AI4YouthWork

ARTIFICIAL INTELLIGENCE
COMPETENCE FRAMEWORK
FOR YOUTH WORKERS

Enhancing Youth Work Through AI

ai4youthwork.eu

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Executive Summary

This publication presents the AI Competence Framework for Youth Workers developed in the scope of the ***Artificial Intelligence for Youth Work (AI4YouthWork)*** project, a Cooperation Partnership co-funded by the Erasmus+ programme of the European Union, dedicated to enhancing the youth sector across Europe through the integration of Artificial Intelligence (AI).

The project unites four organisations - Lascò (Italy, project coordinator), TEAM4Excellence (Romania), Kyttaro Enallaktikon Anazitiseon Neon (Greece), and Contextos (Portugal) -, aspiring to contribute to increasing youth professionals' capacity to harness AI's potential to enhance the quality, attractiveness, and effectiveness of their work, and prepare young people to thrive in AI-powered environments.

This framework aims to provide a comprehensive guide to equip youth workers with the knowledge, skills, and attitudes required to leverage AI technologies in their work and guide young people to thrive in the era of artificial intelligence.

— **Chapter 1** sets the stage for the framework, discussing the context in which it was born and the needs it aims to address.

— **Chapter 2** details the methodological approach used to develop the framework, including literature reviews, expert consultations, and iterative feedback from practitioners. It explains how the framework was structured to address the specific needs of youth workers and their diverse roles.

— **Chapter 3**, the core of the publication, presents the AI Competence Framework, organised into six areas: *Professional Engagement*, *AI-Powered Resources*, *AI for Training and Learning*, *Assessment and Evaluation*, *Empowering Young People*, and *Facilitating Young People's AI Competences*.

— **Chapter 4** proposes *Ways Forward*, providing guidelines and recommendations to develop the competences outlined in the framework.

1. INTRODUCTION

Artificial Intelligence is increasingly integrated into young people's daily lives, influencing how they interact, learn, and make decisions. From social media algorithms and AI-powered educational and entertainment platforms to evolving generative AI applications, AI is shaping experiences and opportunities.

As the sociocultural norms and landscape continue to be shaped by digital transformation, and in the certainty that algorithms and AI will continue to influence young people's everyday decision-making and the overall process of digital transformation, young people - and therefore, youth workers - need to find their way to respond to the ever-changing socio-economic dynamics in an increasingly AI-driven way.

While AI has become more and more present in young people's lives, research (Pawluczuk, 2023) reveals that only a minority of European youth workers seem to proactively engage in AI-related activities in their organisations, with notable disparities between digitally included and AI-enthusiastic youth professionals and those who feel alienated and excluded from the topic. As highlighted in the study, this AI-interest divide is driven by the lack of easily accessible and comprehensible information on the impact of AI on the European youth sector, causing a sense of disconnection and disengagement from the topic. Nevertheless, this presents a two-fold issue with significant implications. On the one hand, European youth workers risk missing significant opportunities to improve

their work through AI solutions enabling, for instance, new forms of inclusion (e.g., AI-powered assistive technologies) and personalised support for young people (e.g., chatbots, social robots or automated content moderation for online communities), as well as new opportunities for data and policy analysis, or automation of administrative tasks. On the other hand, they risk lagging in the new challenges the generation of digital natives is already facing, thus being unprepared both to guide youth to exploit the benefits of AI and to tackle the impact of AI on youth work values such as youth empowerment, meaningful communication, and social cohesion.

However, for youth workers to fulfil this role, they must themselves be equipped with the right competences to understand and use AI technologies. But which are the 'right' competences? The development of this AI Competence Framework for Youth Workers aimed to contribute to providing an answer through a structured and research-driven approach. **This framework was designed to identify and define the essential competences (i.e., knowledge, skills, and attitudes) that youth workers need to integrate AI into their professional practices and support young people in becoming responsible AI users.**

2. METHODOLOGY

This *AI Competence Framework for Youth Workers* has been developed by leveraging established models such as the European Digital Competence Framework for Citizens (**DigComp**) and Educators (**DigCompEdu**) and the ***Competence Model for Youth Workers to Work Internationally***, published by JUGEND für Europa and SALTO Training & Cooperation in the framework of the European Training Strategy in the field of youth (hereinafter referred to as "ETS Competence Model").

The framework aims to tailor these models to address the unique needs of youth workers, focusing on equipping them with essential competences to effectively engage with and guide young individuals in the context of AI.

DEVELOPMENT PROCESS

STAGE 1: TRANSNATIONAL RESEARCH

The framework was built on the results of transnational research conducted by the project's consortium from March to May 2024 through systematic reviews, focus groups, and interviews.

The systematic review focused on existing competence frameworks and relevant literature. The search was conducted across multiple databases and platforms, including UNESCO Digital Library, OECD iLibrary, Council of Europe's online resource databases, EU Science Hub of the European Commission's Joint Research Centre, SSRN, Springer, and Erasmus+ Projects Results Platform. A total of 145 articles were initially retrieved.

After further refinement based on the relevance of titles, abstracts, and keywords to the research questions, 48 sources were included for data extraction. The collected documents were systematically reviewed to extract pertinent information on AI competences and their integration into youth work, identifying commonalities, intersections, and gaps within existing frameworks and literature.

Focus groups were then conducted in April and May 2024 with 72 youth work professionals to gather qualitative data on their needs, challenges, and perspectives regarding AI integration. Focus group sessions facilitated open and in-depth discussions on AI competences, current practices, and potential impacts of AI on youth work. Guided by predetermined questions, discussions aimed to elicit detailed responses and insights from participants. Thematic analysis was employed to identify key themes and patterns, integrating insights with findings from the systematic review.

Lastly, semi-structured interviews were conducted with AI, youth work, and digital education experts to corroborate findings from the systematic review and focus groups.

The results of the research work emphasised that a blend of technical, analytical and soft skills is crucial for navigating the AI landscape. Participants in the focus groups pointed to the need for all the competences outlined in the DigComp Framework and the European

Framework for the Personal, Social and Learning to learn key competence (LifeComp) as **fundamental requirements** for effectively integrating AI. For instance, among the most recurring competences identified in research:

- **Learning-to-learn competences**, including (i) growth mindset, (ii) critical thinking, and (iii) managing learning competences. These competences are the key to: (i) nurturing a desire to innovate, discover unique solutions and maintain an open mindset towards technological advancements; (ii) evaluating AI-generated content, data and recommendations critically to make informed decisions and avoid potential biases; (iii) recognise knowledge gaps about AI and pursue continuous professional development opportunities to bridge them.

- **Personal competences**, including flexibility, necessary for adaptation and resilience in the face of new technological challenges and changes.

- **Social competences**, including communication, to effectively interact with AI systems and leverage AI's capabilities to create content for written, verbal and visual communications.

- **Digital competences**: Proficiency in using digital tools and platforms, essential for leveraging AI tools. Among the digital competences mentioned by participants, data literacy is considered an indispensable area for young people and youth workers, who should have the competences needed for reading, understanding, creating

and communicating data effectively, being aware of the origins and destinations of data fed into AI systems.

Hence, such competences are considered to be prerequisites for understanding and navigating the opportunities and challenges of AI. Consequently, the *AI Competence Framework for Youth Workers* presupposes that these competences are already established and focuses on competences related to AI integration into youth work.

STAGE 2: OUTLINING THE COMPETENCE AREAS

Building on the research results, the partners' researchers collaboratively designed the framework's structure and content, detailing key competence areas, competences (knowledge, attitudes, and skills), proficiency levels, and descriptors.

