AI in Education

Enhancing Equity and Respecting Children's Rights

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Unit T1 Digital Economy and Society

European Commission - Joint Research Centre

Families in the age of Artificial Intelligence, 17 March 2026, Athens, Greece

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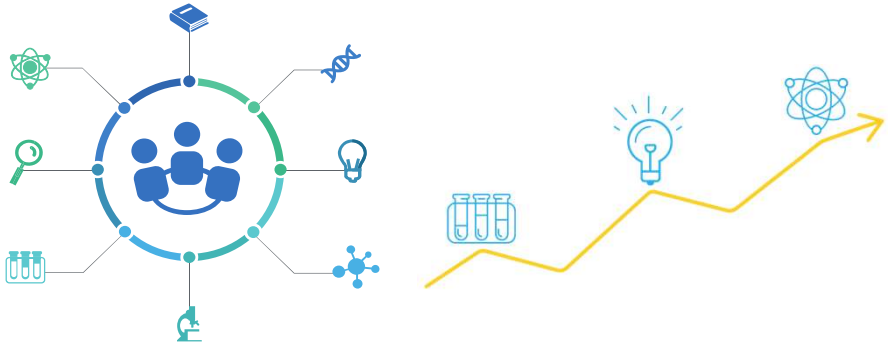
JRC objective

Evidence-based knowledge to support EU policies and positively impact society



The need for evidence to inform policy

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OUTLINE

1. Context
2. JRC research
3. Other resources

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Policy context

Digital Education Action Plan	Union of Skills	Guidelines to support teachers in key educational priorities
AI Act	DSA	Guidelines on the Online Protection of Minors
Action plan against cyberbullying	First meeting of Special Panel on Child Online Safety	

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AI is already in the classroom

OECD (2025), Results from TALIS 2024: The State of Teaching, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/90df6235-en.

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7 in 10

teens (13-18) have used GenAI tools.

Used for variety of purposes but using it for help with homework is the most common

Common Sense (2024)

36%

teachers have used AI in the classroom

High variation between countries

TALIS (2024)

62 %

Youth agree that learning how to use GenAI could help them in their future jobs

Common Sense (2024)

50 %

Parents report wanting to be involved in decisions related to AI in their children's school

But also feel they need more information about AI tools

National Parents Union (2024)

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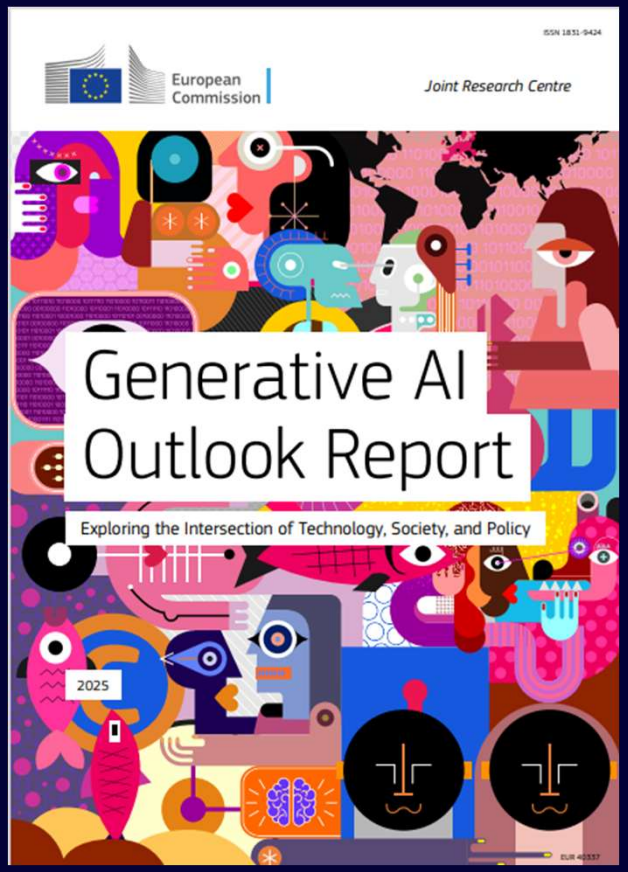
GenAI Outlook: Key Trends and Education Implications



