Insights into artificial intelligence and its impact on the youth sector

Youth Partnership

Partnership between the European Commission and the Council of Europe in the field of Youth

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Insights into artificial intelligence and its impact on the youth sector

Author
Veronica Stefan
Pool of European Youth Researchers

Editor
Tanya Basarab

Council of Europe and European Commission

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About the author

Veronica Stefan is a professional with almost two decades of experience in the youth sector, working at the intersection of education, policy and new technologies. She has been engaged in a variety of international initiatives, from research to public policy, capacity building and project management, while providing expertise for different stakeholders such as the Council of Europe, United Nations agencies, European Union bodies, as well as many other national and international private and public entities. While Veronica has worked closely with youth and educational stakeholders, her activity has also focused on working with the private sector, developing responsible digital transformation strategies and readiness for the digital and AI regulations.
Her recent activity includes contributions to digital policies, research on the social impact of artificial intelligence and new technologies, and development of digital competences for educational and youth actors. Veronica is from Romania, where she has founded a series of non-profits, including the first Romanian Digital Think-Tank. Since 2021 she has led a series of international partnerships relating to participation and digital transformation on behalf of the Estonian National Agency for Erasmus+ and the European Solidarity Corps.

Contents

Acknowledgements

"Insights into artificial intelligence and its impact on the youth sector" is based on the studies "Shapers & Shakers – Young people's voices in the world of Artificial Intelligence" by Veronica Stefan and "Automating Youth Work: youth workers views on AI" by Alicja Pawluczuk, which can be found on the website of the Youth Partnership. It also benefits from the insights gathered before and during the expert meetings on artificial intelligence (AI) research organised in March and December 2022.

We would like to thank the experts and youth organisations involved in the expert meetings for their thoughtful reflections and valuable input.

Acronyms

AI – artificial intelligence

AI HLEG – High-level expert group on artificial intelligence

CAHAI – Ad hoc Committee on Artificial Intelligence

CAI – Committee on Artificial Intelligence

CSO – civil society organisation

EU – European Union

GenAI – generative AI

GPAI – general purpose AI

ICT - information and communications technology

OECD – Organisation for Economic Co-operation and Development

UN – United Nations

UNESCO – United Nations Educational, Scientific and Cultural Organization

UNICEF – United Nations Children's Fund

Illustrations

1. Introduction

The topic of artificial intelligence (AI) and youth was one of the priorities of the Partnership between the European Commission and the Council of Europe in the field of Youth (Youth Partnership) in the 2022-2023 work programme. It builds on the work done by the Youth Partnership on digitalisation and its connection to youth participation, democracy and social inclusion, explored in the symposia Navigating transitions: adapting policy to young people's changing realities (Tirana, 2022) and Connecting the dots: young people, social inclusion and digitalisation (Tallinn, 2018), as well as the follow-up study and Youth Knowledge Book on social inclusion, digitalisation and young people.

Moreover, it complements the initiatives of the Youth Department of the Council of Europe in the field of AI and youth, including the Declaration on Youth Participation in AI Governance (2020), the conclusions of the two seminars "Artificial Intelligence – How Can Youth Take Part?" (2020) and "Artificial Intelligence and its Impact on Young People" (2019) as well as the European Union (EU) initiatives to regulate AI, including the latest publication of the Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators.

This edition of Insights explores the intersection between AI and the youth sector, by looking at how the evolution of this technology affects young people's lives, the policies and practices of state and non-state actors and perceptions of youth workers towards it.

The aim of the publication is to provide an overview of what AI is, and what impact it has on young people's rights and the youth sector at large, as well as to provide guidance for the youth stakeholders interested in playing an active role in AI debates and policies.

1.1. Understanding AI

Since the adoption of the 2017 EU Council conclusions on smart youth work and the 2019 EU Council's conclusions on digital youth work, digital transformation has been part of the youth agenda. Nevertheless, the Covid-19 pandemic has been the main trigger that has led to an increased adoption of digital and AI tools in the wider youth and education sectors.

So why are we now focusing on AI and not digital technologies in general? Is AI and digital the same thing?

> Digitalisation of youth work has often been understood as the use of social media. However, new digital technologies are emerging rapidly. Artificial intelligence, virtual reality, robotics and block-chain technology, *inter alia* are affecting our societies beyond the sphere of communication.[1]

Based on the above definition, we could summarise that AI is one of the existing digital technologies. While it would be easier to consider AI as part of the larger digital debate – since it is another digital technology, it is important to notice that AI plays a more significant role than other technologies. Whether we speak about initiatives focused on economic or societal development, AI has become a distinctive topic of interest, with its own set of policies and regulations, in other words it is pervasive, disruptive and has already been changing many areas of our lives. This paper will explore why it is important to distinguish between AI technologies and other digital ones. Moreover, the urgency to understand how this particular technology functions is increasingly important as there is strong evidence that it affects fundamental rights with long-lasting effects. Lastly, the need to understand AI technologies is closely connected to what actions are needed to support it – what are the specific competences or policies that need to guide us in navigating an AI-enabled world.

a. The concept of AI

The term "artificial intelligence" was coined in 1955 and has ever since been used in different ways, with no universally accepted definition from a technical or legal perspective. Public understanding of AI ranges from apocalyptic visions that the world will be ruled and controlled by robots and super-intelligent powers, to more pragmatic ones, in which AI is powering most of the technologies used today (social media platforms, search engines, news feeds, smart home devices, public platforms used by governments). For the purpose of this publication, the following definition has been used.

> An AI system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations or decisions that may influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.

1. European Union (2019a), Conclusions of the Council and of the Representatives of the Governments of the Member States meeting within the Council on Digital Youth Work, available at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52019XG1210%2801%29, accessed 15 March 2023.

The above definition has been proposed by the Organisation for Economic Co-operation and Development (OECD) and has been adopted by the main institutional stakeholders, including in the European Union's Artificial Intelligence Act and the Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law.

This publication refers to AI as a broader umbrella term for all technologies pertaining to AI, regardless of their complexity of tasks or level of autonomy. The intention is to demystify the main aspects of AI, making it more accessible to non-technical communities, regardless of the technical terminology used in association with it.

b. Generative AI in brief

Generative AI (GenAI) is a distinct AI technology. It has gained greater popularity since the launch of ChatGPT 3.5 in November 2022, when it reached 1 million users in the first five days and 100 million users two months after its release (data source: similarweb).

Such technologies are also known as general purpose AIs (GPAIs) as the same technology can be applied in multiple contexts and for different goals. For this publication, we will further refer to such technologies as GenAI, with their main capacity to generate new content based on short inputs – text, images, videos. ChatGPT is described as a large language model, having the potential to interact with individuals based on its capacity to anticipate the next sequence of words (this characteristic is particularly important as it helps us distinguish between ChatGPT and a more common search engine, the latter providing the actual source of the information).

DALL-E or Midjourney are two other tools in this category, which specialise in generating visual content. Nowadays, various technologies include this type of AI – from tools for project management and editing documents to other more specialised ones applied in law, medicine and other fields.

Interest in the potential of GenAIs, which have received both praise and criticism, has increased significantly in 2023. As there is not just one side to this technology, it is important to look at these technologies through a dual lens – AI as an enabler and as a challenge.

GenAI can be seen as an enabler. Whether used as a stand-alone tool or as a tool integrated into other platforms or products, its benefits for the youth sector could include:

- creative uses – creating content that would otherwise require specialised skills, for example generating a press release based on a short paragraph; appealing social media content; a communication strategy for an organisation; developing a new training curriculum or the concept of a new project;
- productive uses – summarising reports/presentations, transforming a document into a PowerPoint presentation, generating inventories or identifying trends and priorities based on organisational documents or the online presence a visual report;
- interactive uses for new services – using the chat functionality and its capacity to produce "human-like" text by integrating them to complement online youth services, etc.

GenAI as a challenge. While it can bring benefits, the lack of understanding of its limitations or capacity to critically reflect on its outputs can pose new challenges. When using such tools connected to the internet or integrated in a search engine, it can:

- produce content that sounds credible, but still generate mis-/disinformation and completely invent events that have never happened, at times leading to manipulation and radicalisation. Unlike a traditional search engine, tools such as ChatGPT have been discovered to produce "hallucinations", that is, providing information (including links or references to academic articles) that have never been published;
- raise privacy concerns – with the possibility to use it freely, many individuals can choose to share internal sensitive documents that include personal identifiable data (for example a teacher or doctor using his personal records to generate a prescription/recommendation). GenAI tools might not always offer sufficient safeguards for securing data, and there have been situations when identifiable data were discovered, creating risks for individuals but also for organisations. Considering the novelty and excitement of such tools, but also due to the lack of organisational strategies on ethical use of AI technologies, some surveys already point out that there is a lack of awareness for which tasks employees use GenAI, leaving managers blindsided when sensitive (or even proprietary) information is shared;
- manipulate, especially due to their capacity to sound quite assertive and imitate human language, in some cases leading to extremes such as suicide;
- generate malicious content, including deepfakes (synthetic media – visuals and audio media that imitate real humans, giving the feeling they are genuine while possibly promoting ill-intended messages), harmful content for children or other audiences.

This shows how the same technology needs a dual perspective. The growing use of tools such as ChatGPT in such a short time has raised additional questions on the use of AI technologies on a large scale and their impact on society and individuals using them. While developing AI technologies can bring multiple benefits, many stakeholders have already called for more attention as to how to develop and deploy them and the urgency for a governance system that ensures sufficient safeguards.

