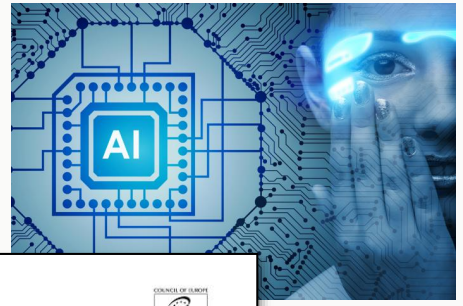
(2) This Regulation should be applied in accordance with the values of the Union enshrined in as the Charter, facilitating the protection of natural persons, undertakings, democracy, the rule of law and environmental protection, while boosting innovation and employment and making the Union a leader in the uptake of trustworthy AI.

(3) AI systems can be easily deployed in a large variety of sectors of the economy and many parts of society, including across borders, and can easily circulate throughout the Union. Certain Member States have already explored the adoption of national rules to ensure that AI is trustworthy and safe and is developed and used in accordance with fundamental rights obligations. Diverging national rules may lead to the fragmentation of the internal market and may decrease legal certainty for operators that develop, import or use AI systems. A consistent and high level of protection throughout the Union should therefore be ensured in order to achieve trustworthy AI, while divergences hampering the free circulation, innovation, deployment and the uptake of AI systems and related products and services within the internal market should be prevented by laying down uniform obligations for operators and

(1) OJ C 517, 22.12.2021, p. 56.
(2) OJ C 115, 11.3.2022, p. 5.
(3) OJ C 97, 28.2.2022, p. 60.
(4) Position of the European Parliament of 13 March 2024 (not yet published in the Official Journal) and decision of the Council of 21 May 2024.

EU http://data.europa.eu/eli/reg/2024/1689/oj — 1/144

AI Regulations



European Union (2024): EU AI Act - risk-based



COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

Council of Europe Treaty Series - No. 225

Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law

Vilnius, 5.IX.2024

Preamble

The member States of the Council of Europe and the other signatories hereto,

Considering that the aim of the Council of Europe is to achieve greater unity between its members, based in particular on the respect for human rights, democracy and the rule of law;

Recognising the value of fostering co-operation between the Parties to this Convention and of extending such co-operation to other States that share the same values;

Conscious of the accelerating developments in science and technology and the profound changes brought about through activities within the lifecycle of artificial intelligence systems, which have the potential to promote human prosperity as well as individual and societal well-being, sustainable development, gender equality and the empowerment of all women and girls, as well as other important goals and interests, by enhancing progress and innovation;

Recognising that activities within the lifecycle of artificial intelligence systems may offer unprecedented opportunities to protect and promote human rights, democracy and the rule of law;

Concerned that certain activities within the lifecycle of artificial intelligence systems may undermine human dignity and individual autonomy, human rights, democracy and the rule of law;

Concerned about the risks of discrimination in digital contexts, particularly those involving artificial intelligence systems, and their potential effect of creating or aggravating inequalities, including those experienced by women and individuals in vulnerable situations, regarding the enjoyment of their human rights and their full, equal and effective participation in economic, social, cultural and political affairs;

Concerned by the misuse of artificial intelligence systems and opposing the use of such systems for repressive purposes in violation of international human rights law, including through arbitrary or unlawful surveillance and censorship practices that erode privacy and individual autonomy;

Conscious of the fact that human rights, democracy and the rule of law are inherently interwoven;

Council of Europe (2024): AI Framework Convention Treaty 225 - value-based

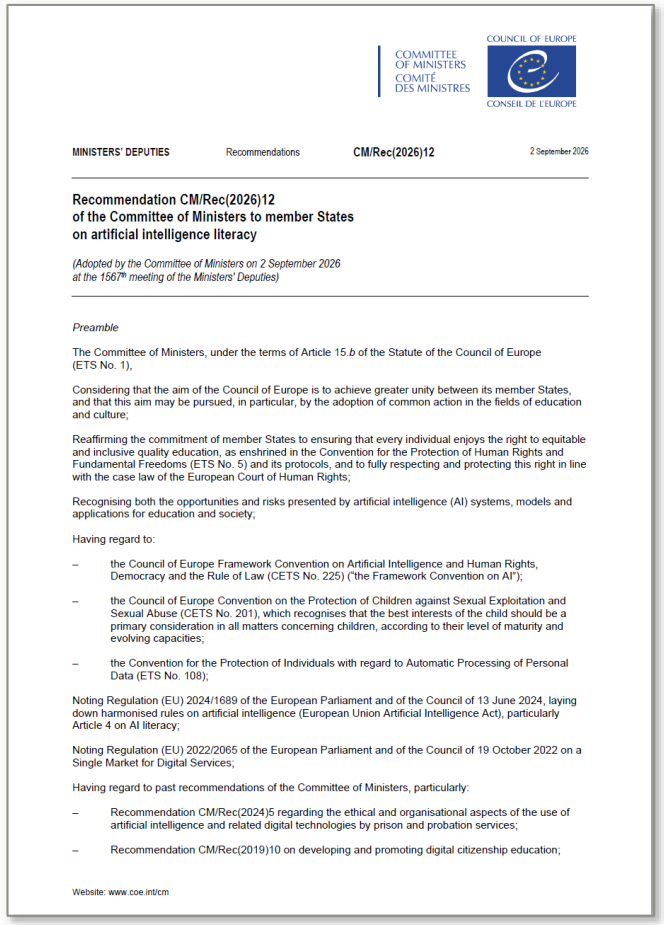
Council of Europe AI&ED Expert Group: International AI conventions specific for Education

AI&ED Expert Group by CoE



https://opening-up.education/artificial-intelligence-and-education

Council of Europe (CoE)



COMMITTEE OF MINISTERS
COMITÉ DES MINISTRES

COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

MINISTERS' DEPUTIES Recommendations CM/Rec(2026)12 2 September 2026

Recommendation CM/Rec(2026)12
of the Committee of Ministers to member States
on artificial intelligence literacy

(Adopted by the Committee of Ministers on 2 September 2026
at the 1567th meeting of the Ministers' Deputies)

Preamble

The Committee of Ministers, under the terms of Article 15.*b* of the Statute of the Council of Europe (ETS No. 1),

Considering that the aim of the Council of Europe is to achieve greater unity between its member States, and that this aim may be pursued, in particular, by the adoption of common action in the fields of education and culture;