Rapid
Capability growth

High
Adoption potential

Uneven
Access & readiness

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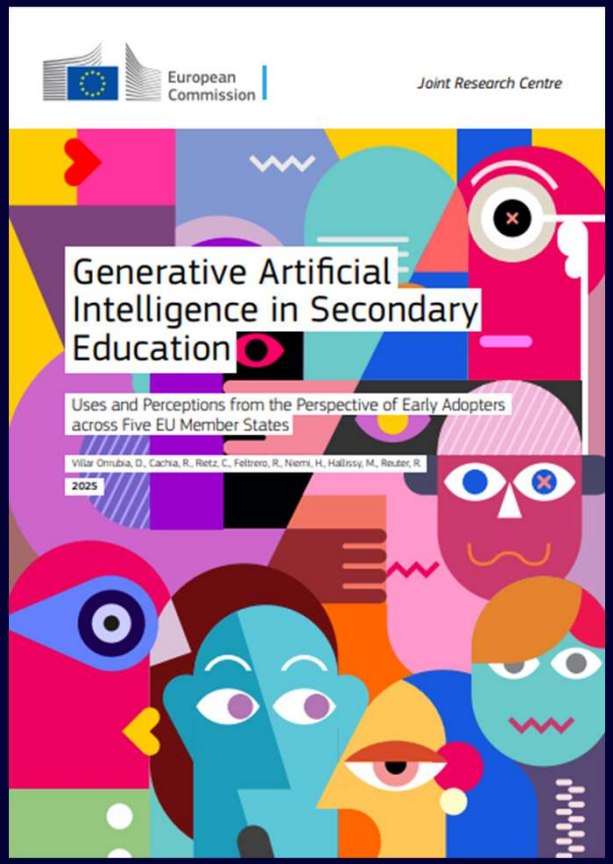
GenAI in Secondary Education



Objective	Snapshot of emerging uses and perception of GenAI in secondary education by early adopters during the academic year 2023/24.
Countries	Finland, Ireland, Germany, Luxembourg and Spain
Method	30 Semi-structured interviews 24 Focus groups
Research Participants	Policymakers, teacher educators, school leaders, teachers and students
Data	March 2024 – March 2025

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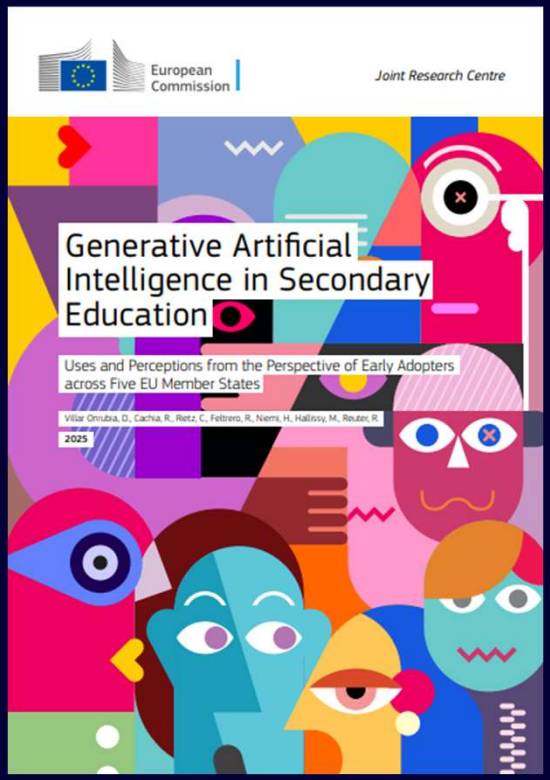
Villar Onrubia, D., Cachia, R., Rietz, C., Feltrero, R., Niemi, H. et al., Generative Artificial Intelligence in secondary education - Uses and perceptions from the perspective of early adopters across five EU Member States, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/8636621, JRC144345.