The United Nations Educational, Scientific and Cultural Organization's (UNESCO) Guidance for generative AI in education and research provides additional inspiration on how to deal with GenAI based on a human-centric approach and how to ensure an ethical, safe and meaningful use of such technologies.

c. AI literacy dimensions

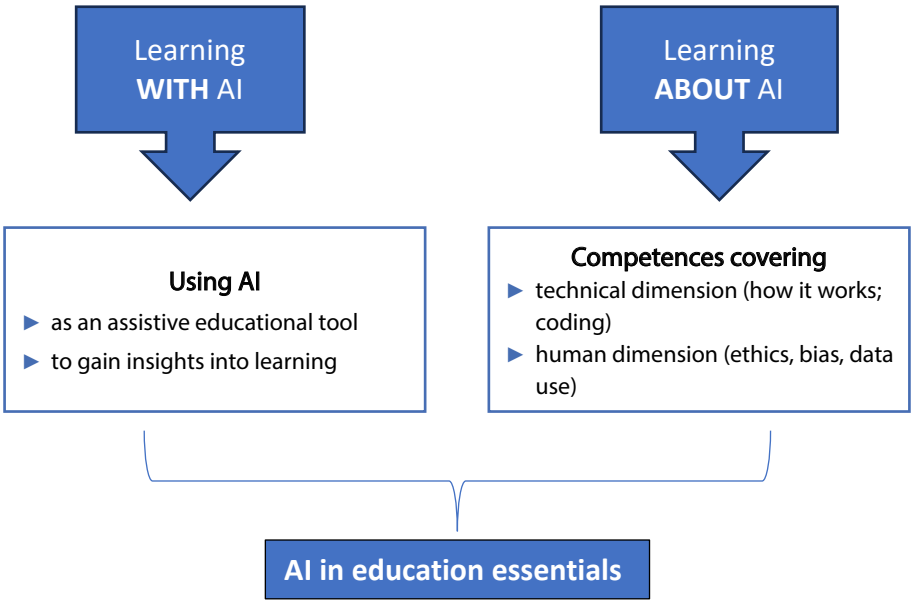
While discussing AI, technologies powered by it or its larger impact, it is equally important to address the concept of AI literacy. On the one hand because literacy can be a precondition for participation, on the other hand because AI literacy will allow us to better grasp the different layers, beyond the mere use of technology.

For this purpose, we have chosen the classification proposed by the Council of Europe's 2022 publication *Artificial intelligence and education – A critical view*

through the lens of human rights, democracy and the rule of law, which makes a distinction between four different elements.

1. **Learning with AI** – referring to the use of AI-driven tools for teaching and learning, including the use of AI tools to support learners (for example intelligent tutoring systems, chatbots), to support administrative systems (for example schedule or learning management), to support educators (for example smart curation of educational materials).
2. **Using AI to learn about learning** – primarily referring to the use of analytics to gain insights into how learners learn, the effectiveness of learning designs and potentially using this information to inform decisions to support admission processes in schools, educational planning, etc.
3. **Learning about AI** – referring to the technical dimension of AI literacy, that is, developing competences connected to understanding (and where appropriate using) techniques and technologies pertaining to AI, including through coding activities.
4. **Preparing for AI** – referring to the human dimension of AI literacy, through which citizens can be prepared for the possible impact of AI on everyday life, including AI ethics, biases, data use, etc.

Figure 1. Main elements that shape the understanding of AI



1.2. Understanding what connects young people with the AI agenda

At first sight, connecting young people and AI might seem a challenging task, because AI was originally a field associated with technology communities and the private sector. Starting in 2017, it has become a field of interest for many more, including public institutions, business, academia and civil society organisations (CSOs). The variety of stakeholders has grown with the understanding that AI technologies have benefits but also challenges for society. Yet, the youth sector still struggles to find its place in this ecosystem, as it is not often included among the core stakeholders deciding on AI.[2]

At a societal level, AI's purpose has been debated from two perspectives: 1. such technologies can bring positive effects and augment quality of life; and 2. they can create harm and negatively affect fundamental rights. In the youth sector we can also apply the same lenses, by looking at both the potential benefits and risks of AI technologies.

Figure 2. Potential benefits and risks of AI

AI as an enabler for the youth sector – usually discussed under the concept of AI or automation for good, AI has been identified as a contributor to larger social needs. Benefits include replacing repetitive and lower-value work and allowing time for more meaningful tasks and more tailored interaction. Youth and other

2. Norqvist L. (2018), Analysis of the Digital Transformation of Society and its Impact on Young People's Lives, Youth Partnership, available at https://pjp-eu.coe.int/documents/42128013/47262517/Analysis+of+the+Digital+Transformation+of+Society+its+Impact+on+Young+People+Lives+-+Lars+Norqvist.pdf/efaff33a-89bc-3947-b618-01160e693872, accessed 4 April 2023.

organisations can benefit from such technologies by investing in AI solutions that could take over some bureaucratic tasks: extracting, copying and inserting data; filling in forms; rewriting and completing routine analyses and reports. Advanced technologies can go even further and support interpreting text, engaging in chats and conversations, and analysing large amounts of data to get insights into the work done, trends and potential new directions of programmes/projects. Yet such technologies are mostly not affordable for sectors with limited resources.

AI's benefits have been largely discussed in connection with specific uses, such as 1. AI in the field of education – offering tailored content and personalised learning approaches, supporting the work of educators; 2. AI as an assistive solution – supporting with adapted tools and technology people with health or learning impairments or disabilities in their social integration and increasing quality of life; and 3. AI in youth services – where chatbots and other AI systems could complement the work of youth and social workers; enabling a larger flexibility for young people with fewer opportunities to get access to services which otherwise depend on the presence of a human being.

On a larger societal scale, AI technologies are expected to contribute to efficiency and improved quality of health and public services systems.

AI as a challenge for youth and fundamental rights – research published in recent years showcases an increasing number of situations in which AI technologies have led to social harms, especially by perpetrating historic biases, amplifying polarisation and accumulated disadvantages. Some of the causes of such harms have been connected to insufficient testing, lack of ethical or legal standards, or lack of information and awareness among the users.

Situations of relevance for the youth sector and young people can be summarised in the following categories: 1. AI's impact on freedom of speech and civic rights – the unseen and pervasive nature of algorithms and micro-targeting on most web platforms (from social networks, search engines, news aggregators or entertainment services) has amplified the power of filter bubbles and increased polarisation, while also raising concerns about how such tools could be used for surveillance purposes; 2. AI's impact on social rights – there are situations where the deployment of AI technologies has caused actual harm to people's rights, often due to discovered biases in such technologies; 3. AI and the future of work – looking at the challenges created by AI in shaping the future of work, while also considering the readiness of the education system to address them in a timely way; and 4. AI and mental health – evidence indicates that excessive use of online platforms combined with the filtering role of algorithms has led to increased negative body image, depression or even suicide among young people.

While many other examples and topics of interest can connect AI and young people, the above list highlights major points of interest for the youth sector. AI is built and centred on data. Data are the resource that fuels all AI technologies. For technologies to function or improve their performance, they need more data. This is particularly relevant to young people, as a group of early and frequent users of the internet and technologies, who implicitly become the data source which feeds many of the private AI technologies from social network platforms to smart home products, to video games and many others. Young people, youth work practitioners, educators, service providers and youth policy stakeholders need to understand

and pay attention to the implications of this involuntary and mostly automatic sharing of data and its possible consequences.

More examples of the impact of AI can be found in reports and recommendations published by the Council of Europe and the European Parliament, with other more specific resources looking into the impact on children or young people: the Memorandum on Artificial Intelligence and Child Rights and Youth and Artificial Intelligence: Where We Stand.

2. Impact of artificial intelligence on youth rights

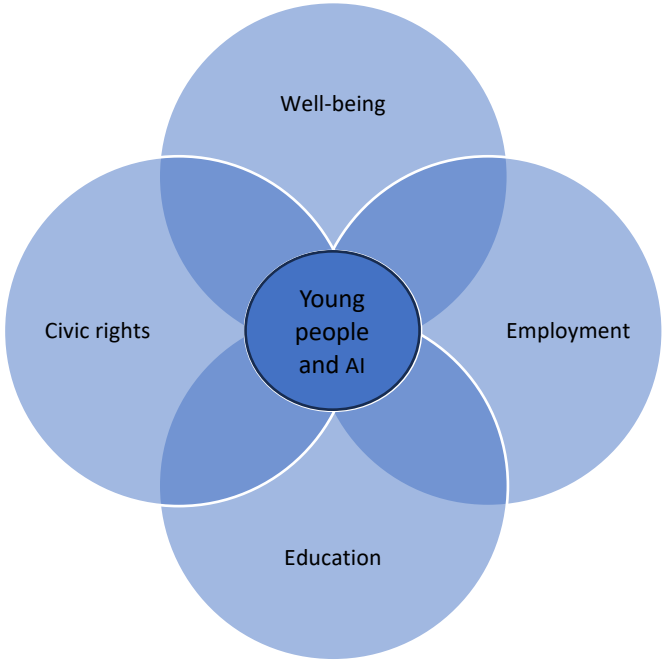
This section explores how AI works and different real-life situations where AI has been used to help readers grasp better the implications of AI technologies on human rights, and young people's rights in particular. While AI is sometimes described as just another technology, it is important to be aware that it is also something produced and shaped by existing cultures, norms and regulations. On the one hand it encapsulates a transformative potential through its anticipated capacity to enhance existing processes, on the other hand it can further feed into the structural asymmetries and amplify existing injustices.

Young people and AI

It is widely understood that algorithmic filtering of social media can have a corrosive effect on young people's sense of self.[3] Yet, this is not the only use of the technology, since similar optimisations are applied across education, employment and many other fields that affect young people's everyday lives. The following subsections bring insights into how the use of AI can affect some of the important rights connected to young people – well-being and mental health, employment, education and civic rights.

3. Wakefield J. (2021), "Facebook under fire over secret teen research", BBC News, available at www.bbc.com/news/technology-58570353, accessed 24 November 2023.

Figure 3. Areas in which we can notice the impact of AI on young people



2.1. AI and well-being

The Covid-19 pandemic was an important milestone in the increased use of AI-powered technologies. As it forced schools to shut down or limit access to spaces of physical socialisation and leisure, young people's lives moved online, which meant more interaction with AI-based technologies. While the physical social life of young people was limited, the technological solutions for replacing it grew. A general increase of the use of digital media, and particularly social media, has shown growth in active users ranging from 8% to 38%.[4] However, this came with new challenges: young people's mental health was at stake.

A 2022 study,[5] which did a systematic review and meta-analysis of 30 studies published up to September 2021, indicated a primarily negative association between mental health and digital media use in adolescents during Covid-19. However, according to the study, not all types of digital media use had adverse consequences on adolescents' mental health. One-to-one communication, self-disclosure in the context of mutual online friendship, as well as positive and funny online experiences mitigated feelings of loneliness and stress.