Reaffirming the commitment of member States to ensuring that every individual enjoys the right to equitable and inclusive quality education, as enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms (ETS No. 5) and its protocols, and to fully respecting and protecting this right in line with the case law of the European Court of Human Rights;

Recognising both the opportunities and risks presented by artificial intelligence (AI) systems, models and applications for education and society;

Having regard to:

– the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (CETS No. 225) ("the Framework Convention on AI");

– the Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (CETS No. 201), which recognises that the best interests of the child should be a primary consideration in all matters concerning children, according to their level of maturity and evolving capacities;

– the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108);

Noting Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024, laying down harmonised rules on artificial intelligence (European Union Artificial Intelligence Act), particularly Article 4 on AI literacy;

Noting Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services;

Having regard to past recommendations of the Committee of Ministers, particularly:

– Recommendation CM/Rec(2024)5 regarding the ethical and organisational aspects of the use of artificial intelligence and related digital technologies by prison and probation services;

– Recommendation CM/Rec(2019)10 on developing and promoting digital citizenship education;

Website: www.coe.int/cm

First International Convention on AI and Education adopted by all 46 member states of the Council of Europe (2nd of September 2026)

AI Literacy Recommendation

(developed by the AI&ED Expert Group)

https://search.coe.int/cm/eng?i=09125948802cde8e

Council of Europe (CoE)


MINISTERS' DEPUTIES

Recommendation CM/Rec(2026
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(Adopted by the Committee of Ministers or
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Preamble

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– the Convention for the Protect
Data (ETS No. 108);

Noting Regulation (EU) 2024/1689 of t
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Article 4 on AI literacy;

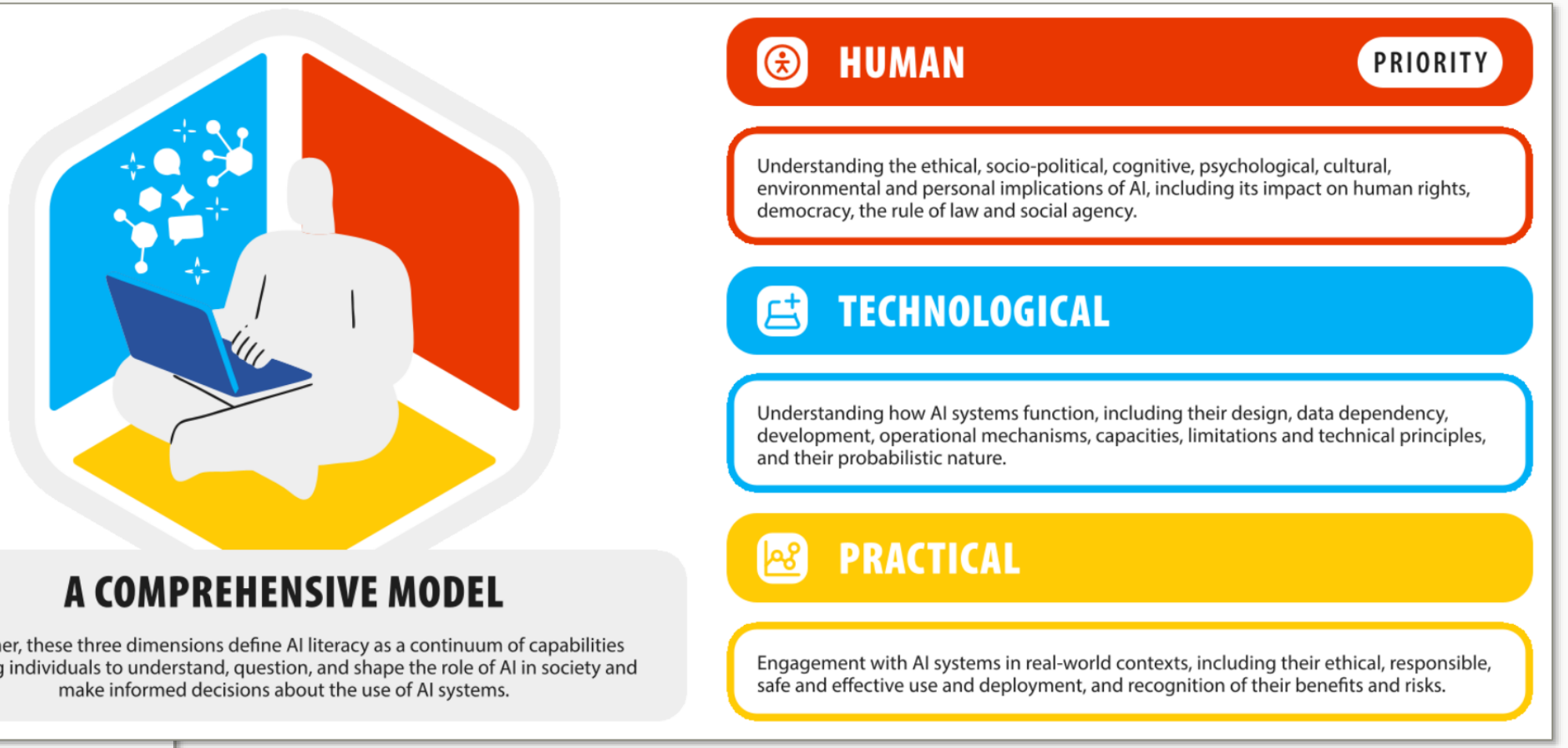
Noting Regulation (EU) 2022/2065 of t
Single Market for Digital Services;