GenAI in Secondary schools: Key findings across Five EU Member States



01 Uses & Opportunities

— Lesson planning, feedback & personalisation

— Students adopted GenAI more than teachers

— Seen as a collaborator: tutor & co-designer

02 Challenges & Concerns

— Academic integrity & over-reliance

— Algorithmic bias & data protection

— Risk of widening the digital divide

- Human agency

03 National Policies

— AI literacy in curricula & teacher training

— Shift to process-based assessment

— Equitable access & ethical guidelines

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Villar Onrubia, D., Cachia, R., Rietz, C., Feltrero, R., Niemi, H. et al., Generative Artificial Intelligence in secondary education - Uses and perceptions from the perspective of early adopters across five EU Member States, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/8636621, JRC144345.

DigComp 3.0

Guiding Values

- People at the centre — rights protected, democracy supported
- Freedom of choice — empowered, safe from harm
- Rooted in EU Charter of Fundamental Rights

Key Priorities

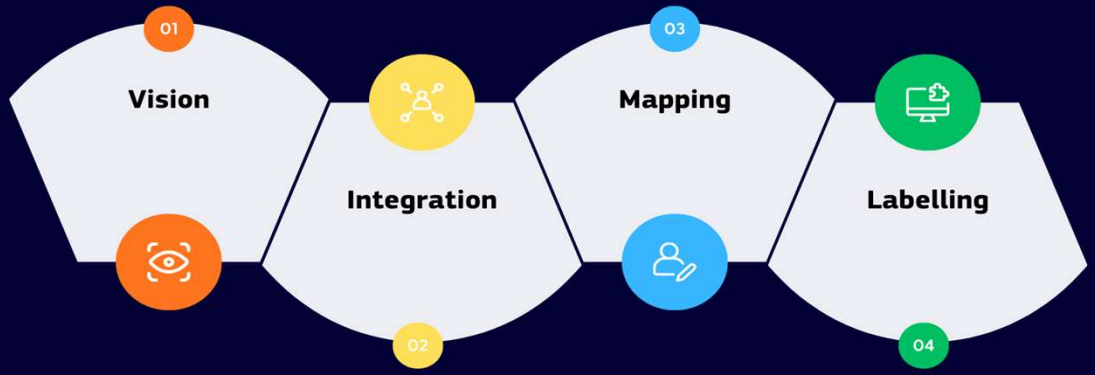
Rights & responsibility: Know digital rights, exercise agency, manage digital footprint
Wellbeing: Recognise problematic use, manage screen time, combat cyberbullying
Misinformation: Critically evaluate sources, spot AI-generated false content
AI literacy: Understand AI limits, bias — integrated throughout all competences
Cybersecurity: Protect devices and data; universal, not just for IT professionals

Relevant Competence Areas

Area 1 – Information: Critical evaluation; spotting manipulation and misinformation
Area 2 – Communication: Asserting digital rights; inclusive participation in society
Area 4 – Safety & Wellbeing: Data protection, mental health, cyberbullying, responsible use
Area 5 – Problem Solving: Bridging skills gaps; supporting those at risk of exclusion