4. Statista, Growth of monthly active users of selected social media platforms worldwide from 2019 to 2021, available at www.statista.com/statistics/1219318/social-media-platforms-growth-of-mau-worldwide/, accessed 24 November 2023.
5. Marciano L. et al. (2022), Digital Media Use and Adolescents' Mental Health During the Covid-19 Pandemic: A Systematic Review and Meta-Analysis, Frontiers, available at www.frontiersin.org/articles/10.3389/fpubh.2021.793868/full, accessed 24 November 2023.

2.2. AI in employment

Competences are an important dimension in relation to youth employment. Reports have already highlighted the gaps in digital skills and the mismatch on the labour market. The International Labour Organization has published a 2020 report that indicates that in countries such as the United Kingdom "digital skills are near-universal requirements", with 72% of all jobs (from low to highly skilled, spread across all sectors) requiring some level of digital skills. This reality becomes particularly relevant when other reports on the future of jobs[6] indicate that 69% to 97% of employers (in different countries) look at automating work. Such situations might lead to more displacement, precarious work and living conditions, especially for young people. In this context, the readiness of the formal education system to prepare young people for the jobs of the future with basic digital skills but also more advanced ones, such as using and developing AI technologies, becomes increasingly important.

In addition to uncertainties created by the changing labour market landscape, young people might experience new challenges in relation to employment, for example algorithmic filtering of job applications or CVs. This is already visible in the spread of AI-driven recruitment applications that offer employers the possibility to automate the selection of applicants. For example, a video interview could be used to analyse not just the content of the answers but also more unique characteristics that enable specialised profiling – posture, facial expression, tone of voice and word choice.[7] Equinet's 2020 report on AI emphasises that the technology is used broadly across the employment sector in many other ways, from managing the workforce, hiring and recruiting, monitoring and surveillance, increasing productivity and more. All these practices raise new questions on how young people's rights might be affected systematically – before and after they enter the labour market.

2.3. AI in education

The connection between AI technologies and education is expected to increase continuously. Starting with the pandemic period, the use of EdTech applications has grown significantly and is expected to bring important economic value (estimated to bring a 36% annual growth rate from 2022 to 2030, based on Grand View Research 2021).

While the vision of personalised education and automated interventions can bring benefits, it is important to be aware that the role of predictive analytics and AI might also bring some shortcomings. The list below includes some limitations that could be considered when using AI in education:

- although personalised learning may not be harmful in itself, its implementation and results can still be unreliable, particularly at younger ages;

6. See World Economic Forum at www.weforum.org/publications/the-future-of-jobs-report-2020/.
7. Buranyi S. (2018), "'Dehumanising, impenetrable, frustrating': the grim reality of job hunting in the age of AI", The Guardian, available at www.theguardian.com/inequality/2018/mar/04/dehumanising-impenetrable-frustrating-the-grim-reality-of-job-hunting-in-the-age-of-ai, accessed 24 November 2023.

- personalised learning delivered through intelligent tutors or chatbots can provide some important benefits; while it can be useful to acquire knowledge, it lacks the ability of an educator to also develop attitudes and values;
- personalised learning is a data-driven process. Seen as part of the "precision education" reality in schools and universities, it primarily relies on learner's data – test scores, preferences or information about environmental factors – in order to establish which type of learning materials best suit them.[8] This situation becomes especially important when personalised learning products are designed by private companies which need to process very sensitive data, thus raising new questions about privacy.

The European Commission has put forward the Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators to mitigate potential problems, such as those listed above.

2.4. AI and civic rights

Some AI technologies have been proven to affect freedoms of expression, association and assembly. While most literature focuses on the impact of algorithms used by social media platforms, other AI technologies, such as facial recognition, should also be considered.

The Council of Europe's Ad hoc Committee on Artificial Intelligence's feasibility study "Artificial intelligence, human rights, democracy, and the rule of law: a primer" addressed this issue and proposed recommendations that are at the core of youth participation. Facial recognition AI and AI-enabled biometric surveillance might intensify oppressive mechanisms, especially in countries with lower levels of democracy. As a consequence, youth participation in social, political and cultural life could be minimised due to fears of sanctions, imprisonment or other consequences and this could lead to further shrinking of civic space.

As the youth sector is working to reach out to more young people through digital means, it becomes especially important to identify AI-enabled means and understand both their benefits as well as their limitations. The 2023 Freedom House report "The Repressive Power of Artificial Intelligence" elaborates further on the shortcomings brought by AI to civic rights.

8. Brookman-Byrne A. (2018), Gathering learner data, BOLD, available at https://bold.expert/gathering-learner-data/, accessed 24 November 2023.

3. AI and youth work

With the increased adoption of new technologies, youth workers see AI as an ever present but invisible and impersonal force that affects different areas of their practice. The accessibility of AI-powered tools triggers the need to better understand how youth workers use them but also how they relate to such technologies. This chapter explores the perceptions of youth workers based on the research done in the framework of the study "Automating Youth Work: youth workers views on AI" by Alicja Pawluczuk.

AI as "a work buddy" – while it is essential to approach AI with a can-do but critical attitude, AI in youth work should not be feared but be seen as "an additional intern" which can be given certain tasks and be trained to deliver specific outcomes (for example organising a calendar, building websites and graphics).

AI as an unpredictable force – with many new AI-driven tools used in youth work settings, non-formal educators feel they have limited (if any) control over data harvesting practices, many of which can have a detrimental impact on young people's beliefs, everyday choices and self-development. One example is the debate connected to certain social media platforms and how they use data. In March 2023, the European Parliament introduced a ban for staff to use such platforms on their work devices, and other public bodies in Europe and America have done the same. What do such steps mean to the European youth sector, knowing that many young people are active consumers and users of content on these platforms? Should youth work get involved in moderating the use of AI in youth settings? Who should be responsible for protecting young people from privacy infringements related to algorithmic profiling and surveillance?

AI driven by young people's interests – there are youth workers who feel confident and are keen to examine AI either in a practical way or as a topic of discussion (for example ethics, AI's impact on democracy), yet they seem to be a minority. When such activities take place, they seem to be primarily driven by young people's interests in the latest technology trends or are grounded in previous experimentation with technologies in youth work settings. It might be argued that the more digitally experienced youth workers are, the more likely they are to engage with AI in their practice.

AI and information in the youth sector – despite the enthusiasms for using AI tools, youth workers in Europe see a lack of easily accessible information which causes a sense of disconnection and disengagement from the topic. Some youth workers consider that AI has low relevance for youth work activities. At the same time, there is some evidence of a paradoxical attitude towards AI where youth workers minimise its relevance (since there is a low adoption of the technology and little awareness on the topic), while calling for active resistance against its implementation in youth work.

AI and "the big data divide" – especially since the Covid-19 pandemic, youth workers and youth work organisations have oscillated between two spectrums – those who take the lead and those who try to catch up without burning out. This links to another issue, where digitally excluded or partially excluded youth workers often struggle with a sense of anxiety, overwhelmingness and digital fatigue. However, such a sense of being overwhelmed and powerless in the context of AI-driven society might be part of a larger structural issue grounded in the big data divide – "the asymmetric relationship between those who collect, store and mine large quantities of data, and those whom data collection targets".[9] It is important to note that digital and data divides lead to new forms of social injustice, whereby those with more access to information are at less risk of becoming socially or educationally excluded.[10]

AI and education for democratic citizenship – considering the essential role of youth work in developing young people's democratic and critical citizenship, it can also be seen as a potential "go to educational and experimentation space" which allows for critical co-examination of emerging and urgent topics of AI's impact on democratic citizenship (for example disinformation, algorithmic bias, unethical use of predictive analytics or facial recognition). While there is a common agreement that youth workers should not be expected to become AI experts, there is an urgent need to return to the democratic fundamentals of youth work as a sociopolitical practice. Such value-based youth work could become central to ensuring that young people are empowered to think critically, understand, challenge and proactively engage in the AI governance and power structures.

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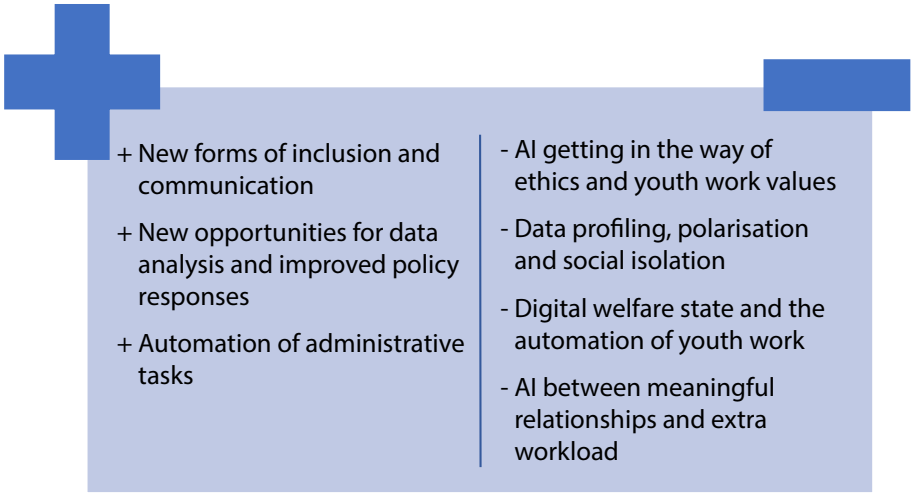
9. Andrejevic M. (2014), "Big data, big questions | The big data divide", *International Journal of Communication*, 8, pp. 1673-1689, available at https://ijoc.org/index.php/ijoc/article/view/2161/1163, accessed 8 April 2024.
10. Ada Lovelace Institute (2021), *The data divide*, available at www.adalovelaceinstitute.org/report/the-data-divide/, accessed November 2023.

Figure 4. Perceived benefits and challenges connected to youth work and AI



3.1. Perceived benefits and challenges

a. Perceived benefits

New forms of inclusion and communication – there is an agreement that digital technologies allow for new ways to reach out to new groups of young people (for example those from remote communities, disabled young people) and include them in planning and delivery of youth activities. Examples include how assistive technologies (for example text to speech, voice recognition) have created new forms of engagement in formal education, or how distance learning solutions have been used to communicate and meaningfully engage with learners with mobility disabilities. The European Agency for Special Needs and Inclusive Education published in 2021 the Inclusive Digital Education – a collection of case studies on how AI has been used in the context of inclusive digital education.