Competence areas were identified in those outlined in the European Framework for the Digital Competence of Educators (DigCompEdu). Developed by the Joint Research Centre of the European Commission, it captures and describes educator-specific digital competences. It proposes 22 elementary competences organised in 6 areas, each focusing on different aspects of educators' professional activities:

- *Area 1: Professional Engagement* - Using digital technologies for communication, collaboration and professional development.
- *Area 2: Digital Resources* - Sourcing, creating and sharing digital resources.
- *Area 3: Teaching and Learning* - Managing and orchestrating the use of digital technologies in teaching and learning.

- *Area 4: Assessment* - Using digital technologies and strategies to enhance assessment.
- *Area 5: Empowering Learners* - Using digital technologies to enhance inclusion, personalisation and learners' active engagement.
- *Area 6: Facilitating Learners' Digital Competence* - Enabling learners to creatively and responsibly use digital technologies for information, communication, content creation, wellbeing and problem-solving

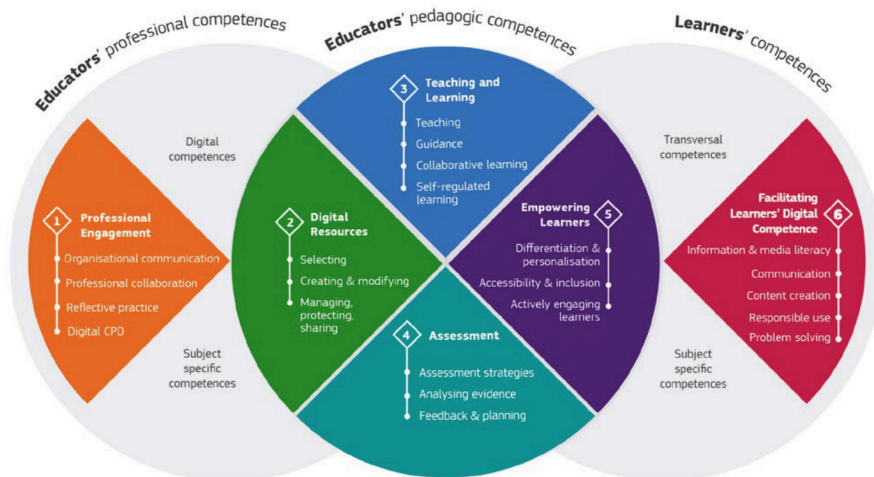The following figure presents an overview of the competences within each area.

Figure 1. DigCompEdu Overview - © European Union 2017

Adapting DigCompEdu's areas to the specific needs of youth workers, the following areas were included in the AI Competence Framework for Youth Workers:

- **Area 1: Professional engagement** – This area focuses on the competences youth workers need to use AI for communication, collaboration, and professional development.
- **Area 2: AI-powered resources** – This area encompasses competences for using AI to source, create, and share digital resources
- **Area 3: Training and learning** – This area addresses competences for managing the use of AI in non-formal training and learning environments.
- **Area 4: Assessment and evaluation** – This area involves competences to use AI to enhance assessments and evaluations in youth work activities.
- **Area 5: Empowering young people** - This area includes competences for using AI to enhance inclusion, personalisation, and young people's active engagement.
- **Area 6: Facilitating young people's AI competence** – This area focuses on competences to enable young people to use AI creatively and responsibly for information, communication, content creation, wellbeing, and problem-solving.

STAGE 3: DEFINING THE COMPETENCES

To define the competences youth workers need in each area, researchers further examined the areas where AI can intersect youth work, to augment the competences of youth work professionals and support them in their work. The **ETS Competence Model for Youth Workers** was used as a framework for this purpose. Hence, the nine competence areas outlined in the Model were used as a reference:

- Facilitating learning
- Designing programmes
- Managing resources
- Collaborating in teams
- Communicating meaningfully
- Displaying intercultural sensitivity
- Networking and advocating
- Assessing and evaluating
- Being civically engaged

The ETS Competence Model was integrated with the key insights derived from the research work to define the competences required in each area.

Competences	
AI4YouthWork Competence Framework	ETS Competence Model
Area 1: Professional Engagement	
Collaborating with AI	ETS4 - Collaborating in teams
Communicating with AI	ETS5 - Communicating meaningfully
Reflective practice	N/A
Managing resources with AI	ETS3 - Managing resources
Advocating and networking	ETS7 - Networking and advocating

Competences	
AI4YouthWork Competence Framework	ETS Competence Model
Being civically engaged to address AI's impacts	ETS9 - Being civically engaged
Area 2: AI-Powered Resources	
Selecting AI-powered tools	N/A
Selecting resources on AI	N/A
Creating resources with AI	N/A
Area 3: AI Training and Learning	
Designing programs with AI	ETS2 - Designing programmes
Facilitating learning with AI	ETS1 - Facilitating learning
Area 4: Assessment and Evaluation	
Assessing and evaluating with AI	ETS8 - Assessing and evaluating
Area 5: Empowering Young People	
Employing inclusive AI systems	ETS6 - Displaying intercultural sensitivity
Differentiating and personalising learning with AI	N/A
Area 6: Facilitating Young People's AI Competence	
Fostering young people's data literacy	N/A
Assessing and evaluating young people's AI competences	ETS8 - Assessing and evaluating
Fostering ethical and responsible use of AI systems	N/A

STAGE 4: DEFINING THE PROFICIENCY LEVELS

The proficiency levels in the AI Competence Framework were inspired by DigCompEdu's progression model and Bloom's revised taxonomy. DigCompEdu's model links competence stages to the six proficiency levels used by the Common European Framework of Reference for Languages (CEFR), ranging from A1 to C2.

Similarly, the proficiency levels in the current framework are cumulative, with each higher level building upon the descriptors of the lower levels. This ensures a structured and scalable progression from basic to advanced competences:

- **Foundation** (**Levels 1 and 2**): These levels focus on understanding basic concepts and practices. They are analogous to CEFR levels A1 and A2, where youth workers assimilate new information and develop foundational skills.

- **Intermediate** (**Levels 3 and 4**): These levels involve applying and analysing AI competences, similar to CEFR levels B1 and B2. Youth workers expand and reflect on their practices, integrating AI skills into their work.

- **Advanced** (**Levels 5 and 6**): These levels, corresponding to CEFR levels C1 and C2, involve evaluating and creating new practices. Youth workers at these levels lead and innovate, critiquing existing practices and developing advanced strategies.

STAGE 5: DEVELOPING A BODY OF KNOWLEDGE, SKILLS AND ATTITUDES

Competences refer to a combination of knowledge, skills and attitudes. As defined in the 2018 Council Recommendation on Key Competences for Life-long Learning:

> *Knowledge is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject.*
>
> *Skills are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results.*
>
> *Attitudes describe the disposition and mind-sets to act or react to ideas, persons or situations.*

For each competence, the consortium researchers developed a body of knowledge, skills and attitudes. The examples were derived from the data collected during the research phase.