Having regard to past recommendatio

– Recommendation CM/Rec(202
artificial intelligence and relate

– Recommendation CM/Rec(20

Website: www.coe.int/cm



https://search.coe.int/cm/eng?i=09125948802cde8e

Introduction of Education about AI



3 AI Literacy

2 Digital Literacy

1 Ethical Literacy

Sustainable Development Goals



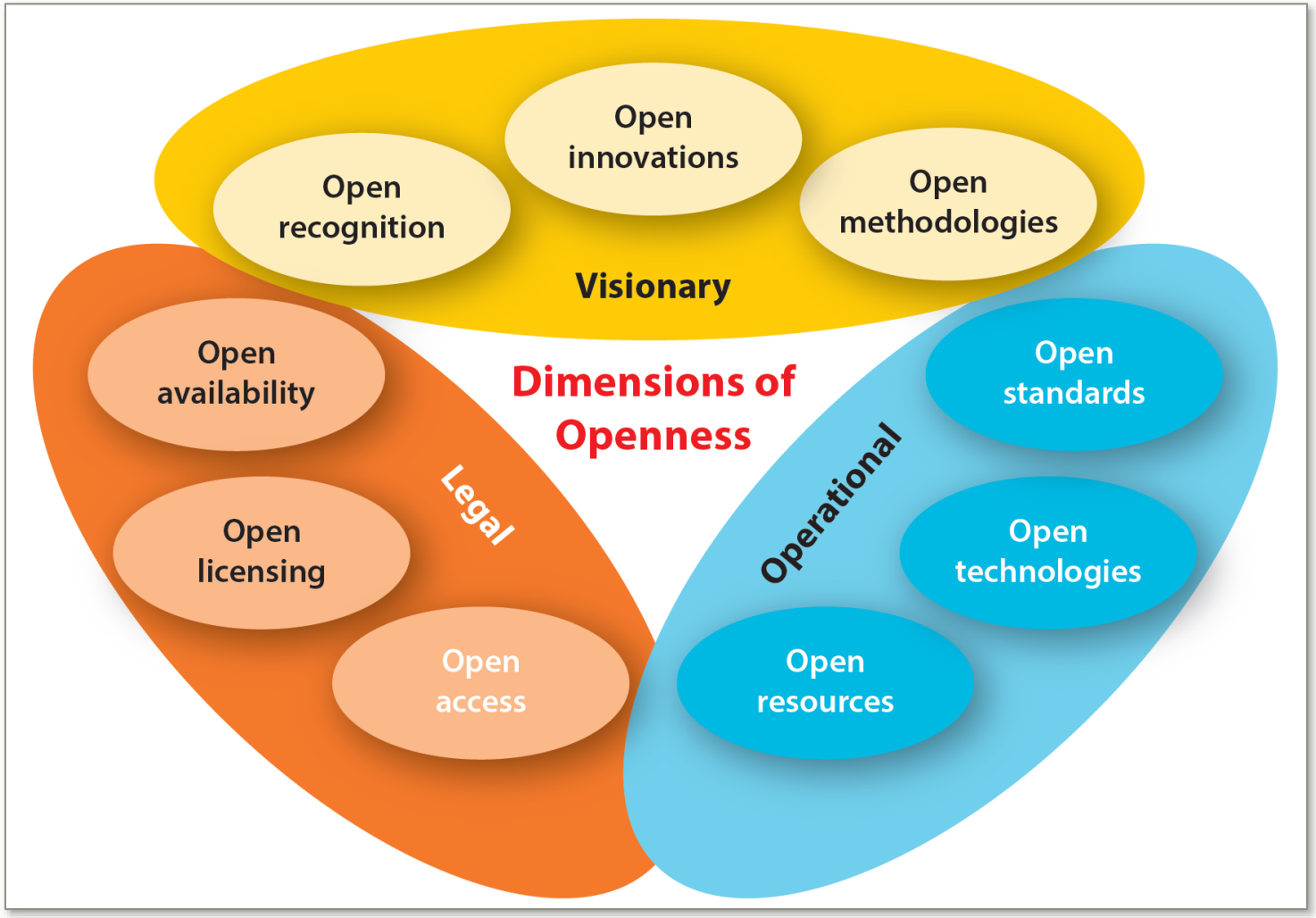
https://www.unesco.org/en/sdgs

Sustainable Development Goals



https://www.unesco.org/en/sdgs

Open Education as Philosophy



https://doi.org/10.1007/978-3-319-58509-3_23

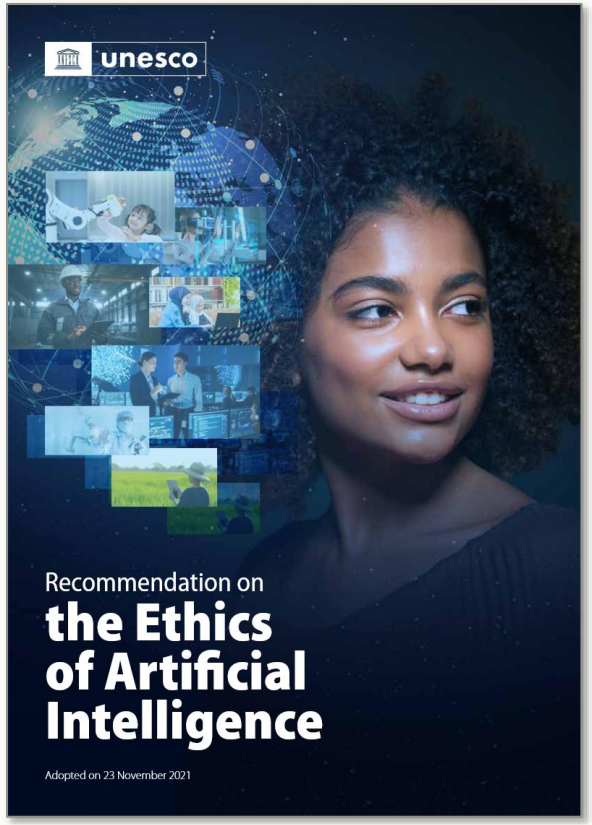
Open Quality Education

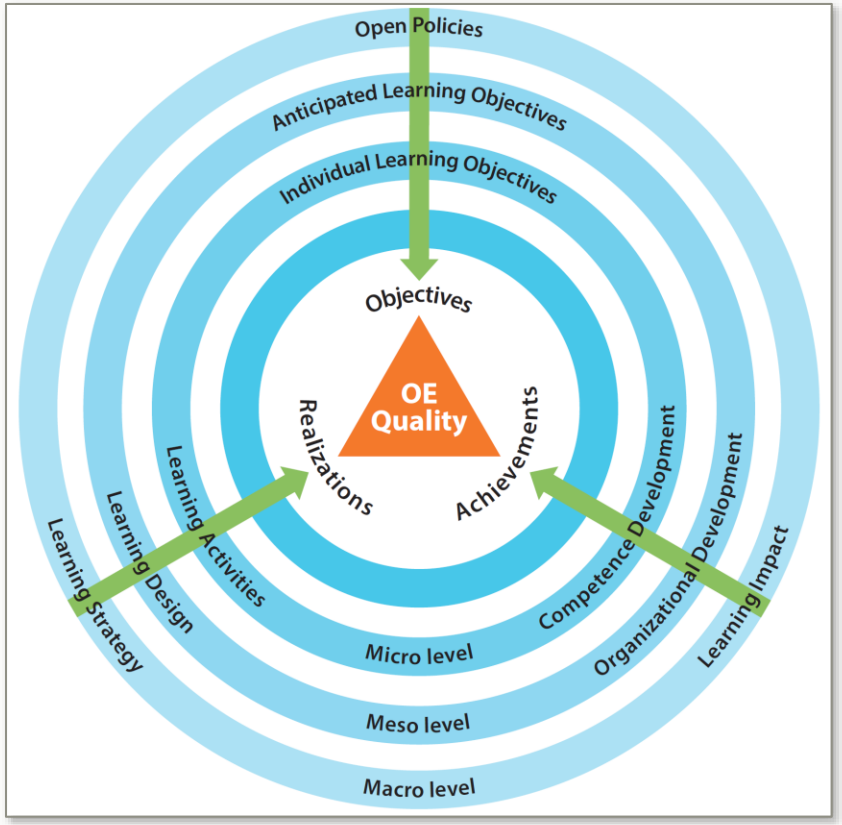
Global goal of Quality Education as SDG 4