New opportunities for data analysis and improved policy responses – AI is also an opportunity for data and policy analysis in the youth sector. Using existing data-based approaches to youth project design might mean more effective targeting of young people at risk or identifying specific concerns. Indeed, such use of open and big data might be beneficial in cross-sectoral work with youth organisations and governments, offering youth workers and young people opportunities to participate in policy making.[11]

Automation of administrative tasks – AI has the potential to make it easier to manage administrative processes such as deadlines and tasks management, digital project management, virtual office and meeting spaces. If applied in an efficient and informed manner, AI and automation processes could free up youth workers, so they can spend more time with young people and deliver quality youth work.

11. UNICEF – Office of Innovation (2019).

b. Perceived challenges and concerns

AI getting in the way of ethics and youth work values – the unethical use of AI can be described as one of the biggest challenges for the youth sector. It is important to be aware of the potentially disrupting and disempowering force that might affect core messages and values of youth work. In practice this might involve a youth group choosing to use social media to gather and share information about sexual health. While the platforms address part of the sexual educational gap for many young people, they also become a source of "toxic disinformation", as the NewsGuard investigation found that teens and young adults are constantly exposed to algorithmically selected content that produces false and misleading claims. Therefore, in the case of a theoretical youth sexual project, such algorithmically driven information might have a negative impact on youth work values such as youth empowerment, meaningful and critical communication, and social cohesion.

Data profiling, polarisation and social isolation – negative effects of AI also include concerns related to young people's privacy and their agency online. This calls for increased awareness of the disadvantages of AI technologies such as data profiling and monetisation of young people's data, automated decision making and racial profiling.[12] Moreover, algorithmically curated content might distort young people's vision of reality (for example by pushing radical content or disinformation their way) and leading to radicalisation and social isolation.[13]

Digital welfare state and the automation of youth work – the use of AI to cut operational costs for the youth sector can be a potential risk. If framed within a larger context of cost-saving oriented "digital welfare" solutions,[14] youth work services could be seen at risk of being substituted by digital solutions or even erased entirely. Implementation of automated decision-making processes in education, welfare and social services are often viewed as efficient and productive. In this situation youth workers fear that AI might be used as a shortcut and money-saving solution to substitute services in the future.

AI between meaningful relationships and extra workload – as the use of AI-powered tools has increased, youth workers also observe the loss of meaningful relationship building and an increased sense of disconnectedness. Therefore, understanding the limits of machine-human connection is fundamental to establishing and nurturing meaningful youth work practice. Moreover, using AI tools is not

12. European Union Agency for Fundamental Rights (2022), *Bias in algorithms – Artificial intelligence and discrimination*, Publications Office of the European Union, Luxembourg, available at: https://fra.europa.eu/en/publication/2022/bias-algorithm#:~:text=This%20report%20looks%20at%20the%20use%20of%20artificial%20intelligence%20in,lives%2C%20potentially%20leading%20to%20discriminatio, accessed 24 November 2023.
13. UN Counter-Terrorism Centre (2022), Research Launch on Examining the Intersection between Gaming and Violent Extremism, available at www.un.org/counterterrorism/events/research-launch-examining-intersection-between-gaming-and-violent-extremism, accessed 24 November 2023.
14. Larasati Z. W., Yuda T. K. and Syafa'at A. R. (2022), "Digital welfare state and problem arising: an exploration and future research agenda", *International Journal of Sociology and Social Policy* 43(1), available at www.researchgate.net/publication/361773832_Digital_welfare_state_and_problem_arising_an_exploration_and_future_research_agenda, accessed 4 April 2023.

as easy as it might sound, since it is often not as a planned organisational process, the good intentions of youth workers in integrating new AI tools turn into more (unaccounted) work that sometimes goes beyond the usual work demands. Adding to this, many youth workers feel they are unable to catch up or take time to learn what AI is or how to include it in their youth practice.

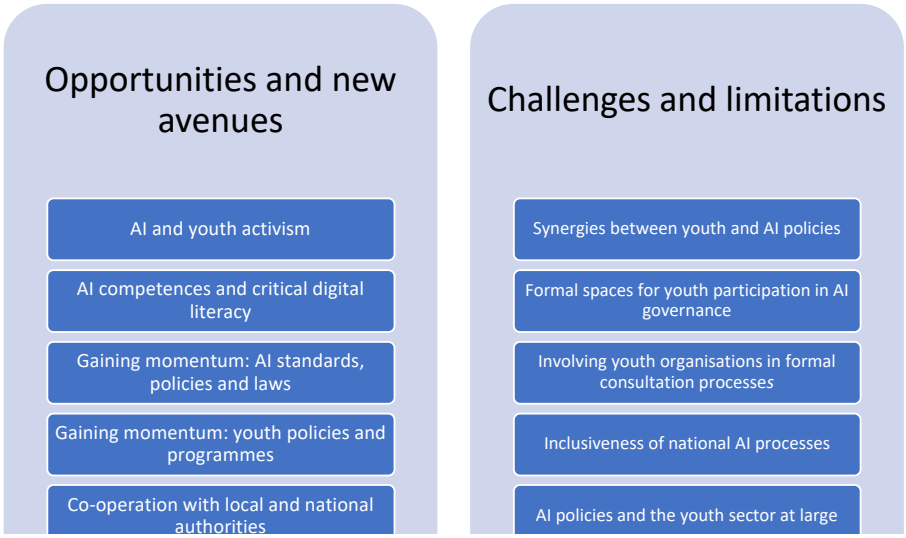
4. Policies in the field of AI and youth

With the growing number of initiatives aiming to address the challenges posed by AI development, this publication introduces some stakeholders working on policies that shape AI technologies, from national governments to international organisations. This section specifically looks at the initiatives developed by the major international organisations, while also providing a general overview on national practices.

Debates concerning AI policies became more visible in 2017. At the core there were several issues clustered in two main categories:

1. competitiveness and innovation – with governments all over the world looking to maintain or develop their competitiveness, debates focused on elements such as the deployment of AI technologies in the business and public sector, support for private companies, investments in research and innovation, retaining and attracting specialised talent;
2. ethics, justice and human rights – findings from academia and CSOs, increased interest from public institutions as well. In recent years an increasing number of organisations have started new initiatives focused on how to regulate AI and protect citizens, democracy, social justice and human rights from the misuse of AI technologies.

Figure 5. Overview of the main topics shaping AI



Even though the two categories of AI debates are not contradictory, stakeholders have struggled to find the right balance between innovation and regulation, economic interest and human rights.

Considering that these different perspectives could lead to a divided and fragmented approach in dealing with AI, both state and non-state actors agreed to work together under the umbrella of international organisations, aiming to build a common ground for everyone. Currently several institutions have initiatives on AI policies and governance frameworks, including the Council of Europe, the European Union, the Organisation for Economic Co-operation and Development and the United Nations System, particularly through bodies such as UNESCO, UNICEF or the International Telecommunication Union (ITU).

Generically, all AI policies (legally binding or non-binding) are referred to as AI governance – in short, managing how AI works, how it is used and who has a role in the processes. We are starting from a point in which AI governance cannot be defined as a single process, pertaining to a single institution, but rather a multi-layered process with implications in many fields – from human rights to economy or innovation.

This section aims to explain the relevance of AI governance to the youth sector, by exploring the connections behind AI, youth policies and spaces for participation. Moreover, it identifies key documents and processes that can be used as a starting point to navigate the AI governance world.

4.1. AI policies – an overview

This section highlights the main guiding documents developed by each international organisation in the AI field.

The **Council of Europe**, as a European organisation working to uphold human rights, democracy and the rule of law, has been actively working in shaping internet governance. It has also been working on a regulatory framework relating to AI's impact on human rights. At the centre of the Council of Europe's AI agenda is the respect for fundamental rights and the development of capacity-building opportunities for stakeholders using or developing AI. In addition to the various recommendations relating to the use and development of AI, in May 2024, the Council of Europe adopted the Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law. It concluded the extensive work done by the Committee on Artificial Intelligence (2022-2024) and its predecessor, the Ad hoc Committee on Artificial Intelligence (2019-2021). The Convention is particularly important as it covers the use of AI systems in the public sector, including the companies that work on its behalf, being open to non-European countries too.

The **European Union** is leading globally a drive to understand the impact of AI on the economy and society at large, with many processes led by the European Commission and the European Parliament. As indicated in EU documents, its approach is designed around three steps: 1. setting out the key requirements for trustworthy AI; 2. launching a large-scale pilot phase for feedback from stakeholders; and 3. working on international consensus building for human-centric AI. In 2018, the EU adopted the first dedicated strategic documents – the strategy Artificial Intelligence for Europe and the Coordinated Plan on Artificial Intelligence. In 2024, the EU finalised a three-year long process of adopting the EU AI Act, a landmark regulation on AI in Europe, and with impact on a global level. The AI Act provides rules that apply to both public-sector and private stakeholders, defining responsibilities for national governments, developers and deployers of AI technologies. Its main aim is to harmonise rules among EU member states by addressing fundamental rights and defining the types of risks associated with AI. Thematic initiatives are designed in parallel to support sectoral engagement with AI.

Within the **United Nations System**, several initiatives on AI have been developed since 2019.

The High-Level Panel on Digital Cooperation (active during 2018-2019), convened by the UN Secretary-General, was the first leading platform to connect the UN agenda with the impact of new digital technologies and their wider impact on society and human rights. Following the work of the panel, the Road map for digital cooperation: implementation of the recommendations of the High-Level Panel on Digital Cooperation is the guiding document defining the framework and key areas on which the UN aims to focus when dealing with digital issues, among them: achieving universal connectivity by 2030; ensuring digital inclusion for all, including for the most vulnerable; ensuring the protection of human rights in the digital era; and supporting global co-operation on AI.

Together with its member states, UNESCO adopted the very first global standard-setting instrument on AI (legally non-binding) – the Recommendation on the Ethics of Artificial Intelligence – in 2021.