3. THE AI COMPETENCE FRAMEWORK FOR YOUTH WORKERS

Following established competence frameworks by the European Commission's Joint Research Centre, this framework comprises **four dimensions**:

DIMENSION 1: **COMPETENCE AREA** - Areas identified to be part of the AI competence for youth workers. In this Framework, 6 competence areas outline what AI Competence for Youth Workers entails, such as *Professional Engagement, AI-Powered Resources, AI for Training and Learning, Assessment and Evaluation, Empowering Young People,* and *Facilitating Young People's AI Competences.*

DIMENSION 2: **COMPETENCE** - The title and descriptor of each competence included in the competence areas. The framework includes 17 competences:

1. Collaborating using AI
2. Communicating with AI
3. Reflective practice
4. Managing resources with AI
5. Advocating and networking
6. Being civically engaged to address AI's impacts
7. Selecting AI-powered tools
8. Selecting AI resources
9. Creating resources with AI
10. Designing programs with AI

11. Facilitating learning with AI
12. Assessing and evaluating with AI
13. Employing inclusive AI systems
14. Differentiating and personalising learning with AI
15. Fostering young people's data literacy
16. Assessing and evaluating young people's AI competences
17. Fostering ethical and responsible use of AI systems

DIMENSION 3: **PROFICIENCY LEVELS** - The levels of proficiency for each competence, divided into six levels:

Foundation	Level 1
	Level 2
Intermediate	Level 3
	Level 4
Advanced	Level 5
	Level 6

DIMENSION 4: **BODY OF KNOWLEDGE, SKILLS AND ATTITUDES** - Examples of the knowledge, skills and attitudes that are relevant to each competence.

THE FRAMEWORK AT A GLANCE

Professional Engagement
Collaborating using AI
Communicating with AI
Reflective practice
Managing resources with AI
Advocating and networking
Being civically engaged to address AI's impacts

AI-Powered Resources
Selecting AI-powered tools
Selecting AI resources
Creating resources with AI

Facilitating Young People's AI Competences
Fostering young people's data literacy
Assessing and evaluating young people's AI competences
Fostering ethical and responsible use of AI systems

AI for Training & Learning
Designing programs with AI
Facilitating learning with AI

Empowering Young People
Employing inclusive AI systems
Differentiating and personalising learning with AI

Assessment & Evaluation
Assessing and evaluating with AI

1.
Professional Engagement

1.1 Collaborating using AI
1.2 Communicating with AI
1.3 Reflective practice
1.4 Managing resources with AI
1.5 Advocating and networking
1.6 Being civically engaged to address AI's impacts

1.1 Collaborating using AI

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.1 COLLABORATING WITH AI

To use AI to collaborate with colleagues and stakeholders, enhancing teamwork and communication through AI technologies

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify AI-enabled collaboration tools** and platforms available for youth work, such as visual collaboration tools or digital workspaces.
- **Recall the basic functions** of a commonly used AI-powered collaboration tool.
- **Identify the benefits of using AI-powered collaboration tools** in youth work.

2
- **Explain how AI can assist in enhancing collaboration** in youth work activities, such as scheduling meetings or automating reminders.
- **Recognise the positive and negative impacts of AI tools** on collaboration dynamics.
- Have a **basic interaction with AI-enabled collaboration tools**.
- **Being aware of ethical issues** related to using AI-powered collaboration tools in diverse cultural settings.

INTERMEDIATE

3
- **Use AI-powered management tools** to organise and assign tasks within a team.
- **Integrate AI-based communication tools** to enhance team collaboration.

4
- **Analyse the effectiveness of different AI tools** in facilitating collaboration among team members by comparing their features and user feedback.
- **Evaluate the impact of the outputs** of AI collaboration tools on decision-making processes within a youth work project.

ADVANCED

5
- **Assess the potential biases in AI tools** and their effects on collaborative outcomes, identifying areas for improvement.
- **Judge the ethical considerations of using AI** in youth work, guiding responsible use.
- **Evaluate the long-term impact of AI integration** on team productivity and youth engagement, using both qualitative and quantitative metrics.

6
- **Design a comprehensive AI-driven collaboration strategy** for youth work activities or organisations, incorporating tools for communication, project management, and feedback.
- **Train peers on AI-driven collaboration tools.**
- **Customise existing AI tools to solve specific collaboration challenges** in youth work, such as facilitating cross-cultural communication among international teams.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding the use of AI-powered collaboration platforms and video conferencing tools offering collaborating features to facilitate cooperation with diverse groups.
- Knowing how AI tools can assist in real-time collaboration, for instance, by providing grammar suggestions and predictive text to improve document quality and efficiency (e.g. Grammarly, Google Docs' Smart Compose).
- Familiarity with email management AI tools (e.g., Gmail's Priority Inbox, Smart Reply) that help manage and prioritise emails, ensuring timely, effective collaboration.
- Understanding how AI in work management platforms (e.g. ClickUp, Asana, Trello..) can help assign tasks based on team members' availability and skills, ensuring balanced workloads and efficient project completion.
- Recognising how AI tools on feedback system platforms (e.g. SurveyMonkey) with AI-driven analytics can gather and analyse feedback from youth participants and stakeholders to improve programs and services.

SKILLS

- Using AI chatbots to schedule meetings and set reminders, ensuring all team members are informed and on track with their tasks.
- Employing AI-powered project management tools to organise, assign, and track tasks within a team, enhancing coordination and cooperation.
- Leveraging AI capabilities in platforms with custom AI models to automate routine tasks, facilitate information sharing, and streamline team communication (e.g., Slack).
- Using AI-based data analysis report tools to analyse data from team projects and youth programs, generating insights that inform decision-making and improve outcomes.
- Participates actively in decision-making processes within their organisation regarding the use of AI tools in ethically and responsibly.

ATTITUDES

- Valuing the role of AI in breaking down collaboration barriers, such as using translation tools to facilitate multilingual team interactions.
- Questioning AI tools to ensure all team members, regardless of language or ability, can participate fully in collaborative activities.
- Being mindful of the ethical implications of AI, such as data privacy and bias, and promoting responsible use of AI tools in all team activities.
- Creating a culture where team members are encouraged to learn and share knowledge about new AI tools and technologies that can enhance collaboration.
- Appreciating the complementary strengths of AI efficiency and human intuition, ensuring that AI tools are used to enhance, not replace, human contributions.

1.2 Communicating with AI

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.2 COMMUNICATING WITH AI

To communicate with AI and through AI. To contribute to improving communications and outreach strategies towards young people and relevant stakeholders.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify different AI tools that can be used for communication**, such as chatbots, virtual assistants, or AI-driven email marketing platforms.
- Recognise **platforms that use AI for communication** (e.g., automatic translations).
- **List the key benefits of using AI in communication** (e.g., improving the effectiveness and clearness of communications).

2
- **Explain how AI can help improve digital communications** (e.g., scheduling, text or multimedia content creation).
- **Recognise the ethical implications** of using AI for communication.
- **Have a basic interaction with a conversational AI system** (e.g., chatbots or virtual agents).

INTERMEDIATE

3
- **Integrate AI tools to facilitate communication** and learning among youth.
- **Critically evaluate the outputs** of conversational AI systems.
- **Apply AI to support and streamline communication** assessment and feedback processes.

4
- **Evaluate the effectiveness of different AI communication tools** in engaging young people.
- **Assess the impact of AI-driven** communication on stakeholder relationships and identify potential areas for enhancing engagement.

ADVANCED

5
- **Critically evaluate the ethical implications** of AI use in communication.
- **Judge the ethical implications of AI in communication,** particularly regarding data privacy and consent.
- **Evaluate the impact of AI tools** on empowering youth in communication.