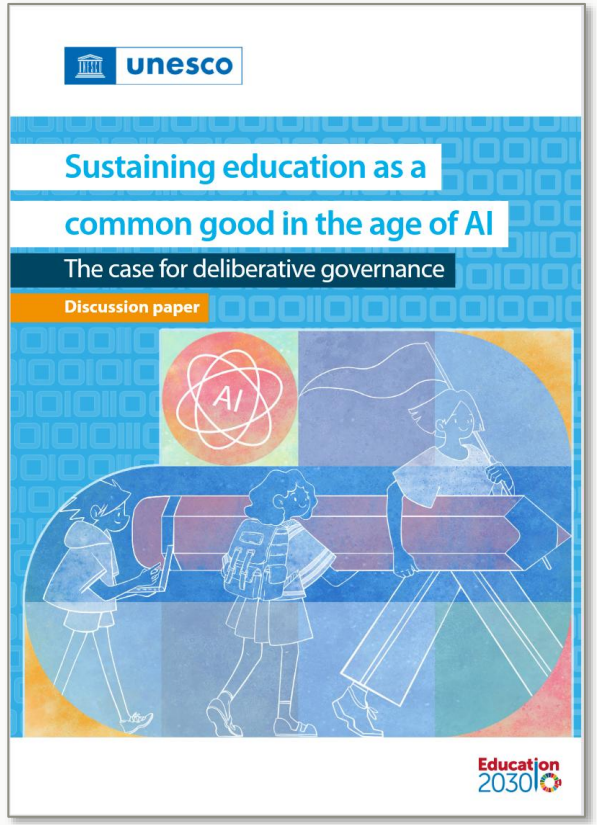
Open Education for All as solution

AI as tool to be integrated if it makes sense

Open Quality Education with AI?







https://unesdoc.unesco.org/ark:/48223/pf0000381137 http://doi.org/10.19173/irrodl.v20i2.4213 https://unesdoc.unesco.org/ark:/48223/pf0000399349

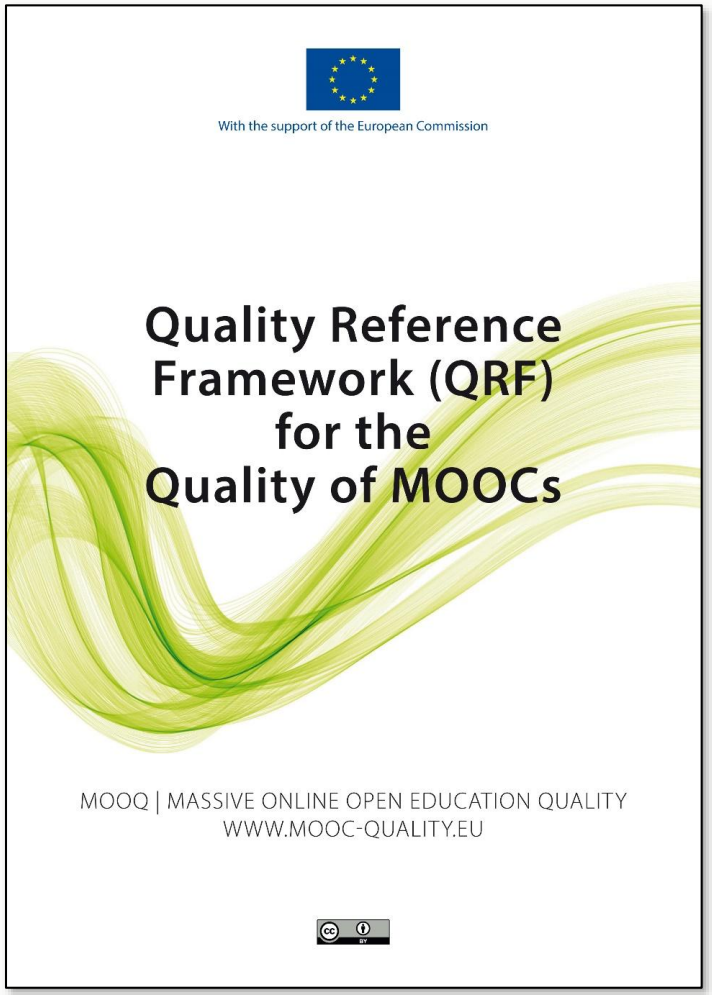
Consequences for Education with AI

Design of education is crucial and most important

In particular assessment has to be changed

Decision about use of AI (or not) is required

Quality Reference Framework





QRF freely & openly available online:

www.MOOC-quality.eu/QRF

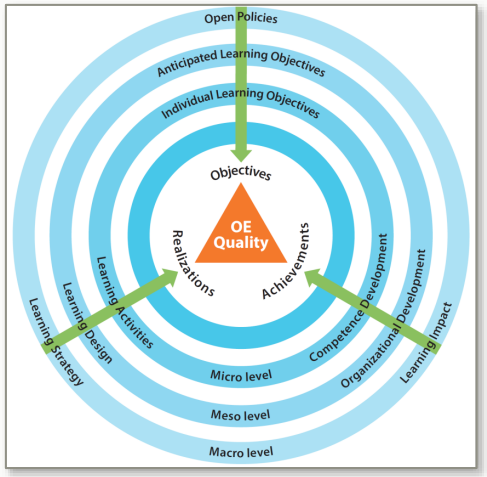
https://doi.org/10.5281/zenodo.3894573

Open Quality Education with AI?