DigComp 3.0

Integration of AI



Guiding Values

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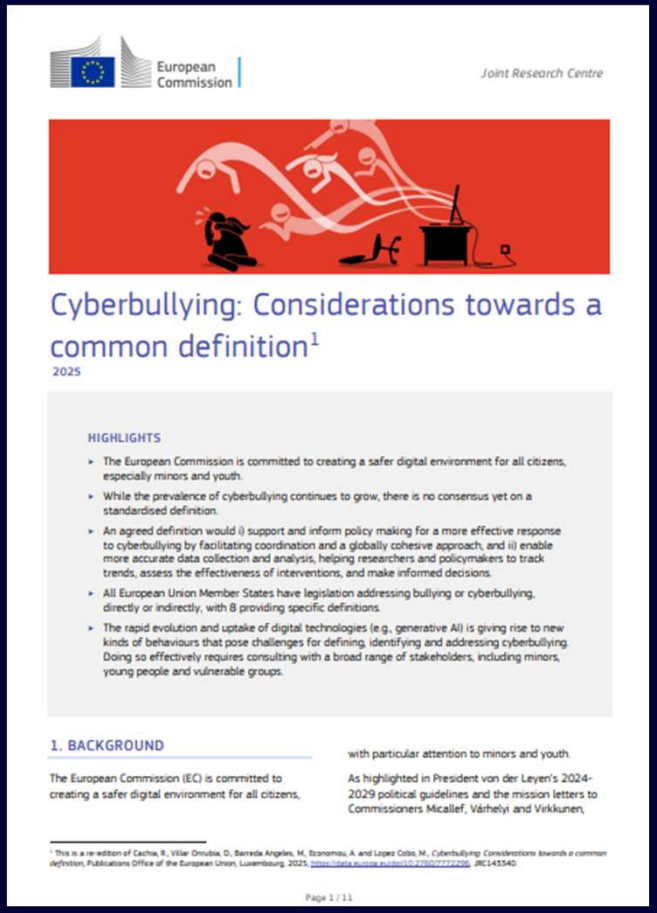
Example: CS 2.1.14): A person has a long text to read and is considering using an AI system to help provide a summary. If they decide to use AI, they need to select an appropriate AI tool. They also need to be competent in devising appropriate inputs or commands

Cyberbullying



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Cyberbullying: Considerations towards a common definition[1]

2025

HIGHLIGHTS

- The European Commission is committed to creating a safer digital environment for all citizens, especially minors and youth.
- While the prevalence of cyberbullying continues to grow, there is no consensus yet on a standardised definition.
- An agreed definition would i) support and inform policy making for a more effective response to cyberbullying by facilitating coordination and a globally cohesive approach, and ii) enable more accurate data collection and analysis, helping researchers and policymakers to track trends, assess the effectiveness of interventions, and make informed decisions.
- All European Union Member States have legislation addressing bullying or cyberbullying, directly or indirectly, with 8 providing specific definitions.
- The rapid evolution and uptake of digital technologies (e.g., generative AI) is giving rise to new kinds of behaviours that pose challenges for defining, identifying and addressing cyberbullying. Doing so effectively requires consulting with a broad range of stakeholders, including minors, young people and vulnerable groups.

1. BACKGROUND

The European Commission (EC) is committed to creating a safer digital environment for all citizens, with particular attention to minors and youth.

As highlighted in President von der Leyen's 2024-2029 political guidelines and the mission letters to Commissioners Micallef, Várhelyi and Virkkunen,

[1] This is a re-edition of Cachia, R., Villar Onrubia, D., Barreda Angeles, M., Economou, A. and Lopez Cobo, M., *Cyberbullying: Considerations towards a common definition*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/7772296, JRC145540.

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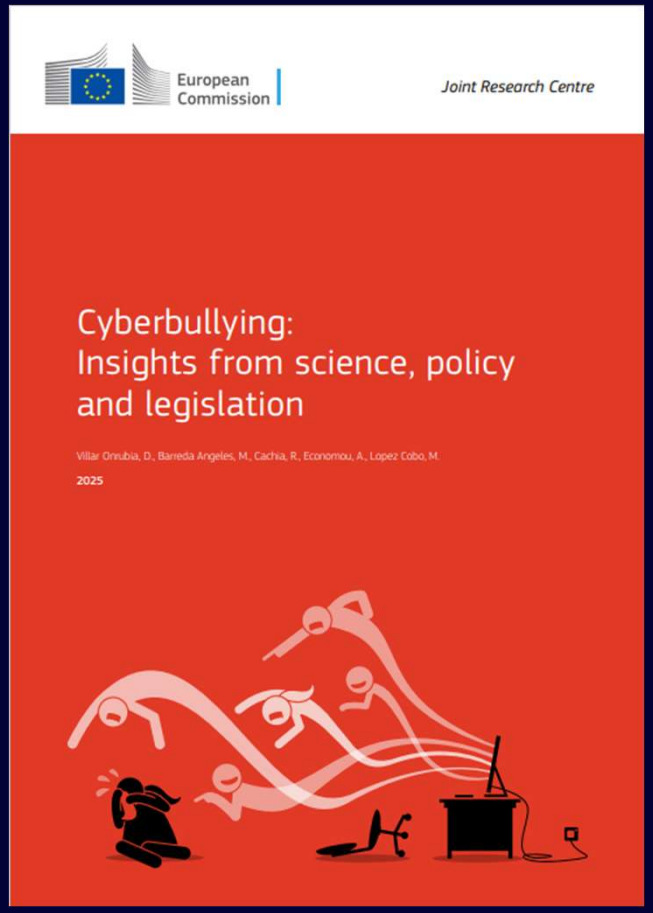