The **Organisation for Economic Co-operation and Development** has been working on AI since 2016, with its Committee on Digital Economy Policy being the main driver and building on the results of various digital-related projects, such as Going Digital, Next Production Revolution or the Future of Education and Skills 2030 initiative which also addressed the connection with AI in Education, as proposed in the document Education and AI: preparing for the future & AI, Attitudes and Values. Most importantly, the OECD Recommendation of the Council on Artificial Intelligence was one of the first documents adopted by national governments and was used as a reference in many national processes of setting AI frameworks.

National authorities in many countries have started to develop strategies and policies to promote and regulate AI even before an international approach was agreed. Many national initiatives have a strong focus on economic competitiveness with priorities relating to the business environment, research, innovation and talent retention or attraction. A reason for this might be that AI strategies are often led by ministries in charge of the economy or business affairs. Youth ministries do not seem to be involved in shaping or implementing such strategies. A short review of national policies shows that despite concern around ethics and citizens' protection, the focus is still on the economic and innovation dimensions.

4.2. Youth policies and AI

The frameworks guiding AI policies cover diverse issues. Many of them address the need to support general AI literacy and specialised technical competences with limited references to young people or the youth sector. In this context, one conclusion is that there are no clear synergies between AI and youth policies. While youth strategies refer to the role of digital technologies, very few mention AI specifically. Most often, youth and AI are connected in policies related to digital skills and the future of work.

This section identifies the main guiding documents from a youth policy perspective and to which extent they reflect AI topics.

Complementary to the formal process behind the Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law, the **Council of Europe**'s main document guiding the youth sector – Resolution CM/Res(2020)2 on the Council of Europe youth sector strategy 2030 – explicitly connects the youth sector with the work of the Council of Europe on internet governance and AI, and proposes as one of the strategic areas "improving institutional responses to emerging issues affecting young people's rights and their transition to adulthood, such as but not limited to, the effects of climate change and environmental degradation, artificial intelligence, digital space, increased mobility and new forms of employment".

In September 2023, the Council of Europe Standing Conference of Ministers of Education set new priorities and actions to implement the Reyjkjavik Declaration by adopting five resolutions and endorsing the Council of Europe Education Strategy 2024-2030. The latter includes among its three pillars "Advancing education through a human rights-based digital transformation", which specifically acknowledges the impact of AI in education, on students and educators alike, and puts the emphasis on the role of "digital citizenship education as a lifelong process to

anticipate digital evolution and transformation". At the same conference new plans have been made for 2025 as the European Year of Digital Citizenship Education (DCEY2025), aiming to promote digital citizenship and digital literacy, including AI literacy, in educational institutions in all Council of Europe's member states. Moreover, Recommendation CM/Rec(2022)6 on protecting youth civil society and young people, and supporting their participation in democratic processes emphasises the need to address the digital dimension, among others, by recommending member states to "protect the political and social rights of young people and their privacy in the sphere of artificial intelligence (AI) development, for example with regard to possible misuse of facial recognition technology in public spaces, such as AI-enabled mass surveillance".

At the **EU level**, the main document guiding the youth sector is the EU Youth Strategy 2019-2027, adopted in December 2018. While the strategy does reference AI explicitly, it recognises the impact of emerging technologies on young people. It proposes to "explore and promote the use of innovative and alternative forms of democratic participation, e.g. digital democracy tools and facilitate access in order to support youth participation in democratic life and engage young people in an inclusive way, whilst being aware that some young people do not have access to the internet and digital technologies, or the skills to use them". The strategy is complemented by two other documents that frame the importance of digital technologies for young people, the youth sector at large and education: 1. Conclusions on Digital Youth Work (2019), highlighting the role of digital literacy and youth work to "allow for experiential learning in a non-formal setting and to involve young people in activities to strengthen their digital competences and media literacy. Youth work can also engage young people who are at risk of being left behind in a digitalised society"; and 2. the Digital Education Action Plan (2021-2027), which includes two specific actions connected to AI: Action 6, Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators, and Action 8, which updates the European Digital Competence Framework with new examples relating to AI and data skills.

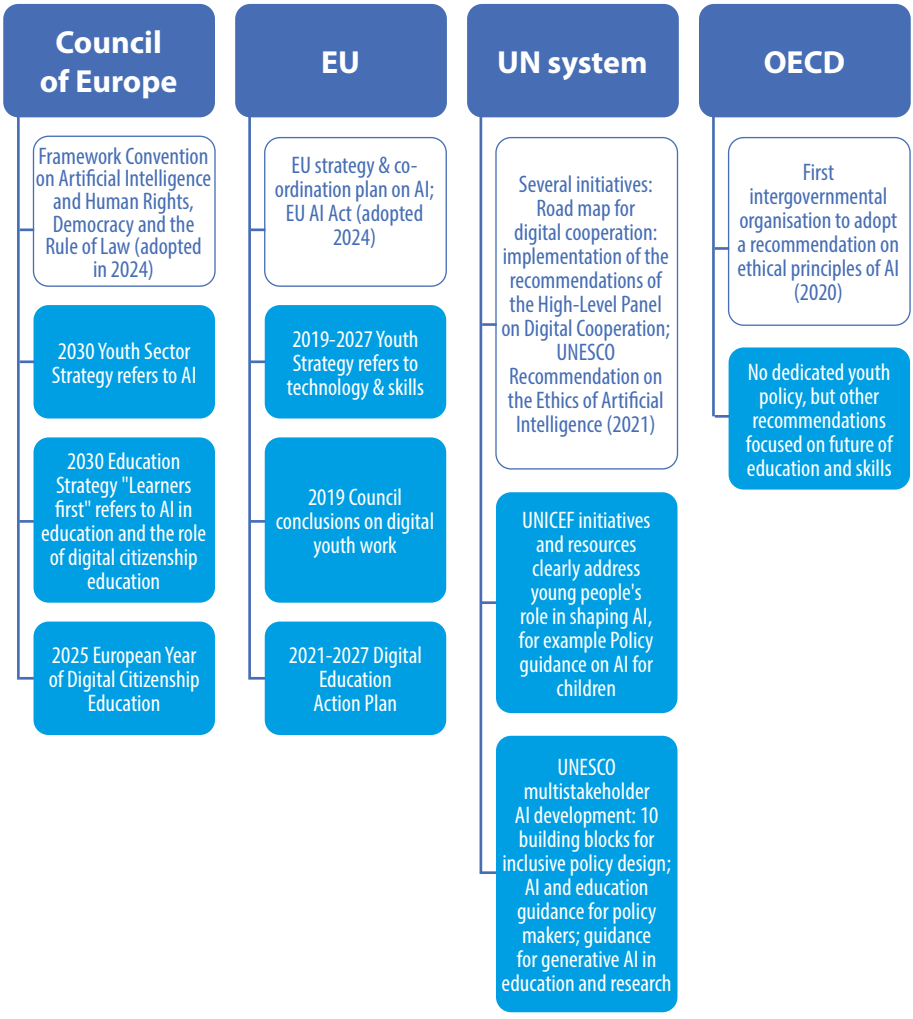
In the UN system, **UNICEF** has been the most active in connecting the two policy fields. Even if it addresses children under 18 years of age, some UNICEF initiatives such as AI for Children and Generation AI specifically address "the opportunities and challenges, as well as engaging stakeholders to build AI powered solutions that help realize and uphold child rights". The Policy guidance on AI for children (2021) can also be an inspiration for the wider youth sector, being centred on three cumulative perspectives for a child-centred AI policy or system deployment:

- protection (do no harm) – children need to be protected from any harmful and discriminatory effects of AI systems and interact with them in a safe way;
- provision (do good) – the opportunities that AI systems bring to children of all ages and backgrounds – such as to support their education, healthcare and right to play – need to be fully leveraged when it is appropriate to use AI systems;
- participation (include all children) – children are given agency and opportunity to shape AI systems and make educated decisions on their use of AI and the impact that AI can have on their lives. All children should be empowered by AI and play a leading role in designing a responsible digital future for all.

Additionally, **UNESCO** has also advanced work on AI, mostly in connection to education, publishing in 2021 *AI and education: guidance for policy-makers* and in 2023 *Guidance for generative AI in education and research*, which includes recommendations for developing AI competences, such as GenAI-related skills for learners.

On the other spectrum, the organisation which was the first to advance international work on AI policies, the **OECD**, does not have a traditional youth policy or a guiding document for the youth sector.

Figure 6. Overview of AI and youth policies and guiding documents



5. Participation in AI governance

Following the overview of AI and youth policies, what is the agency of young people and the youth sector in contributing to these processes? This section looks at practices connected to participation in AI governance of the above-mentioned international organisations and other initiatives. Even if the focus of AI governance is on shaping and implementing AI policies, it is important to understand how AI technologies are shaped and what role young people play in shaping the technologies they are using.

5.1. Participation initiated by state actors

a. Participation in shaping AI policies

Since 2017, four organisations have initiated AI governance processes, including expert groups and consultative bodies and proposing specific sets of laws or recommendations for standards in the field of AI. Considering the vast implications of AI technologies, these processes are complex and often dealt with at expert level. In this context, the role of civil society, including youth organisations, is rather marginal and far from crystallised.

In the **Council of Europe**, the main space for advancing debates and exploring a possible legal framework on AI is the Ad hoc Committee on Artificial Intelligence (CAHAI), active between 2019 and 2021, and its successor, the Committee on Artificial Intelligence (CAI), active between 2022 and 2024. In addition to representatives

of the 46 member states, the CAI/CAHAI brought as participants (without the right to vote) representatives of the private sector, civil society, research and academic institutions – including the Joint Council on Youth (CMJ), which brings together the European Steering Committee for Youth (CDEJ) and the Advisory Council on Youth (CCJ). During its mandate, CAHAI organised a wide multistakeholder consultation on the elements of a legal framework on AI, collecting 260 contributions, 31% of which came from CSOs. Despite the high number of CSO contributions, the inventory of contributing organisations mentioned the European Youth Forum (the largest European umbrella organisation representing young people) as the only youth organisation which has submitted such a contribution.

While the formal structures shaping AI policies do not include a prominent role for youth stakeholders, other Council of Europe departments have taken an active role in bridging the voice of the sector. Both the Youth and the Education departments have engaged AI expert groups in developing an understanding of the topic, delivering trainings and creating resources for the youth and education sectors.