Governments & public authorities: Binding laws

Organisations & institutions: Binding strategies

Teachers & students: Binding decisions



My Assessment Practices

Traditional lectures into group work (since 2008):
Project-based tasks with feedback & peer-reviews

Up to 200 students in online groups of 4-10:
Individual assessment only in oral examinations

Teaching assistants are needed, only 3 meetings:
Start with videos, mid-term exchange, final results

AI Policies for Ethical Assessment

ASSAI for formative & summative assessment with AI

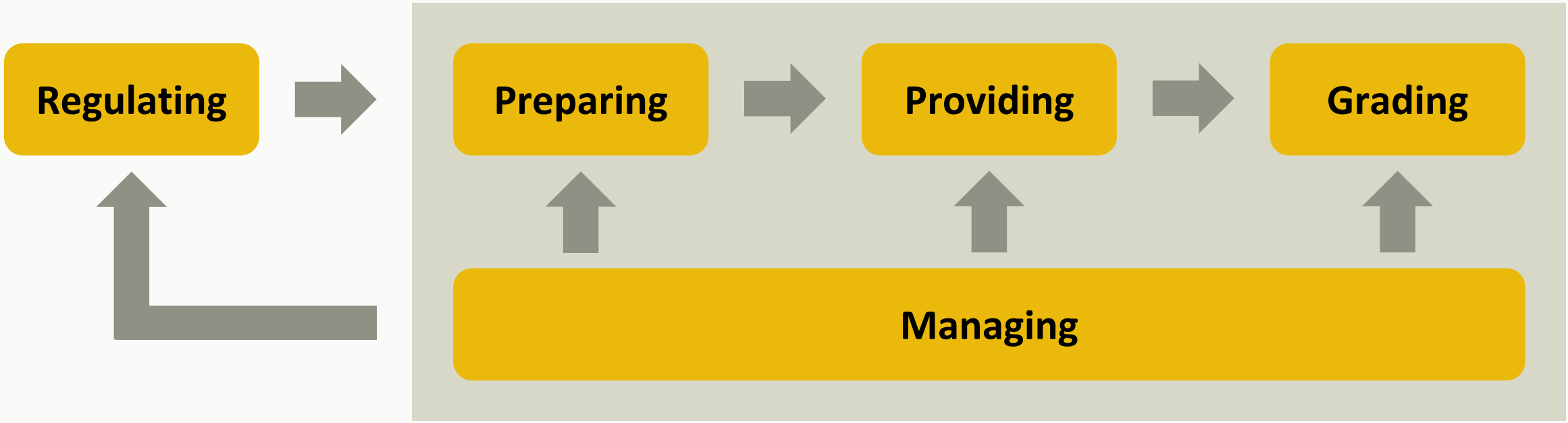


1. "Preparatory studies": ethical use, principles and processes of GenAI
2. "Inquiries": systematic GenAI review into the use of GenAI in assessment
3. "Policy formulation": collaboration with stakeholders for ethical GenAI
4. "Mainstreaming": web-based policy & policy implementation services.

https://assai-project.eu

Assessment with AI

First phase: acceptance or rejection of GenAI use in assessment by public authorities and institutions



AI Policies for Ethical Assessment

ASSAI for formative & summative assessment with AI



AI policies for assessment practices

AI used for assessment preparations

AI used during assessment practices

AI used for grading assessment results

https://assai-project.eu

Assessment Alternatives

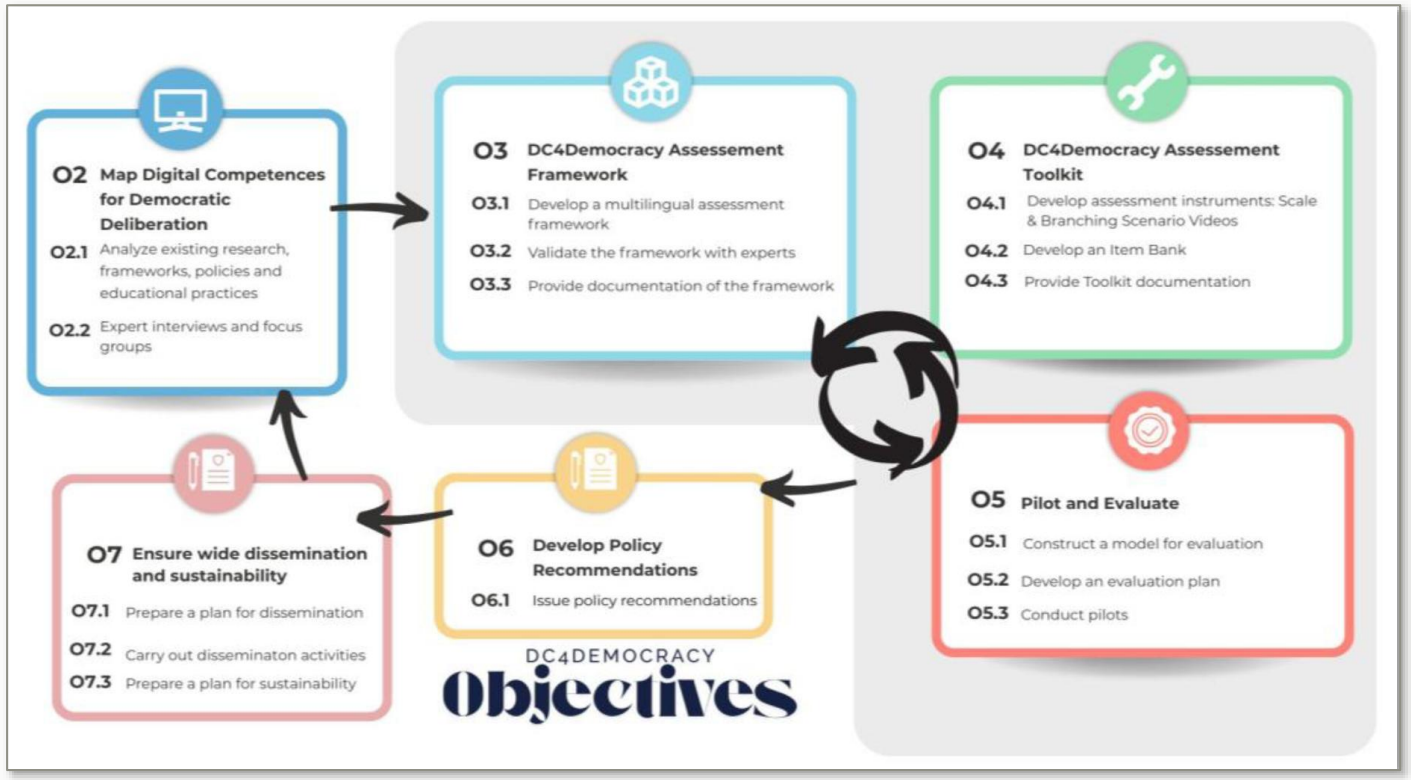
Oral examinations instead of written assessments:
Same time for grading 4 students (2 h) or even less