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Cyberbullying:
Insights from science, policy and legislation

Villar Onrubia, D., Barreda Angeles, M., Cachia, R., Economou, A., Lopez Cobo, M.

2025

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Cyberbullying

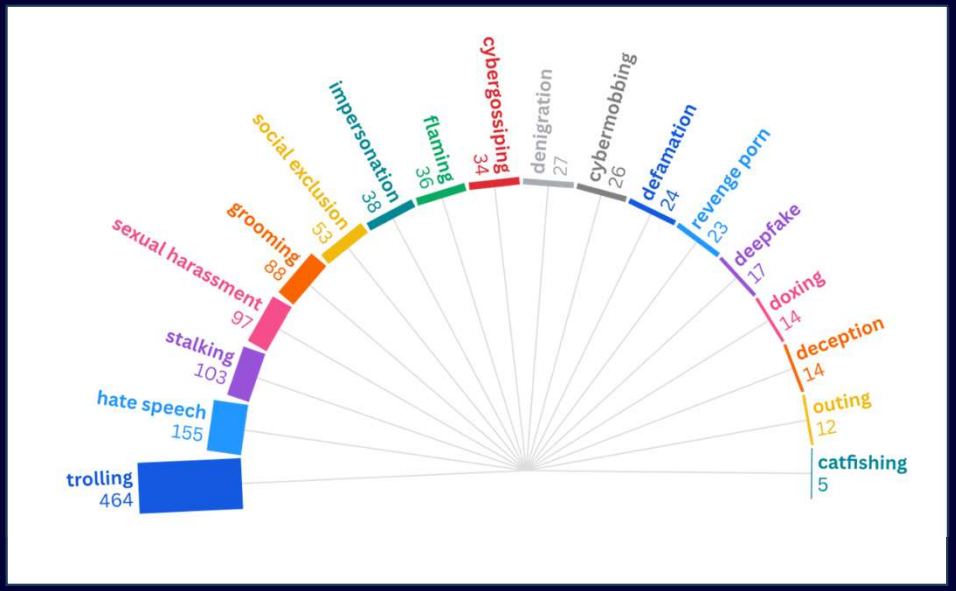
Key findings for a safer digital environment for children

AI rewrites the rules

GenAI tools enable deepfakes, synthetic impersonation & AI-generated abuse content — none of which are covered by most existing legal definitions of cyberbullying

Fake images: a growing threat

Non-consensual AI-generated images (incl. sexual content) are increasingly used to humiliate children. Girls are disproportionately targeted. Most EU laws do not yet explicitly address this form of harm



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JRC141047

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SCIENCE FOR POLICY BRIEF

Social media usage and adolescents' mental health in the EU

HIGHLIGHTS

- **In 2022, on a typical weekday, 96% of 15-year-olds in the EU engaged in social media activities, with 37% spending over three hours per day browsing on these platforms.**
- **Results from a representative sample of over 40,000 adolescents from four EU countries (Ireland, Hungary, Slovenia and Spain) show that nearly half (47%) of 15 year olds report depression and over half (53%) struggle with anxiety. Excessive social media usage (i.e., more than three hours per day) is associated with negative mental health outcomes, specifically depression and anxiety.**
- **Female adolescents exhibit higher intensive (over three hours per day) social media usage rates than their male peers (42% vs. 32%), and are significantly more likely to experience symptoms of depression (60% vs. 35%) and anxiety (65% vs. 41%), highlighting the need for gender-specific policy interventions and research.**
- **Future research and policy interventions should consider the intensity of social media use, the nature of activities, and the unique vulnerabilities of different demographic groups, particularly young females. Gender-sensitive and context-specific policies are essential to address and bridge these disparities. Media and digital literacy, as well as awareness raising for students and all educational stakeholders, are fundamental.**
- **Qualitative and quantitative studies are needed to better understand the underlying mechanisms driving the relationship between social media usage and poor mental health among adolescents, particularly given the challenge of establishing causality.**