6
- **Design an AI-powered communication strategy** tailored for youth engagement, incorporating personalised messaging, automated responses, and data analytics.
- **Create programs to enhance youths' AI literacy** and critical thinking about AI in communication.
- **Design and implement AI-driven communication** solutions tailored to youth needs.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowledge of basic AI concepts, including machine learning, natural language processing (NLP), and neural networks.
- Awareness of different AI communication tools and platforms.
- Knowing how tools with AI bots for automating responses and reminders facilitate team communication.
- Recognising how features such as real-time transcription and translation enhance meeting accessibility.
- Understanding how AI processes and interprets human language in tools such as chatbots and virtual assistants to provide relevant responses.
- Understanding of copyright and ethical considerations related to AI-generated content.
- Understanding that AI systems gather and analyse various types of data (e.g., personal, behavioural, and contextual data) to develop user profiles and predict user preferences and behaviours, enabling the AI to offer personalised services and communication.

SKILLS

- Using chatbots to schedule meetings, set reminders, and automate routine communications.
- Employing AI features in platforms for real-time transcription and translation to facilitate inclusive meetings.
- Leveraging AI suggestions word processor software (e.g., Word, Google Docs) to improve document collaboration and quality.
- Creating and integrating custom AI bots to streamline workflows and enhance team communication.
- Using AI to segment the audience based on various criteria to deliver more targeted and effective messages.
- Proficiency in interacting with AI-based conversational agents by identifying whether one communicates with a human or an AI and effectively providing feedback (e.g., user ratings, likes, tags) to influence the AI's recommendations based on user preferences.

ATTITUDES

- Valuing AI's role in facilitating efficient and effective communication among team members.
- Promoting inclusivity using AI tools that support multilingual communication and accessibility.
- Encouraging team members to explore and share new AI tools that improve communication and collaboration.
- Appreciating the need to combine AI tools with human intuition and empathy in team communications.
- Cultivate empathy towards the needs, interests, and preferences of the target audience (e.g., team members, students, stakeholders).
- Ensuring that AI communication tools are used responsibly, respecting privacy and data security.
- Being open to adopting new AI tools and technologies to improve communication efforts.
- Encouraging ongoing evaluation and refinement of AI-driven communication strategies.

1.3 Reflective practice

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.3 REFLECTIVE PRACTICE

To individually and collectively reflect on, critically assess and actively develop one's AI competences and AI integration practices and that of one's non-formal educational community.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION	1	• Identify **gaps in AI knowledge** to pinpoint areas for improvement. • Identify **good practices** for effective AI integration techniques. • Search for **professional development opportunities** for continuous enhancement of AI competences.
	2	• **Associate AI skills with real-world applications** to understand their practical value. • Estimate the **impact of AI tools** on non-formal education and youth work methods to make informed decisions about their use. • **Predict the future needs of young people** to tailor AI integration strategies effectively.
INTERMEDIATE	3	• **Choose the right AI tools** for different youth work scenarios to enhance learning experiences. • **Experiment with various AI techniques** to discover the most effective methods for youth. • **Implement AI-driven activities** in youth work sessions to engage young people and enhance their youth development experiences.
	4	• **Structure reflections on AI** in a logical and coherent manner. • **Correlate AI integration outcomes with learners' performance**. • **Question the ethical implications of AI usage**, prompting reflection and ensuring responsible integration into non-formal education and youth work settings.
ADVANCED	5	• **Validate the effectiveness of AI** applications through rigorous assessment methods. • **Judge AI integration practices** to identify benefits and needs for improvement. • **Reflect on experiences with AI** in youth work to refine strategies and deepen understanding.
	6	• **Plan long-term AI integration strategies** to align youth work goals with emerging technologies and young people's needs. • **Adapt AI-enhanced youth work methods** based on continuous evaluation and feedback to enhance dynamic and responsive youth-centred practices.

DIMENSION 4: KNOWLEDGE, SKILLS AND ATTITUDES

KNOWLEDGE

- Understanding the fundamental concepts and basic principles of artificial intelligence.
- Knowledge of ethical considerations and responsible practices in AI, including data privacy, bias mitigation, and the impact of AI on society and employment.
- Insight into effective pedagogical approaches and strategies for integrating AI into non-formal learning experiences for young people, ensuring AI enhances rather than detracts from educational outcomes.
- Awareness of the latest trends, advancements, and research in AI, particularly as they relate to youth work and youth development.
- Knowledge of methods for assessing the effectiveness of AI applications in youth work, including evaluating the impact on expected outcomes and youth engagement and motivation.
- Understanding organisational policies regarding AI and best practices for implementing AI initiatives within non-formal educational and youth work organisations, including project management and stakeholder engagement.

SKILLS

- Ability to facilitate discussions and activities that promote critical thinking and collaborative learning, leveraging AI tools to enhance engagement and interaction in non-formal and youth work settings.
- Skills in creating personalised youth development experiences using AI to adapt content and pacing to meet the diverse needs and interests of individual young people (e.g., AI literacy, proficiency in educational and developmental theories).
- Competence in training and guiding learners on digital literacy, including safe and responsible use of AI technologies, online privacy, and cybersecurity.
- Proficiency in designing and implementing project-based youth work activities integrating AI, fostering hands-on experience and practical problem-solving skills among learners.
- Ability to engage with and mobilise the community to support and enhance AI-driven youth work initiatives.
- Proficiency in curating, organising, and managing digital resources and AI tools to create a rich and accessible repository of materials for young people.
- Proficiency in using AI-driven analytics to gather and analyse feedback from young people, adapting and improving educational practices based on data-driven insights.

ATTITUDES

- Willingness to critically examine one's own AI competences and practices and to seek and accept constructive feedback from peers and learners.
- A proactive attitude towards seeking and participating in targeted training and professional development opportunities to improve AI competences.
- Eagerness to engage with others, share knowledge and experiences, and collaborate to enhance collective AI integration practices within the youth work community.
- Enthusiasm for exploring and experimenting with new AI youth-oriented practices and integrating innovative AI technologies into youth work activities.
- Dedication to identifying personal competence gaps and taking the initiative to address these areas for improvement in AI integration.
- Willingness to assist and mentor others in developing their AI competences, fostering a supportive learning environment within the organisation.
- A critical stance towards existing organisational AI policies and practices, combined with a constructive approach to contributing to developing improved policies and visions for AI use in youth work.

1.4 Managing resources with AI

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.4 MANAGING RESOURCES WITH AI

To use AI tools to enhance the management of human, physical and financial resources needed to design, prepare and deliver youth projects and youth work activities.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify various AI tools available** for managing resources (e.g., AI-enabled project management software, financial planning tools, human resource management systems, files including text, images and videos).
- **Recall the basic features of an AI-powered project management tool** for youth work.
- **List the benefits of using AI** to manage resources, such as increased efficiency, data-driven decision-making, and better resource allocation.

2
- **Explain how AI can assist** in managing various digital resources.
- **Describe how AI tools can streamline human resource management tasks** (e.g., for scheduling and performance tracking).
- **Summarise the key functions** of AI in managing physical resources, such as inventory management and maintenance scheduling.

INTERMEDIATE

3
- **Use AI-powered tools** (e.g., AI-enabled project management tools) **to manage resources** for a youth project.

4
- **Analyse the efficiency of resource allocation** in youth projects by analysing data with AI.
- **Evaluate the impact of AI tools on human resource management**, considering factors such as staff satisfaction and productivity.
- **Assess the effectiveness of AI-driven financial management tools** in maintaining budget accuracy and transparency.