At the **EU** level, the main consultative body – the High-level expert group on artificial intelligence (AI HLEG) set up by the European Commission between 2018 and 2022 aimed to facilitate dialogue with other stakeholders and get input on AI. It included 52 members, selected through an open call, with the majority representing academia, industry associations, institutions, technology companies and a few CSOs – the most notable being the European Trade Union Confederation, Access Now and AlgorithmWatch. Youth organisations were not included in this structure.

Another, less structured space for discussing AI issues in the EU is the European AI Alliance, described as a multistakeholder forum for engaging in a broad and open discussion on all aspects of AI development and its impact on the economy and society. The alliance has no formal structure, and individuals or legal entities can join it by creating an online account on the designated platform. In addition to the two structures, the European Commission has also launched a public consultation on the White Paper on AI and the Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics (February and June 2020). Considering that this was the largest EU online consultation on AI, the 1 270 responses were grouped in the following categories: 31% individual EU citizens, 18% private companies, 13% industry organisations, 13% academia, 11% CSOs and 6% public authorities. Out of the 11% CSOs, none represented the youth sector.

The European Commission also set up an expert group on AI and data in education and training, to bring policy initiatives closer to students and educators.

The **UN** and **OECD** included a series of high-level expert groups to inform AI-related strategies and processes, but none of them indicate the presence of youth structures.

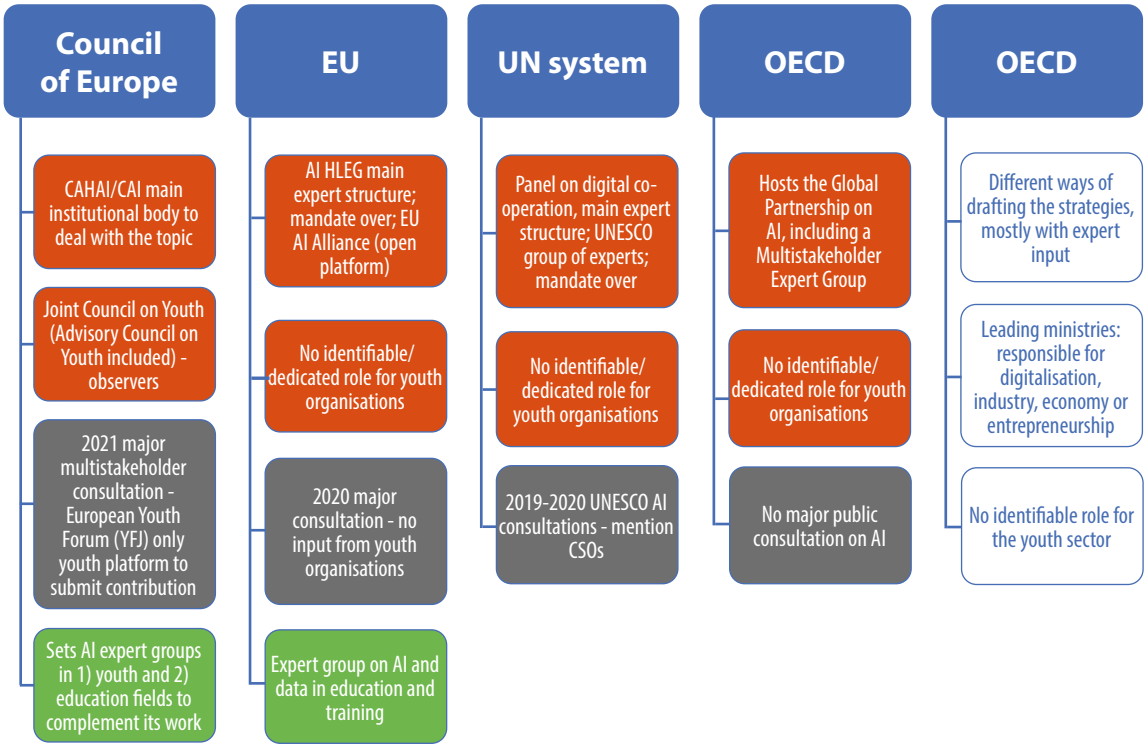
At **national level**, literature review shows that many countries have started developing strategies and policies to promote and regulate AI even before an international approach was agreed. National approaches have a strong focus on economic competitiveness that results in priorities relating to the business environment, research, innovation and talent retention or attraction.

A reason for this might be that AI strategies are often led by ministries in charge of the economy or business affairs. Youth ministries do not seem to be relevant actors in shaping or implementing such strategies.

A UNICEF policy brief What do national AI strategies say about children, which analysed 20 national strategies – by searching for key terms such as child, children, minor, youth, young, student, primary, secondary, high school and education – concluded that even if there are strong references to digital skills and education, there are very few related to the impact of AI in relation to inclusion, data protection or digital rights.

In conclusion, it seems that the Council of Europe is the only structure in which the presence of youth voices and traditional youth non-governmental organisations is specifically visible, both through public consultations and formal processes. At the same time, it is worth noting that even when there is a process to engage youth structures, they are invited as observers (with limited rights to participate) and not as full members.

Figure 7. Consultative processes and structures involved in informing AI policies



b. Participation connected to other digital and internet governance processes

The previous section focused exclusively on spaces connected to AI governance. Nevertheless, discussions on AI do not happen exclusively in spaces labelled as AI. Discussions on the impact of the new technologies have taken place in various other spaces. The fact that AI is being discussed in multiple spaces indicates its growing importance at a societal level.

Some of the spaces organised by state actors, which have facilitated discussion on the impact of new technologies, are given below.

The **UN Internet Governance Forum** – the UN convened the first Internet Governance Forum (IGF) in 2006 – a multistakeholder platform for policy dialogue that aims to inform and inspire those interested in the topic, without having a decision-making mandate. Since then, the IGF convenes annually and engages stakeholders in debates around emerging technologies and their implications. IGF chapters have been created at regional (European Dialogue on Internet Governance (EuroDIG)) and national level, including a series of youth initiatives that have gained momentum. Still, practices across countries differ significantly, in some cases casting doubts on their participatory approach and inclusiveness.

YOUthDIG, a yearly pre-event to the EuroDIG is one of the most significant European initiatives fostering active participation of young people (aged 18-30). The event does not have a specific focus on young people traditionally engaged in youth organisations or representation of youth interests. Still, it has a wider audience defined as "newcomers to Internet Governance … those who do not have any prior experience and want to learn something new or those who work on a specific subject area (e.g. AI, cybersecurity, law, art, communications, biology, medicine, or other) and want to broaden their understanding on how digitalisation or Internet policies would impact their fields". In addition to the learning dimension of the event, the youth messages, drafted by participants at the YOUthDIG, have become a tradition and an opportunity where youth priorities (including in connection with AI) can be captured annually and further promoted in the European and global internet governance forums.

The **EU – Better Internet for Kids (BIK) – Youth Programme** is part of the EU BIK strategy, updated in 2022. The BIK Youth programme includes the BIK youth panels organised annually in the context of the Safer Internet Forum and the BIK Youth Ambassadors. The programme offers a space for young people under 18 to be active at both national and European levels on issues related to a safer and better internet. Many of the youth ambassadors are supported in joining the European and global IGF to increase the impact of their work.

The 2022 campaign Democracy Here | Democracy Now and the Youth Action Week**,** organised by the youth sector of the Council of Europe with the aim of revitalising democracy and building mutual trust between young people, democratic institutions and processes, included among its central objectives: youth participation in digital transformation, AI and internet governance.

The **smart cities initiative** is a concept built around the integration of technologies in the way cities function. It is seen in many projects from sensors that monitor the

quality of air, traffic intensity to automation of public services, all having a strong focus on collecting and using data, implicitly a strong AI feature. In this context, it is relevant to look at how municipalities engage or could engage young people in co-designing these developments. Based on current literature reviews, it is hard to tell how European countries specifically involve young people or youth organisations in their smart city strategies and implementation bodies. One noteworthy example of smart city initiatives fostering citizens' engagement is the Amsterdam Smart City platform, described as "an open innovation platform that brings together innovation professionals from governments, companies, knowledge institutions and CSOs to shape the city and region of the future". In 2020, Amsterdam also launched an algorithm register, which gives citizens an easy overview of what the AI-powered municipal services are, including information about how the register functions and what could be the potential ethical implications (for example how data are stored or if there are human oversight).

5.2. Participation initiated by non-state actors

a. Movements and organisations shaping AI debates and policies

Campaigns and movements focusing on facial recognition – new youth movements engaged in defending digital rights, focusing on "facial recognition" and "biometric mass surveillance" – a technology that can be used to monitor all public presence of individuals and identify unique personal traits that can later be used to inform other decisions (for example monitor and punish people that join protests). ReclaimYourFace is among the most active European movements advocating for the ban of these technologies. It is a global movement too, with similar objectives being pursued through campaigns like Big Brother Watch in the United Kingdom or Ban the Scan in the United States of America. Digital and human rights activists initiated most of these campaigns.

Campaigns and movements around copyright – during the 2016-2018 public debates on the EU Copyright Directive, a strong youth reaction was felt, especially around two proposed articles: Article 13, also named the "meme ban" or the #UploadFilter, being harshly criticised for the obligation that it might have created for online platforms to remove copyrighted content, thus considered to be possibly harming for many digital content creators; and Article 11, also named the #LinkTax, which was asking platforms such as news aggregators to remunerate publications and publishers when using snippets of their articles. Article 13 particularly mobilised many young internet users, young vloggers or influencers who feared that online platforms would ban their content and their freedom of expression would be limited, since memes and other visuals based on copyrighted images are used for online expression. The campaign was visible through the #SaveYourInternet platform and hashtag, mostly engaging digital rights organisations. The EU Directive on copyright and related rights in the Digital Single Market, adopted in 2019, managed to address many challenging points and has particular relevance since it was one of the central moments when young internet users showed an explicit interest in digital policies.