BACKGROUND AND POLICY RELEVANCE

Social media[1] refers to online platforms, tools and technologies that emerged during the early 2000s that enable users to create and share their own content, and engage with other users through an interactive digital environment (boyd, 2014; Kaplan and Haenlein, 2010). The most used social media platforms by the young people (15-24 years old) in the EU are Instagram (used by 76%), YouTube (69%), WhatsApp (60%) and TikTok (55%).[2]

1 For the purpose of this work, we use the terms 'social media' and 'social networking sites' interchangeably.

2 https://europa.eu/eurobarometer/surveys/detail/3153

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Promoting Well-being in Digital Education

Proposal for a Model of Emerging Practices

Centeno, C., Leiputė, B., Langham, E., Kampylis, P., Monge Roffarello, A., Hillman, V., Gausas, S., Svedkauskiene, A.

2025

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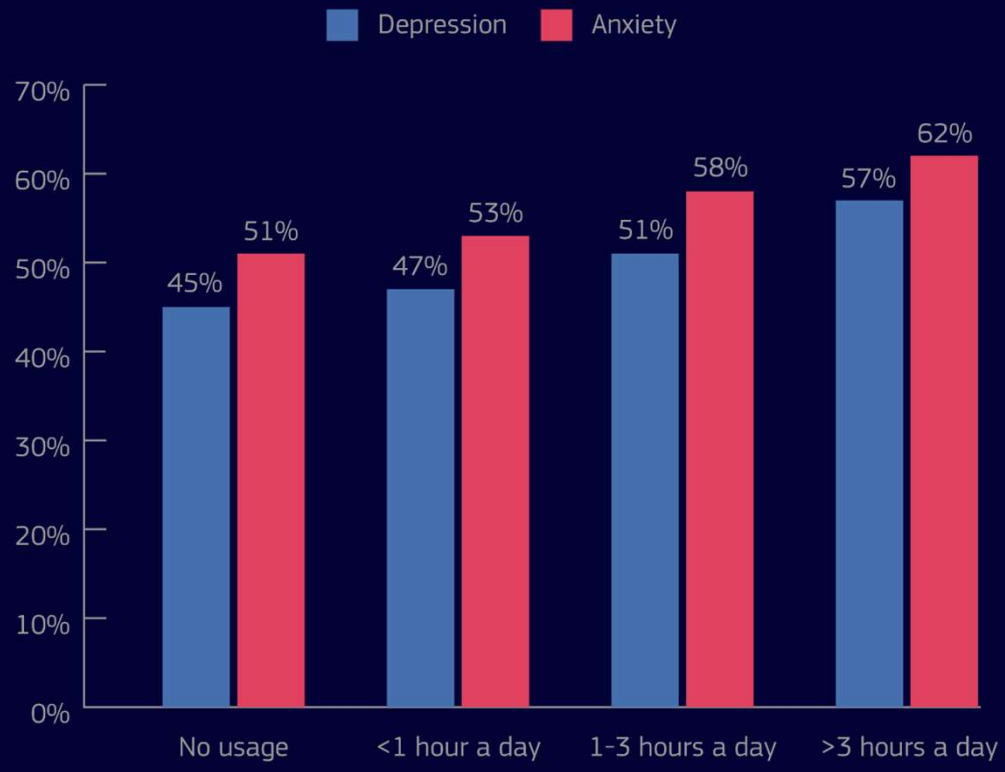
Positive relation between high social media usage and self-reported poor mental health



Source: PISA 2022, Well-being survey, data for HU, IE, SI, ES.