ADVANCED

5
- **Evaluate the impact of AI tools** on resource management efficiency and effectiveness.
- **Judge the ethical considerations** of using AI for resource management, particularly regarding fairness and transparency.
- **Evaluate the long-term impact of AI integration** on the overall management efficiency of youth projects and activities.

6
- **Develop strategic plans** for integrating AI into resource management.
- **Develop comprehensive training programs** for peers on effectively using AI tools for resource management, including practical exercises and case studies.
- **Create innovative AI applications** that address specific resource management challenges in youth work, such as volunteer coordination or grant management.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowing how AI tools assist in optimising resource allocation for youth projects.
- Understanding how AI platforms use predictive analytics for financial planning and management.
- Knowing how AI tools help manage physical resources efficiently.
- Recognising how AI-driven project management tools can help plan and track project activities.
- Understanding that AI tools for managing human, physical, and financial resources can produce positive or negative outcomes depending on how they are designed, implemented, and used, as well as by whom and for what specific purposes.
- Understanding that using AI systems that directly interact with and make decisions about people can often be controversial and require careful consideration of ethical implications.

SKILLS

- Using AI tools to forecast future resource requirements based on historical data, improving planning accuracy.
- Leveraging AI tools (e.g., Trello) to manage volunteer schedules, track participation, and optimise volunteer deployment.
- Using AI tools to analyse grant databases, suggest potential funding opportunities, and assist in writing compelling grant proposals.
- Utilising advanced AI-driven analytics to assess the efficiency and effectiveness of resource allocation, making data-informed adjustments as needed.
- Creating and delivering training programs for team members on effectively using AI tools for resource management.

ATTITUDES

- Appreciating the role of AI in supporting informed decisions about resource allocation.
- Advocating for the use of AI to streamline and optimise resource management processes.
- Ensuring that AI tools are used responsibly, particularly regarding data privacy and transparency.
- Actively seeking opportunities to learn about new AI tools and their applications in resource management.
- Maintaining a healthy scepticism towards AI outputs, critically evaluating AI-generated content and recommendations.
- Thinking strategically about the long-term implications of integrating AI into resource management, including benefits and risks.
- Considering the human impact of AI-driven decisions, ensuring that the use of AI in resource management supports positive outcomes for all involved.

1.5 Advocating and networking

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.5 ADVOCATING AND NETWORKING

To advocate for trustworthy AI solutions in youth work and the value of youth work in supporting young people to become conscious, responsible, and critical users of AI technologies. To develop and manage partnerships with other relevant actors, such as AI experts, tech companies, educational institutions, and community organisations, to support the integration of AI in youth work and non-formal education activities aimed at fostering AI literacy among young people.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- Recall the **requirements and principles of trustworthy AI.**
- **Identify key stakeholders** relevant to AI in youth work.
- **List benefits** of advocating for AI literacy among young people.

2
- Explain the role of youth work in **promoting AI literacy and responsible AI use.**
- **Describe fundamental strategies** for advocating trustworthy AI solutions within youth communities.
- **Identify potential partnerships** with experts to support AI integration in youth work.

INTERMEDIATE

3
- **Use basic advocacy techniques** to promote trustworthy AI solutions in youth work.
- **Implement initial networking strategies** to establish connections with relevant stakeholders in AI and youth work.
- **Facilitate introductory workshops** or sessions on AI literacy for young people, highlighting the value of youth work in this context.

4
- **Analyse the effectiveness of current advocacy efforts** for trustworthy AI in youth work and identify areas for improvement.
- **Assess the impact of AI literacy initiatives** on young people's understanding and usage of AI technologies.

ADVANCED

5
- **Develop advocacy campaigns** for trustworthy AI solutions for youth work contexts.
- **Judge the ethical implications of AI** partnerships in youth work, focusing on transparency, fairness, and youth protection.
- **Evaluate long-term outcomes of integrating AI literacy programs** in youth work on young people's critical thinking and responsibility towards AI use.

6
- **Develop strategic partnerships** with organisations and institutions that support research and ongoing development of trustworthy AI solutions in youth work.
- **Lead regional or national initiatives** to promote the use of trustworthy AI in youth work, being an influential voice at conferences and events advocating for responsible AI policies and practices.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding the basic concepts of AI, including machine learning, neural networks, natural language processing, and AI ethics.
- Knowledge of best practices for integrating AI into non-formal education activities and youth work complying with the *Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators*.[1]
- Understanding of advocacy principles and strategies for promoting trustworthy AI solutions.
- Awareness of the landscape of stakeholders in AI and youth work, such as AI experts, tech companies, educational institutions, and community organisations.
- Understanding the potential benefits and risks associated with integrating AI into youth work.
- Awareness of current trends and advancements in AI technologies that can be applied in youth work.
- Understanding the ethical considerations in AI use, including issues of bias, transparency, and accountability.

SKILLS

- Communication skills to articulate the importance of trustworthy AI solutions and the relevance of youth work in helping young people become aware and critical users of AI technologies.
- Ability to research best practices and new technologies in AI applicable to youth work.
- Ability to discern between reliable AI solutions and those that may be harmful or unethical.
- Competence in networking and partnership building with relevant stakeholders.
- Competence in using AI tools to support advocacy and networking efforts.
- Ability to assess the ethical implications of AI technologies and their use in youth work.

ATTITUDES

- Commitment to ethical and responsible practices in using and promoting AI technologies and encouraging critical awareness among young people about the ethical and social implications of AI.
- Willingness to keep up with the latest trends and advances in AI and its application in the context of youth work.
- Being open to new ideas and methodologies, constantly seeking innovative ways to integrate AI into youth work.
- Demonstrate a commitment to social responsibility by ensuring that the use of AI benefits the community and does not cause harm.
- Proactivity in seeking and establishing partnerships with relevant actors to expand the impact of AI initiatives.

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[1] European Commission, Directorate-General for Education, Youth, Sport and Culture (2022). *Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for educators*. Publications Office of the European Union. https://data.europa.eu/doi/10.2766/153756.

1.6 Being civically engaged to address AI's impacts

DIMENSION 1: COMPETENCE AREA

1. PROFESSIONAL ENGAGEMENT

DIMENSION 2: COMPETENCE

1.6 BEING CIVICALLY ENGAGED TO ADDRESS AI'S IMPACTS

To actively participate in societal discussions and initiatives to address the societal impacts of AI, encouraging civic engagement and informed decision-making among young people.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify key societal impacts of AI,** such as job displacement, privacy concerns, and ethical considerations.
- **Recall basic concepts related to civic engagement** and its importance in addressing AI's societal impacts.
- **List the benefits of** encouraging young people **to engage in societal discussions about AI.**

2
- **Explain how AI impacts** different aspects of society, including the economy, privacy, and ethical norms.
- **Recognize the role of civic engagement** in fostering informed decision-making about AI.
- **Interact with basic AI tools** and platforms that facilitate civic engagement.

INTERMEDIATE

3
- **Integrate AI-based communication platforms** to enhance civic engagement among youth.
- **Facilitate youth-led initiatives and discussions** on the societal impacts of AI, fostering critical thinking and informed decision-making.

4
- **Analyse the effectiveness of various AI tools** in promoting **civic engagement** and addressing societal impacts.
- **Evaluate the impact of AI-driven civic engagement initiatives** on young people's understanding of AI issues.
- **Assess the ethical implications of AI technologies** in societal contexts, guiding responsible civic engagement.

ADVANCED

5
- **Assess potential biases in AI tools** and their effects on societal discussions and civic engagement.
- **Judge the ethical considerations** of using AI in civic engagement initiatives, ensuring transparency and fairness.