The **Young European Federalists** (JEF) is a youth organisation that has shown particular interest in working on internet and AI governance. The organisation's Political committee on internal European policy drafted a thematic recommendation, Calling for an ethical and efficient EU policy framework on Artificial Intelligence. In 2021-2022, with the support of the Council of Europe's European Youth Foundation, the JEF organised a pan-European project on internet governance, looking, among others, at the role of young people in the current processes.

AlgorithmWatch is one of the most active organisations on AI. It is most closely involved in formal processes of setting up AI legislation and in the various movements that advocate for digital rights, including ReclaimYourFace. Founded in 2017, it is described as a "non-profit research and advocacy organization that is committed to watch, unpack and analyze automated decision-making (ADM) systems and their impact on society". Although it is not defined as a youth-led organisation or organisation advocating for youth rights, most of their members are young professionals. AlgorithmWatch stands out at the European level, working almost exclusively on AI and human rights.

The Algorithmic Justice League was among the first organisations focused on the bias in AI technologies and their impact on civil rights. Initiated by a young graduate of the MIT Media Lab in 2016 and rooted in her own accidental research of how AI technologies are generating biased results (based on gender or race), the Algorithmic Justice League has become a strong advocate for digital rights by combining research and art. The organisation has gained more international momentum after launching the film Coded Bias.

b. Hackathons, civic labs and games as a space to co-create with young people

Whether for supporting smart city initiatives or for wider empowerment of young people to shape AI technologies, the list below showcases some successful practices that can inspire design of co-creative practices with young people.

Teens in AI is an initiative officially launched at the UN's AI For Good Global Summit with the mission to improve diversity and inclusion in AI. Led by national youth groups, it primarily aims to offer young people aged 12-18 early exposure to AI for social good, rooted in ethical principles. Through its different programmes (accelerators, incubators, hackathons) it supports diverse youth groups, not just those with technical skills, to explore a future in technology and AI through collaborative, hands-on learning experiences. Its core objectives include developing ethical AI technologies with the support of mentors and experts in different fields. The movement is an example of how to invest in the next generation of responsible young innovators. At the same time, it is a valuable exercise to expand the understanding of how AI technologies work, even to young people who are not interested in becoming information and communications technology (ICT) professionals.

Gaming and gamification as a tool for co-design – using online games and environments where young people already spend a considerable time is a solution to incentivising youth participation on issues that have not been traditionally open to them (for example urban planning or smart cities). The Block by Block Foundation is an organisation tapping into this potential and it has created a new methodology to engage young people, as well as other social groups, by using one of the most popular online games, Minecraft. Participants can use the game's environment to redesign, co-imagine and plan how specific places in their community could look. With the support of the programme, organisations or informal groups can have their community mapped and integrated into a Minecraft game, allowing them to work on concrete ideas. Since such initiatives are usually implemented with the support of local decision makers or institutions interested in transforming their ideas into reality, participants gain a sense of fulfilment, going beyond ideation gaming.

What the Future Wants is an exhibition co-developed with young people to explore the impact of technology. It was initiated by Tactical Tech, a Berlin-based organisation, and implemented with the involvement of 200 young people between 13 and 18 years old. The interactive exhibition explores young people's perspectives on technology by responding to the questions "What is it like to grow up in a digital world? How does it impact you? And in your digital future, what would you like to change and what would you like to protect?". The organisation describes this process as a co-creation of a public education intervention, as young people are invited to reflect on the impact of technology and at the same time develop their critical thinking through curiosity.

Makerspaces, a movement dating back to 2005, are not only an opportunity for young people, but also a possibility to engage bigger audiences with creating technology. Makerspaces bring a great added value in educating young people on how technologies work, empowering them to co-create their small AI-powered projects (from software applications to robots). Often seen as a learning opportunity for STE(A)M education (Science, Technology, Engineering, Arts and Maths) makerspace methodologies can also play an important role in supporting young people's AI literacy, especially when educators integrate ethical principles in developing the activities. The 2020 "Setting up makerspaces in youth work organisations – A guide" created by the National Youth Council of Ireland can serve as an inspiration.

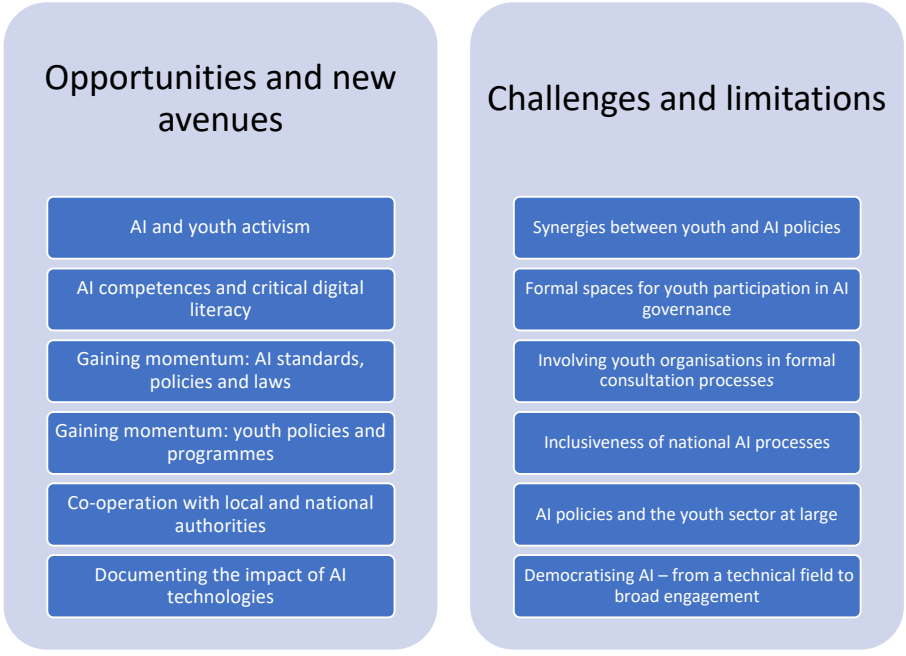
c. AI ethics boards of private companies

Complementing all the above practices, focused on the actual engagement of young people, AI ethical advisory boards of companies deserve a special attention. As debates about AI governance have intensified during the past years, even before the major international human rights organisations started working on it, many companies developing AI technologies recognised the importance of engaging wider social groups in their design process. This brief analysis does not allow for an in-depth understanding of how advanced the practices are (for example to what extent all technology companies set up such structures, who is part of them, what is the selection procedure of such boards, or even what their role is). Youth stakeholders should pay more attention to these structures and become relevant players in them – either by claiming a space in the existing ones, or by proposing

the creation of such structures within other companies and organisations. Companies such as DeepMind (now a division of Alphabet, Inc.) mention the creation of the Ethics and Society as an internal platform to engage scientists, practitioners and citizens. IBM also mentions AI Ethics Board "as a central, cross-disciplinary body to support a culture of ethical, responsible, and trustworthy AI throughout IBM". Even if data do not allow for a precise identification of all the organisations or target groups involved, at first sight, these initiatives seem dominated by representatives of academia, think tanks and other specialists with specific backgrounds in technology or law. Youth sector stakeholders should claim their place in them.

5.3. Opportunities and challenges in promoting young people's participation in AI debates

Figure 8. Opportunities and challenges for the youth sector in AI governance



a. Opportunities and new avenues to be explored

AI and youth activism – there is a consensus that all AI strategies and frameworks should include ethical principles to protect citizens and their rights. Youth organisations could play an important role in shaping the mechanisms through which these principles are implemented and monitored at the national and local level. Furthermore, additional capacity-building initiatives could support young people to voice their concerns or act as human rights watchdogs when AI systems affect their lives. Traditional youth organisations (youth councils and similar umbrella organisations) need to define their actions concerning the rights AI might affect.

AI competences and critical digital literacy – all reviewed documents, including most national AI strategies, refer to developing AI competences and jobs of the future, including advanced skills for experts or future engineers, but also basic AI literacy. This also means making AI education a priority for the youth sector. While formal education focuses on advancing technical skills and creating more ICT experts, new resources are needed to support young people in understanding the everyday impact of technology. AI and critical digital literacy resources and programmes are needed for youth multipliers (including youth leaders, youth workers, non-formal educators) and young people. This calls for a reflection on the competences needed for these groups and who should develop such approaches.

Gaining momentum: AI standards, policies and laws – the recently adopted AI policies and legal instruments, such as the 2021 UNESCO Recommendation on the Ethics of Artificial Intelligence, or the current work done by the European Union (AI Act, AI Liability Act and Digital Services Act) and the Council of Europe (Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law) allow the youth sector to position itself and understand what are the AI aspects regulated. Using these moments to advance a youth agenda on AI could be beneficial for increasing the recognition of the youth sector as a valuable stakeholder, but it will also ensure a role in the national implementation of these documents. Finally, youth organisations should secure their role in monitoring and evaluating the impact of AI strategies at local and national levels.

Gaining momentum: youth policies and programmes – some major national and international frameworks guiding the youth sector reflect only lightly on the impact of digital technologies. Other initiatives that specifically put digital at the centre, such as the new EU Digital Education Plan or the extensive work done by the Council of Europe's youth sector, show that there is a momentum to better connect young people and AI. At the EU level, particular focus could be put on the review of the current and development of the next EU Youth Strategy and the two EU youth programmes (Erasmus+ and the European Solidarity Corps) 2028+, to ensure more support for projects with access to and experimentation with AI in youth organisations, and those exploring the impact of AI on youth rights and opportunities.

Co-operation with local and national authorities – since 2017, many governments have adopted national strategies or action plans on AI. While it is not clear that the youth sector had any direct contribution, it is important for the sector to have a proactive role and claim a space in the debates related to AI. In this context, some ideas that the youth sector could explore include setting up digital youth advisory boards (at national or local level); contributing to established digital transformation councils; or, if they do not exist, initiating dialogue platforms on digital and technology issues. Smart city initiatives should be especially followed as that is the most tangible place where the impact of AI can be seen, either through the presence of technology on the streets, in public spaces or through public services. Understanding that not all spaces that contribute to AI governance include the term "artificial intelligence" is equally important. That is why young people and youth organisations should react and get involved in debates around the topics of digital transformation, Internet of Things, smart cities, internet, digital or AI governance.