Problems, projects and products as study tasks:
AI to be continuously used & documented as tool

Written texts with high-level analysis demands:
Reflections & individual opinions as main content

Democracy Building with AI

DC4Democracy: Deliberations in schools for AI



https://dc4democracy.eu

Democracy Building with AI

DC4Democracy: Deliberations in schools for AI



Democracy building in schools

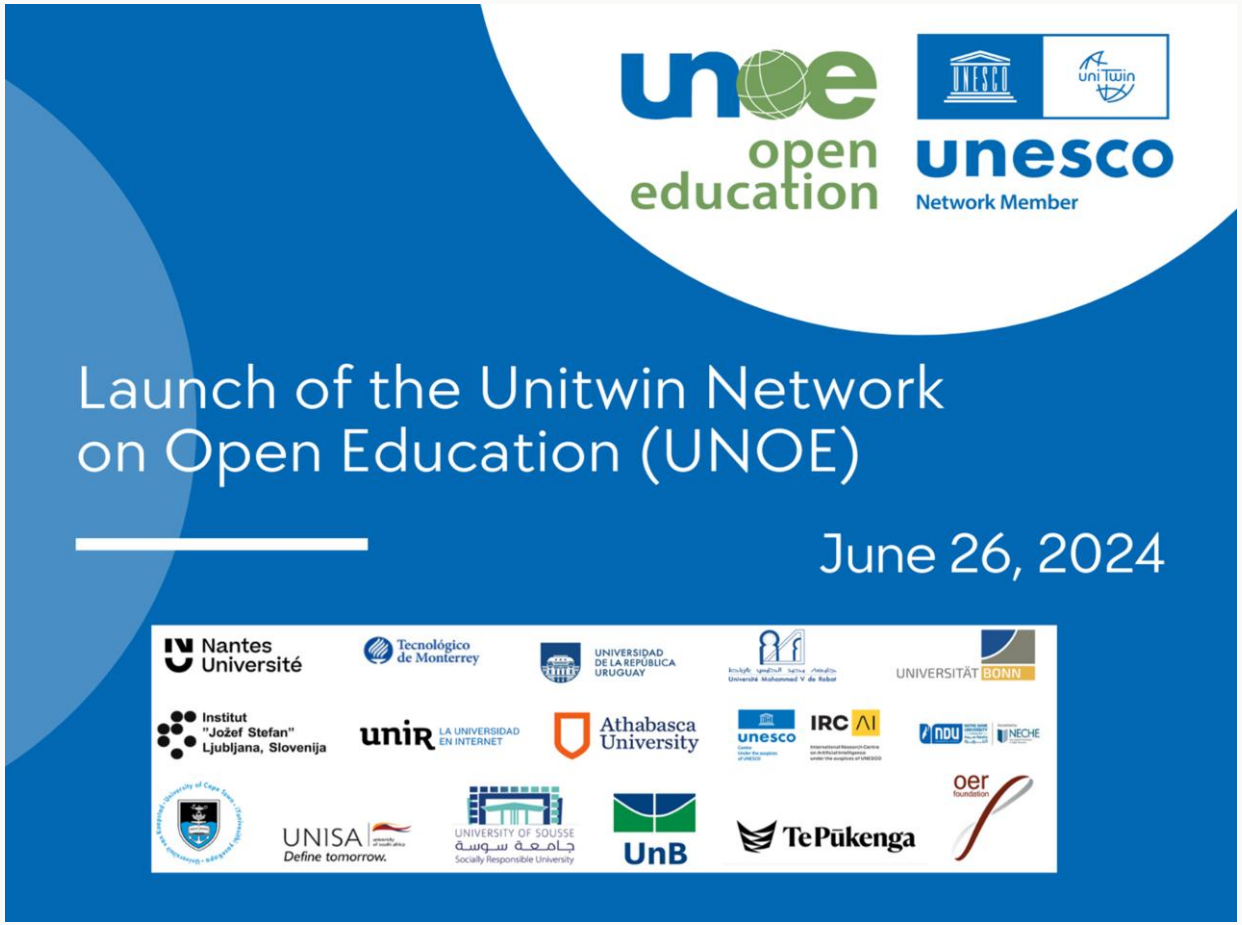
Digital competences for society

Assessments of these buildings

Policy recommendations and tools

https://dc4democracy.eu

UNESCO Network UNOE



UNOE = UNESCO Unitwin Network on Open Education

16 partners from all five continents

https://opening-up.education

https://unitwin-unoe.org

Networks "Ethical Use of AI"