6
- **Design comprehensive AI-driven strategie**s for civic engagement that address AI's societal impacts, incorporating communication, project management, and feedback tools.
- **Train peers and community leaders** on using AI-driven tools for effective civic engagement and societal impact discussions.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding of key societal impacts of AI, including economic, ethical, and privacy concerns.
- Awareness of practices to use AI in community projects for social good.
- Understanding of the ethical considerations related to AI use in societal contexts.
- Knowledge of current trends and issues in AI that are relevant to societal discussions and civic engagement.
- Awareness of the benefits and challenges of integrating AI into civic engagement initiatives.
- Understanding the role of youth work in promoting informed decision-making about AI.
- Knowledge of strategies to foster critical thinking and responsible AI use among young people.

SKILLS

- Facilitation and communication skills to facilitate youth-led initiatives and discussions on AI's societal impacts.
- Critical thinking and analytical skills to analyse and evaluate the impact of AI-driven civic engagement initiatives.
- Assessing the ethical implications of AI technologies in societal contexts.
- Project management, analytical and evaluation skills for creating and managing projects that use AI to promote civic engagement and informed decision-making.
- Ability to design and implement strategies for integrating AI into civic engagement activities.

ATTITUDES

- Commitment to community well-being and social justice, recognizing the role and influence of AI in society.
- Valuing the role of civic engagement in addressing the societal impacts of AI.
- Encouraging youth participation in societal discussions about AI.
- Appreciating the importance of critical thinking and informed decision-making in AI-related issues.
- Cultivating an open-minded and proactive approach to understanding and addressing AI's societal impacts.
- Advocating for transparency and fairness in the use of AI in societal contexts.
- Fostering an inclusive environment where all young people can engage in discussions about AI's societal impacts.
- Openness to listen to and consider different points of view and perspectives, especially those that may be disproportionately affected by AI.

2.
AI-Powered Resources

2.1 Selecting AI-powered tools

DIMENSION 1: COMPETENCE AREA

2. AI-POWERED RESOURCES

DIMENSION 2: COMPETENCE

2.1 SELECTING AI-POWERED TOOLS

To identify, evaluate, and select appropriate AI-powered tools that can enhance youth work practices, comparing potential benefits and limitations of different AI solutions.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify various AI-powered tools** that can be used to enhance youth work practices.
- Recognise the **basic functions and purposes of different AI tools** available in the market.
- List the **primary benefits of using AI-powered tools** for different youth work activities.

2
- **Explain how specific AI-powered tools can optimise** different youth work tasks.
- **Recognise the ethical considerations** when selecting AI tools for youth work.
- Demonstrate a **basic understanding of cost-benefit analysis** for AI-powered tools.

INTERMEDIATE

3
- **Implement multiple-criteria decision analysis** to evaluate the suitability of different AI tools for specific youth work activities.
- **Critically assess the usability and effectiveness of selected AI tools** within different youth work contexts.
- **Integrate selected AI tools** into existing youth work practices and **evaluate their impact**.

4
- **Analyse the cost-effectiveness** of various AI-powered tools and their potential return on investment.
- **Evaluate the scalability and sustainability of specific AI tools** in youth work activities.
- **Assess the readiness and capacity of the organisation to implement and maintain selected AI tools.**

ADVANCED

5
- **Critically evaluate the long-term benefits and potential risks** associated with adopting specific AI-powered tools in youth work.
- Judge the **ethical and societal implications** of using advanced AI tools, particularly regarding data privacy and inclusivity.
- **Develop strategies** for training colleagues and stakeholders on the effective use of selected AI tools.

6
- **Design a comprehensive strategy for selecting and deploying AI-powered** tools that align with organisational goals and values.
- **Create innovative solutions to address youth work challenges** through the strategic use of AI-powered tools.
- **Lead initiatives to continually assess and refine the selection and use of AI tools**, ensuring they remain effective and relevant to evolving needs.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding of the landscape of AI-powered tools available for youth work.
- Familiarity with the General Data Protection Regulation (GDPR) and its implications for handling personal data within AI tools.
- Awareness of methods and requirements to evaluate the accessibility of AI-powered tools and platforms, such as the Web Content Accessibility Guidelines by the World Wide Web Consortium (W3C) Web Accessibility Initiative.
- Knowledge of criteria for evaluating AI tools's trustworthiness (e.g., the Assessment List for Trustworthy Artificial Intelligence developed by the High-Level Expert Group on Artificial Intelligence set up by the European Commission)
- Knowledge of cost-benefit analysis methods (e.g., *Return on Investment* and *Payback Period*) to evaluate AI tools' financial viability.

SKILLS

- Ability to conduct multiple-criteria decision analysis (MCDA) to select AI tools. Examples of criteria that may guide the analysis are trustworthiness, ease of use, availability of technical support, accessibility, cost of use, and compatibility with operating systems used by the target group and/or the organisation.
- Critical thinking and critical decision-making in the selection and use of AI tools.
- Proficiency in conducting cost-benefit analyses to evaluate AI tools' potential benefits and risks.
- Ability to assess the organisational capacity for implementing and maintaining AI tools.
- Ability to analyse the scalability and sustainability of AI tools within the organisation.

ATTITUDES

- Valuing the importance of thorough research and evaluation in selecting AI-powered tools.
- Valuing new ideas and approaches in leveraging AI tools for youth work.
- Ethical responsibility, promoting ethical practices in the use of AI tools.
- Commitment to ongoing professional development and continuous improvement in the use of AI tools.
- Appreciating the diverse needs and contexts of the organisation and its stakeholders.
- Cultivating an open-minded and proactive approach to adopting new AI technologies.
- Valuing collaborative environments for sharing knowledge and experiences with AI tools.
- Questioning mindset towards the selection and use of AI tools.

2.2 Selecting AI resources

DIMENSION 1: **COMPETENCE AREA**

2. AI-POWERED RESOURCES

DIMENSION 2: **COMPETENCE**

2.2 SELECTING AI RESOURCES

To identify, assess, and select training and learning resources on AI for young people, considering the specific learning objectives, context, and needs of the target groups.

DIMENSION 3: **PROFICIENCY LEVELS**

FOUNDATION

1
- **Identify various types of AI training and learning resources** available, such as online courses, tutorials, books, and videos.
- Recall basic criteria for **selecting appropriate AI resources** for youth work (e.g., age-appropriateness, relevance to youth development objectives, ease of understanding).

2
- **Explain how different AI learning resources can meet specific learning objectives** for young people.
- Recognise the importance of **aligning AI resources with the context and needs** of target groups.

INTERMEDIATE

3
- Use established criteria to **select and recommend AI learning resources** suitable for different youth work objectives (e.g., choosing resources that match learning goals, and providing practice opportunities).
- **Integrate various AI tools** to create comprehensive learning plans for young people (e.g., combining online courses, practical tutorials, and group discussions).

4
- **Analyse the effectiveness of various AI learning resources** in achieving specific educational goals (e.g., comparing student progress across different resources, and gathering feedback from learners).
- **Evaluate the suitability of different AI training resources** for diverse youth groups, considering factors such as age, background, and learning preferences.
- **Assess the quality and reliability of AI learning resources**, ensuring they meet educational standards and ethical guidelines (e.g., verifying the qualifications of content creators, and checking for unbiased information).