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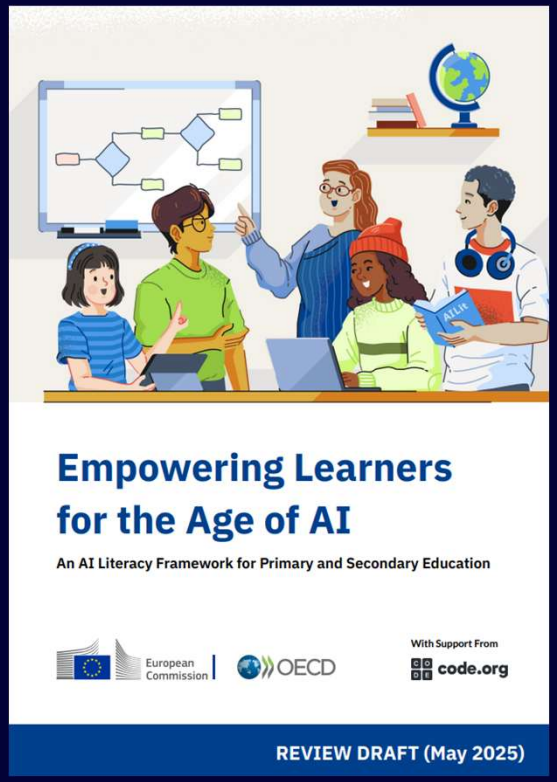
AI Literacy Framework



Final version
June 2026

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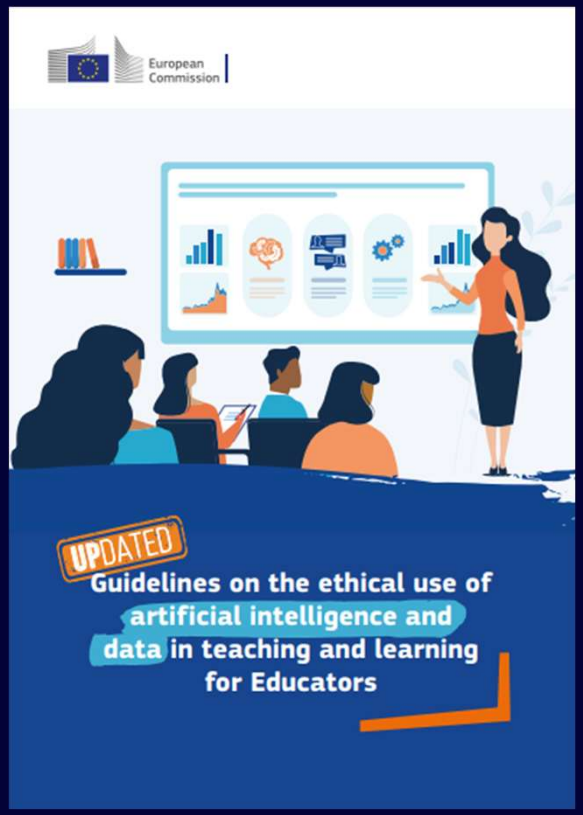
OECD (2025). Empowering learners for the age of AI: An AI literacy framework for primary and secondary education (Review draft). OECD. Paris. https://ailiteracyframework.org

UPDATED: Guidelines on the ethical use of AI and data for teaching and learning for Educators



Key ethical and legal considerations, building teachers' confidence in using AI while fostering responsible adoption among students.

The guidelines provide:

- **guiding questions and scenarios**, which provide practical tools and ready-to-use classroom examples
- **ethical considerations, core principles and legal context** that underpin responsible AI use in education
- **practical guidance** for applying ethical considerations to support teachers and school leaders
- **updated glossary** defining key AI and data-related terms and highlighting their relevance to educators

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European Commission: Directorate-General for Education, Youth, Sport and Culture, *Guidelines on the ethical use of artificial intelligence and data in teaching and learning for educators*, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2766/7967834

Thank you

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