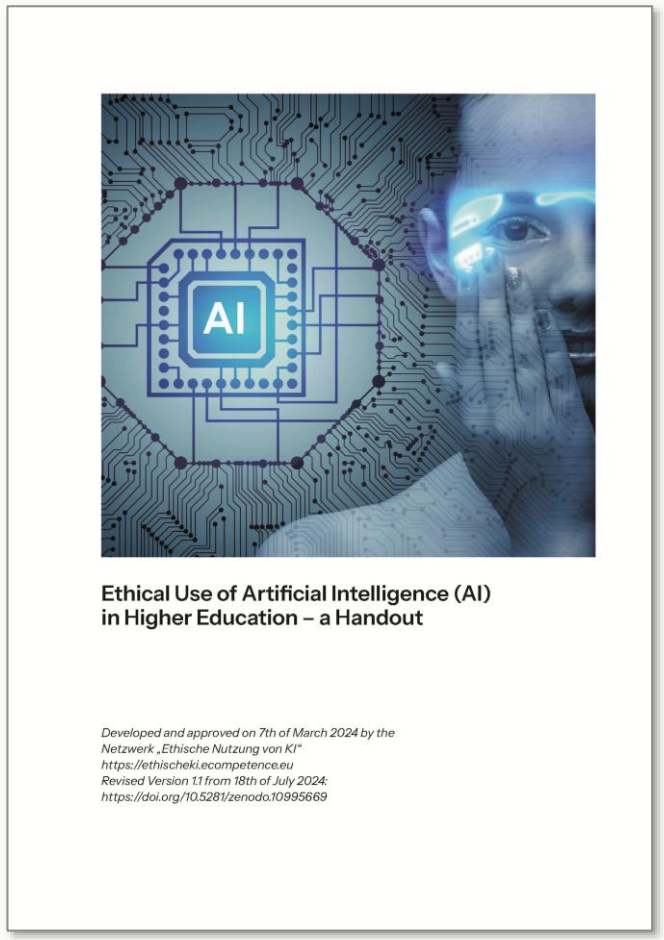


German Network since March 2023:
https://ethischeki.ecompetence.eu

European Network since AIED 2023:
https://ethicalai.ecompetence.eu

Monthly meetings for collaboration:
Everybody is most welcome!

Network "Ethical Use of AI"



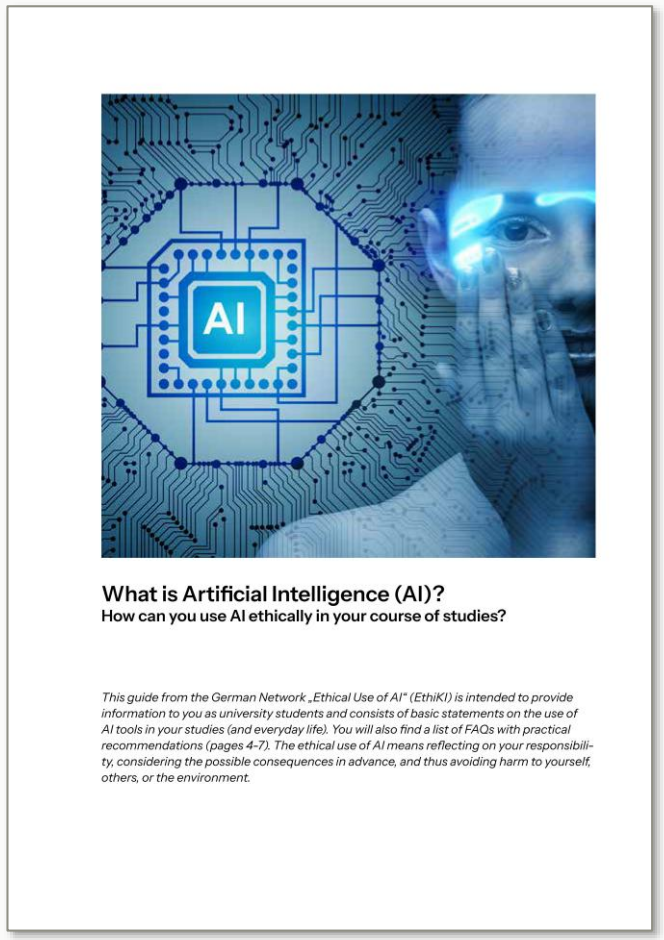
"Ethical Use of AI in Higher Education – a Handout" for university teachers

(Version 1.1 from 18th of July 2024)

- **10 Statements (1 page) and FAQ-Liste with answers (4 pages)**
- **For university teachers & leaders**

https://doi.org/10.5281/zenodo.10793844

Network "Ethical Use of AI"



"What is AI? How can you use AI ethically in studies?" for students

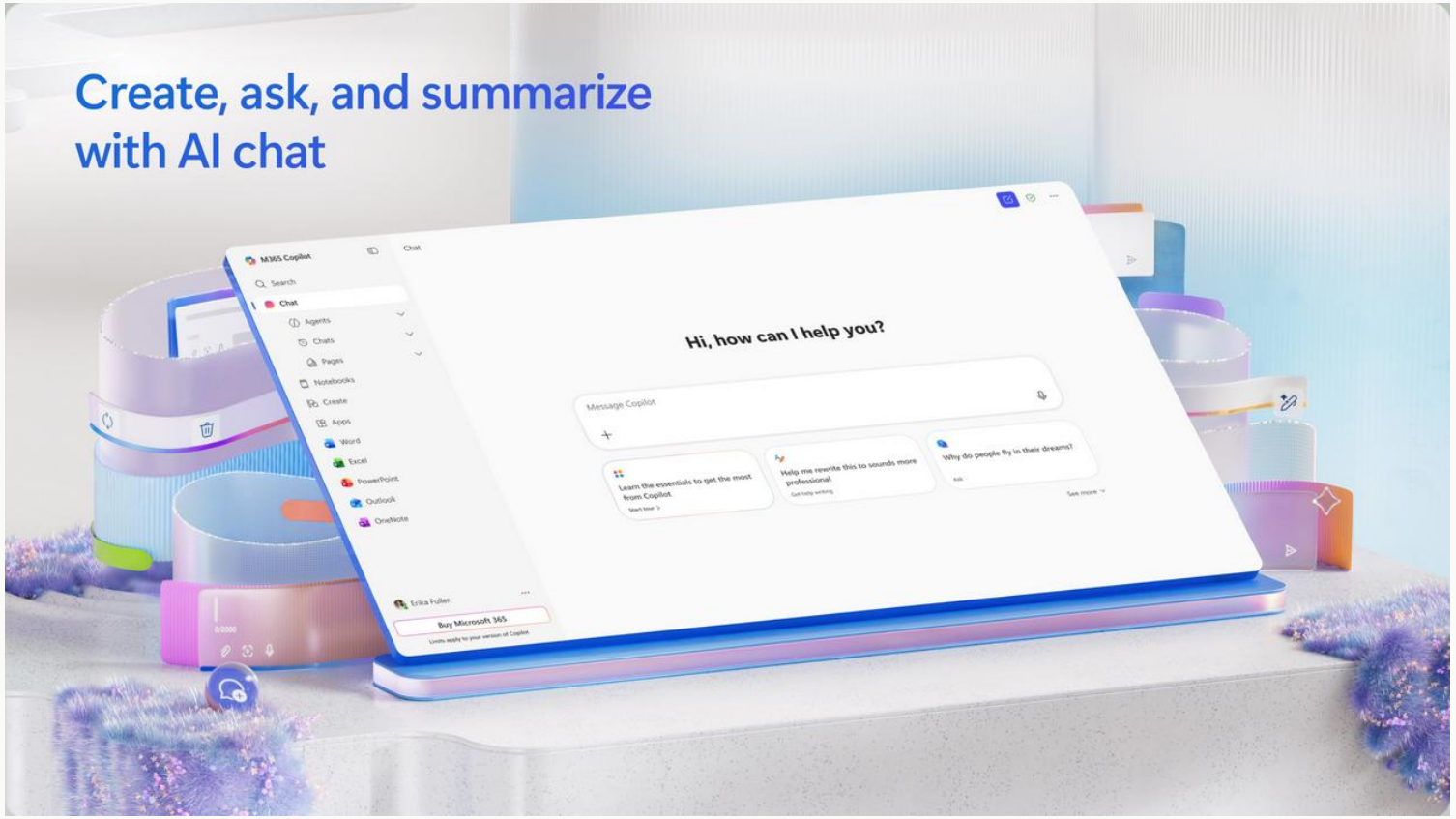
(Version 1.0 from 6th of May 2025)