ADVANCED

5

- **Evaluate potential biases** in AI learning resources and their impact on educational outcomes (e.g., identifying gender or cultural biases in AI datasets or examples).
- Judge the **ethical considerations of using specific AI resources** in youth work, ensuring fairness and inclusivity (e.g., considering privacy issues in AI tools, and promoting resources that encourage ethical AI use).
- **Evaluate the long-term impact** of selected AI learning resources on youth's understanding and engagement with AI technologies.

6

- **Design comprehensive AI learning resources** tailored to specific educational contexts and target groups.
- **Develop advanced training programs** for educators on selecting and utilising high-quality AI learning resources (e.g., creating professional development workshops on AI literacy, and resource curation).
- **Customise existing AI learning** resources to address the specific educational challenges and needs of diverse youth groups (e.g., modify resources to be more culturally inclusive, develop supplementary materials for different learning levels).

DIMENSION 4: KNOWLEDGE, SKILLS AND ATTITUDES

KNOWLEDGE

- Knowledge of various AI training and learning resources, including online courses, tutorials, books, and videos.
- Understanding criteria for assessing the quality and suitability of AI learning resources (e.g., relevance, credibility, accessibility).
- Awareness of the specific learning objectives, context, and needs of different youth groups.
- Knowledge of interdisciplinary approaches integrating AI with other disciplines, such as ethics, law, psychology, and social sciences, for a broader and more integrated education on AI.
- Understanding the potential biases in AI learning materials and their impact on learners.
- Awareness of current trends and developments in AI education.
- Knowledge of strategies for integrating diverse AI learning resources into comprehensive non-formal education programs.

SKILLS

- Ability to identify and select appropriate AI learning resources for different educational objectives and target groups.
- Ability to assess the quality and credibility of AI training materials.
- Skills in integrating various AI resources to create comprehensive and effective learning plans (e.g., instructional design skills and technical skills to use various AI tools and platforms).
- Ability to facilitate introductory sessions and guide young people using AI learning resources.
- Ability to analyse and evaluate the effectiveness of AI learning resources.
- Critical thinking and proficiency in identifying, analysing and implementing strategies to mitigate biases in AI educational content.
- Ability to develop strategic plans for selecting and using AI learning resources.
- Proficiency in customising AI learning resources to meet specific educational challenges and needs.

ATTITUDES

- Valuing the importance of high-quality and suitable AI learning resources in youth work.
- Promoting ethical and responsible use of AI learning materials.
- Encouraging continuous evaluation and improvement of AI educational resources.
- Appreciating the diverse learning needs and contexts of different youth groups.
- Cultivating an open-minded and proactive approach to selecting and using AI learning resources.
- Advocating for fairness and inclusivity in AI education.
- Demonstrating a commitment to ongoing professional development in AI literacy and resource selection.
- Fostering a supportive and inclusive environment for young people to engage with AI learning materials.

2.3 Creating resources with AI

To use AI technologies to support the creation of resources for different youth workers' functions[2].

DIMENSION 3: **PROFICIENCY LEVELS**

FOUNDATION

1

- **Identify various AI tools available for creating training and learning resources** (e.g., GenAI tools to create personalised learning plans, multimedia learning contents or facilitator sheets).
- **List various AI tools available for creating support resources to foster youth's societal engagement and empowerment** (e.g. GenAI tools supporting the creation of community engagement guides, roadmaps for individual or collective actions for social change, role-playing simulations).
- **Recognise various AI tools available for creating resources to support participatory evaluations** (e.g., GenAI tools to support the creation of evaluation surveys, AI-driven survey tools, and AI-driven platforms creating data visualisations).
- **Identify various AI tools available for creating resources to enhance teamwork and organisational development** (e.g., AI-driven systems to generate team performance analysis reports, and GenAI tools to create templates or guidelines).
- **Identify various AI tools available for creating support resources for project management and evaluation** (e.g., GenAI tools to develop templates of project documentation or communications, AI systems to create automated project reports, AI-driven platforms to create data visualisations or Gantt charts).

2

- **Explain how AI tools can assist in creating resources** that meet specific youth work functions and objectives.
- **Recognise the importance of aligning AI-created resources** with the context and needs of target groups (e.g., adapting content to different social and cultural backgrounds, tailoring resources for specific age groups or community contexts).
- Have **basic interactions with AI tools** to create simple resources (e.g., generating a quiz using AI, or creating a visual aid with an AI graphic design tool).

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[2] Youth workers' functions refer to those outlined in the Council of Europe's *Youth Work Portfolio*. More information at https://www.coe.int/en/web/youth-portfolio

INTERMEDIATE

3

- **Use AI tools to create comprehensive resources** that align with specific youth work functions and objectives (e.g., creating comprehensive training programs or project documents)..
- **Integrate various AI-powered tools** to enhance the quality, effectiveness and attractiveness of different resources (e.g., combining AI-generated text with AI-designed visuals, interactive elements, and multimedia content).
- **Interact effectively with AI tools** to create multimedia resources (e.g., producing images, videos, schedules, outlines of training programs).

4

- **Analyse the effectiveness of AI-generated resources** in achieving the desired objectives related to each youth worker's function (e.g., learning outcomes, youth engagement and empowerment, teamwork, more effective project management).
- **Evaluate the suitability of different AI tools** for creating resources tailored to diverse contexts and needs (e.g., comparing tools for their functionality, ease of use, and adaptability).
- **Assess the quality and reliability of AI-generated content**, ensuring it meets ethical requirements (e.g., verifying accuracy, checking for biases, and ensuring the content is culturally sensitive and inclusive).

ADVANCED

5

- **Evaluate potential biases in AI-generated resources** and their impact on learning outcomes (e.g., identifying cultural or gender biases in content).
- **Judge the ethical considerations** of using AI for creating resources, ensuring fairness and inclusivity (e.g., addressing data privacy concerns, promoting diverse perspectives, and ensuring equitable access to AI-generated resources).

6

- **Design comprehensive AI-driven strategies** for creating resources tailored to specific contexts and target groups (e.g., developing a curriculum incorporating diverse AI tools, and creating adaptive learning materials).
- **Develop custom AI solutions** to address specific youth work challenges and needs, creating innovative solutions for diverse environments (e.g., building AI assistants, autonomous agents or intelligent tutoring systems with no-/low-code tools).

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowledge of various AI tools available for creating training, learning and support resources.
- Understanding the basic functions and capabilities of commonly used AI tools in content creation.
- Knowledge of educational standards and ethical guidelines related to AI-generated content, like the *Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators* and the *Ethics guidelines for trustworthy AI* by the High-Level Expert Group on AI set up by the European Commission.
- Understanding potential biases in AI-generated resources and their impact on the desired outcomes of youth work activities.
- Knowledge of prompting strategies, patterns and techniques to better interact with generative AI tools.

SKILLS

- Skills to identify and select appropriate AI tools for creating resources aligned with specific youth work objectives (e.g., technical literacy, research skills, analytical thinking, and decision-making).
- Proficiency in crafting inputs for AI tools to produce optimal outputs (i.e., prompt engineering).
- Skills to use AI tools to create high-quality, engaging training, learning and support resources (e.g., creativity and content creation skills, technical competence in operating AI tools and troubleshooting any technical issues that arise).
- Skills to integrate various AI tools to enhance the overall quality and effectiveness of resources.
- Skills to assess AI-generated resources' quality, reliability and effectiveness (e.g., critical thinking, data analysis and evaluation skills).
- Skills to address potential biases and ethical considerations in AI-generated content (e.g., capacity to analyse ethical principles related to AI and adapt the use of AI tools to comply with them).