Documenting the impact of AI technologies – while there is an agreement that AI technologies have a positive and negative impact, current literature does not include enough specific examples. The impact of social networks and their algorithms on young people is among the best-documented fields. Yet, the interaction of young people with AI technologies goes well beyond this. In this context, there is a need to collect concrete case studies, especially on biases and discriminations by AI technologies. This becomes even more important in the context of limited research on AI impact versus the generally very positive image of AI technologies among young people. Such documentation and research will help increase reflection on the broader social implications of AI.

b. Challenges and limitations

Synergies between youth and AI policies –there are no clear synergies between AI and youth policies. While youth strategies refer to the role of digital technologies, very few mention AI specifically. AI regulatory frameworks have little or no references to young people or the youth sector. Most often, young people and AI are connected in relation to digital skills and the future of work.

Formal spaces for youth participation in AI governance – current spaces that public institutions have created to shape AI governance focus mostly on expert input and less on the engagement of all stakeholders – by age groups or socio-economic status. Young people represent the majority of internet and technology users, yet they are not recognised in these processes and have not been invited to join them as stakeholders.

Involving youth organisations in formal consultation processes – data do not indicate clearly that youth organisations contributed to past consultations on AI frameworks. Most stakeholders in these processes include national governments, the private sector, academia and think tanks. CSOs are mostly represented through organisations with specific AI expertise, consumer organisations or trade unions, while human rights and digital rights defenders have been less visible. Considering the asymmetrical powers, especially between the technology stakeholders and CSOs or even academia, special measures are needed to level the playing field.

Inclusiveness of national AI processes – at the national level, AI processes are often led by ministries of economy and industry, hence the focus seems to be connected to economic growth and the business sector. The role of ministries in charge of youth or that of youth organisations does not seem to be explicitly mentioned. Mirroring international processes, national ones have the tendency to connect young people with AI only when it is about digital competences, building new technical talent or retaining expertise. The current situation might require a redefinition of the role national youth institutions could have in these processes.

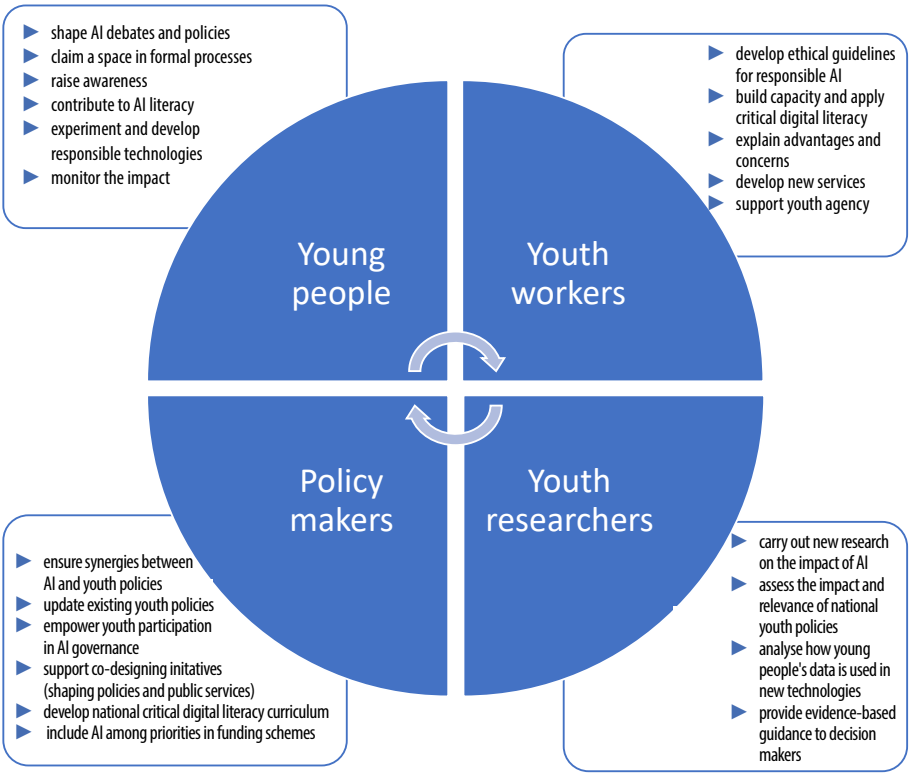
AI policies and the youth sector at large – low engagement of the youth sector in national and international processes may be due to a limited understanding and awareness of which are the institutions working on AI and where these policies are shaped. This challenge raises questions as to how well-informed youth organisations are about AI policies and processes in general. The new focus on bringing a youth perspective and mainstreaming youth in all policy fields could be an opportunity to remedy this situation.

Democratising AI – from a technical field to broad engagement –low youth engagement in formal AI governance processes, where other stakeholders are more active (including academia, private companies or more specialised digital rights organisations), might be because youth stakeholders have a fear of not having sufficient expertise on the topic and avoid participation. It is natural to expect that professionals with a technical, legal or even philosophical background can contribute faster and more easily to international processes regulating AI. Nevertheless, it is important to acknowledge that these processes have not allowed sufficient time for wider audiences to join the debate and make meaningful contributions. Future initiatives require increased efforts, because any law or regulation adopted at the international level will ultimately have to be implemented at the national and local levels.

6. Recommendations for stakeholders

This section builds on the opportunities and challenges identified previously and aims to provide actionable points for youth sector stakeholders. An integral part of all the recommendations is the cross-sectoral collaboration, since advancing AI in the youth sector needs diverse voices and types of expertise.

Figure 9. Overview of recommendations for stakeholders



6.1. Young people and youth leaders

a. Join European and national debates related to AI technologies; whether they are connected to the future of cities, the future of work or more technical issues, youth voices are insufficiently represented.

b. Claim a space in the consultative, advisory or decision-making structures that deal with AI governance. They can be part of public institutions or of private companies that develop technologies.

c. Raise awareness of the impact of AI on youth rights and engage in critical digital literacy initiatives.

d. Experiment with AI technologies and contributing to new AI tools based on ethical principles. Makerspaces and other creative forms to engage young people both in using and in shaping AI technologies are just as important as knowing how to mitigate the potential risks of AI.

e. If you are part of a youth organisation or youth group, work with your peers to develop a vision on how to engage with AI topics and which specific issues you would like to advance. AI is affecting most fundamental rights, but it might be more efficient for your organisation or group to focus just on one or some of them – for example impact on social and economic rights, civic and political rights.

f. If you are not part of an organisation yet, this is an opportunity to start new movements that can advocate for youth rights in an AI-enabled world.

g. Launch initiatives that monitor the use of AI in contexts closely connected to young people's lives (for example automated decision making (ADM) technologies used to prioritise or predict performance in education, job recruitment, credit worthiness, etc.).

6.2. Youth workers

a. Develop ethical guidelines and standards that support youth work practice – related to the use and choice of AI technologies or AI-powered tools (including social and online media platforms).

b. Promote and develop capacity-building opportunities for young people and youth workers on digital critical literacy, with a specific focus on AI.

c. Experiment with new AI technologies to increase the impact of youth work, from increasing productivity, to developing new services or gaining new insights into the needs of young people.

d. Design support services that guide young people to navigate an AI-enabled society.

e. Support youth agency in shaping AI policies and technologies.

f. Create new services to support young people in their interactions with AI systems (from hotlines to reporting and support platforms or youth centre-based services).

6.3. Policy makers

a. Engage in updating European and national youth strategies and policies to include references to the impact of AI technologies on young people. Long-term efforts should ensure the development of future-proofed policies, based on research and foresight to prepare society and the next generations for increased adoption of AI technologies. Such policies need to address, *inter alia*:

   i. access of young people to social and economic rights;

   ii. access to mechanisms of redress (how easily can young people access or use a certain mechanism when negatively affected by AI technology);

   iii. cross-sectoral approach, ensuring that youth policies address AI impact, while digital and AI policies include stronger references to the impact of AI on young people as a specific social group.

b. Set up advisory, consultative and decision-making processes that include young people and youth organisations by:

   i. ensuring that youth representatives have a designated place within specialised consultative bodies (for example smart cities, digital transformation councils);

   ii. opening new dialogue platforms led by young people, where the impact of AI is analysed through the needs and views of young people;

   iii. facilitating multistakeholder dialogue, where youth and CSOs work on an equal footing with other stakeholders (for example private companies).

c. Support co-designing initiatives where young people have an opportunity to contribute to decisions on how technologies are developed and deployed – both in the public and private sector. Such initiatives could include engagement:

   i. in designing and testing a digital public service before it is publicly launched;

   ii. in monitoring structures of AI technologies.

d. Develop national and local funding programmes, or new actions under European funding programmes, that allow young people and youth (work) organisations to:

   i. implement activities related to the impact of AI;

   ii. engage in capacity building on AI and critical digital literacy;

   iii. ensure youth participation in AI governance processes.

e. Increase funding for makerspaces and development of responsible technologies, in both formal and non-formal learning, for non-technical audiences (for example students with a background in humanities; beneficiaries of youth centres and youth work).

f. Support the development of national critical digital literacy curricula based on the revised DigComp 2.2 and Digital Citizenship Education principles, both in formal and non-formal settings.

6.4. Youth researchers

a. Explore the impact of AI on the rights of young people (going beyond use of social media). Include a mapping of the AI technologies that have the greatest potential to create a positive and/or negative impact on youth rights.

b. Design and implement national and European in-depth analysis on how national AI strategies and policies address the needs of young people.

c. Analyse how data about young people are collected and used in digital public services, as well as in training AI systems.

d. Propose evidence-based guidelines to support national decision makers in developing national AI policies and standards with a youth lens.

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What is artificial intelligence (AI)? How does it affect young people's education, employment and other fundamental rights? How do youth workers perceive AI and what opportunities do they have to engage with AI governance? This edition of Insights explores the intersection between AI and the youth sector by looking at how the evolution of this technology affects young people's lives, the policies and practices of state and non-state actors and perceptions of youth workers towards it.

As AI has become an omnipresent technology in our society, the main aim of the publication is to provide an overview of what AI is and its impact on young people's rights and the youth sector at large. With the adoption of major AI regulations, both within the Council of Europe and the European Union, it also sets out to inspire and provide guidance for the youth stakeholders interested in playing an active role in AI debates and policies.

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youth-partnership@partnership-eu.coe.int

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