- **Specifically for students & their guidance with 10 Statements and FAQ list plus recommendations**

https://doi.org/10.5281/zenodo.23040469

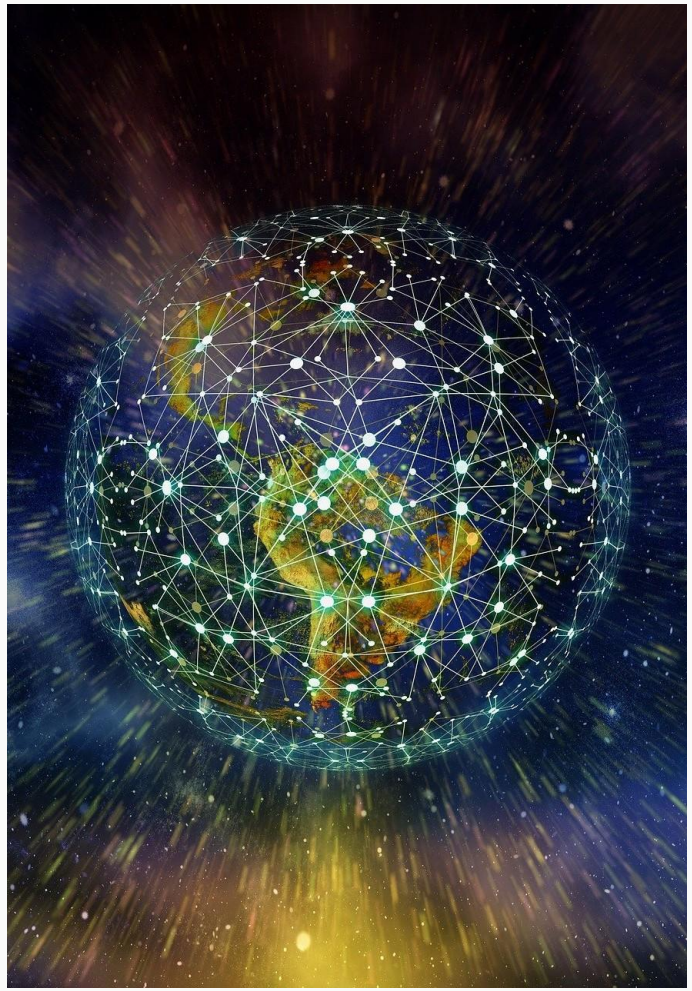
And the Future ED&AI?





https://tenor.com/de/view/ai-bot-chatgpt-artificial-chat-gpt-gif-28270493876272123 8 - https://apps.microsoft.com/detail/9wzdncrd29v9?hl=en-US

Future of Education and AI?

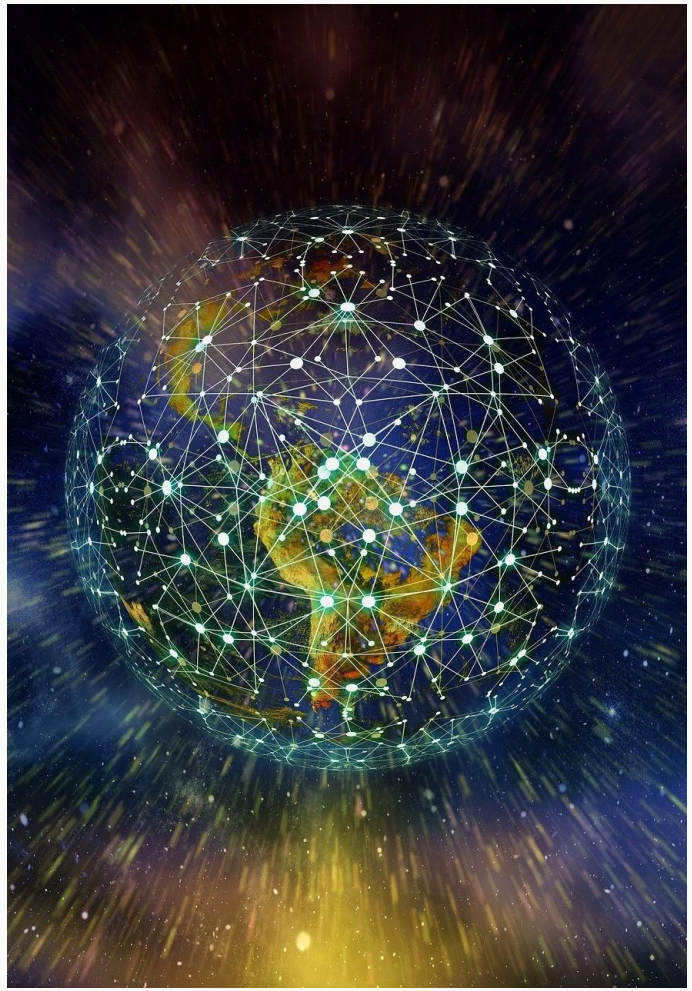


Safe, responsible and fair AI use for All

Regulation of AI: Restrictions and chances

Transparency and infrastructure

Open AI questions for discussion



Pedagogical: Strategies, learning goals, curricula, environments, assessments

Technological: Blackbox, souvereignty

Ethical: Bias, personality, deskilling

Societal: Human rights, literacy, autonomy, resources, digital divide

Education and AI

Interested? Contact me!



Dr. Christian M. Stracke
ED&AI and Open Education Research
stracke@uni-bonn.de

www.lifeethics.uni-bonn.de/en
www.opening-up.education

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