ATTITUDES

- Openness and curiosity about emerging technologies and their applications in youth work.
- Cultural awareness and sensitivity to create and implement AI-generated resources which respect different cultural backgrounds.
- Commitment to ethical practices in the use of AI and a proactive approach to address potential biases in AI-generated content.
- Flexibility in adapting to new tools and methods, and resilience in the face of challenges.
- Commitment to ongoing professional development in AI literacy and content creation.
- Fostering a supportive and innovative environment for youth workers and youth to engage with AI-generated resources.

3. AI for Training & Learning

3.1 Designing programs with AI
3.2 Facilitating learning with AI

3.1 Designing programs with AI

DIMENSION 1: **COMPETENCE AREA**

3. AI FOR TRAINING AND LEARNING

DIMENSION 2: **COMPETENCE**

3.1 DESIGNING PROGRAMS WITH AI

To use AI technologies to develop and design non-formal learning programs that are youth-centred, innovative and responsive to the diverse needs of individual learners.

DIMENSION 3: **PROFICIENCY LEVELS**

FOUNDATION	**1**	• **Identify AI tools suitable for youth non-formal personal, social, and educational development programs.** • Apply basic AI features to **engage young people in simple activities.** • **Collaborate with mentors** to create structured, AI-enhanced, youth-centred content for non-formal learning programs.
	2	• **Explore various AI tools** and **implement foundational features**. • **Adapt simple non-formal learning programs** using AI to cater to individual learners' needs. • **Seek AI-driven guidance** selectively to refine and enhance non-formal education design.
INTERMEDIATE	**3**	• **Use AI technologies to develop youth work programs** that address specific learning outcomes. • **Customised content based** on AI-analysed learner feedback and straightforward data analysis. • **Select and integrate a wide range of AI tools** to ensure the programs remain engaging and responsive to diverse learners.
	4	• **Analyse data from AI tools** to design innovative, youth-centred programs. • Address non-routine challenges by developing tailored AI solutions. • **Enhance development experiences** by incorporating diverse AI-driven methods.
ADVANCED	**5**	• **Synthesise AI capabilities** to create complex and interactive learning environments • Mentor peers in effectively integrating AI into program design. • **Evaluate and refine youth work programs**' effectiveness using AI in response to participants' feedback.
	6	• **Lead the development of innovative non-formal learning programs** using AI. • **Collaborate with teams to tackle multifaceted challenges** in designing AI youth work programs. • **Innovate AI solutions tailored to complex youth work contexts,** meeting the diverse needs of individual participants.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding AI tools and familiarity with various AI platforms and tools used in educational/youth work settings.
- Knowledge of AI-enhanced learner-centred theories approaches, non-formal education and youth work principles.
- Awareness of ethical considerations and data privacy laws in using AI.
- Understanding AI capabilities and how AI can personalise learning experiences based on individual needs.
- Knowledge of designing innovative programs that incorporate AI effectively.

SKILLS

- Openness to AI innovation to embrace new technologies and innovative approaches in youth work.
- AI-enhanced youth-centred focus for prioritising the needs and experiences of individual learners.
- Ethical responsibility and commitment to ethical use of AI, ensuring privacy and security.
- Adaptability to learn continuously and integrate AI in a rapidly changing tech environment.
- Collaboration by valuing teamwork and sharing AI-related knowledge with peers to enhance learning outcomes.
- Inclusive attitude ensuring AI-integrated programs are accessible and responsive to diverse learner backgrounds and abilities.

ATTITUDES

- Ability to use AI tools to develop tailored youth work programs.
- Skill in analysing AI-generated learner data to inform program improvements.
- Problem-solving skills and capability to address challenges in program design using AI solutions.
- Ability to work with teams to integrate AI in youth work settings.
- Capacity to adapt AI tools to meet diverse learning styles and needs.
- Mentoring skills to guide others in effectively using AI technologies in educational contexts.

3.2 Facilitating learning with AI

DIMENSION 1: **COMPETENCE AREA**

3. AI FOR TRAINING AND LEARNING

DIMENSION 2: **COMPETENCE**

3.2 FACILITATING LEARNING WITH AI

To employ AI tools to support young people in managing their learning, and establishing dialogue and cooperation mechanisms with individuals, groups and communities.

DIMENSION 3: **PROFICIENCY LEVELS**

FOUNDATION

1
- **Identify AI tools that can assist in managing individual learning experiences.**
- **Use basic features of AI tools** under supervision to facilitate group discussions.
- **Support young people in exploring AI tools** to enhance their personal, professional and social journey.

2
- **Explore AI tools independently** to enhance youth work facilitation, seeking guidance as required.
- **Apply AI to foster group collaboration and dialogue,** adjusting approaches based on feedback.
- **Assist youth in managing their development paths** with AI tools, promoting engagement.

INTERMEDIATE

3
- **Implement AI technologies to support young learners' autonomy** and facilitate straightforward problem-solving.
- **Encourage youth to use AI tools** in managing their development experiences effectively.
- **Facilitate dialogue among youth,** using AI to enhance communication and cooperation.

4
- **Leverage AI tools to facilitate non-routine learning experiences** and well-defined challenges.
- **Guide young people in using AI** to manage their health, relationships, and self-confidence, and to address complex questions.
- **Establish effective communication channels** within groups through AI-enhanced platforms.

ADVANCED

5
- **Design and facilitate learning programs using AI,** mentoring peers in these methods.
- **Promote learner agency** by supporting personalised development paths through AI tools.
- **Lead discussions and cooperation efforts** within communities using AI to bridge communication gaps.

6
- **Innovate learning facilitation strategies** using AI, addressing complex needs of diverse youth.
- **Empower youth to manage their learning independently,** using AI in various contexts.
- **Foster collaboration and dialogue across communities**, leveraging AI to connect diverse groups.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding various AI tools for learning and platforms that assist in learning facilitation.
- Familiarity with AI-driven LMS - Learning Management Systems that support young learners' autonomy.
- Knowledge of AI tools and communication technologies that enhance dialogue and cooperation.
- Understanding the basics of digital literacy as it pertains to AI use.
- Awareness of theories and practices in collaborative and group learning, enhanced by AI technologies.
- Understanding ethical implications of AI in youth work settings.

SKILLS

- Ability to use AI to enhance communication among learners and groups.
- Skill in helping and guiding youth use AI to autonomously manage their own development paths.
- Problem-solving skills utilising AI tools to address youth challenges and facilitate solutions.
- Community building skills using AI to establish cooperation mechanisms within communities.
- Implementing AI-driven adaptive facilitation techniques to meet diverse needs.
- Skills for feedback integration or incorporating AI-driven feedback into development facilitation.

ATTITUDES

- Empathy for understanding and responding to diverse learner needs through AI.
- Collaboration attitude for teamwork and to share youth learning experiences facilitated by AI.
- Willingness to explore and integrate new AI tools into youth work environments.
- Commitment to the ethical use of AI and ensuring its benefits are maximised for all young learners.
- Inclusivity to ensure that AI tools are used to support all young learners, regardless of background.
- Dedication to ongoing professional development in AI technologies and their educational/youth work applications.

4.
Assessment
& Evaluation

4.1 Assessing and evaluating with AI

4.1 Assessing and evaluating with AI

DIMENSION 1: COMPETENCE AREA

4. ASSESSMENT AND EVALUATION

DIMENSION 2: COMPETENCE

4.1 ASSESSING AND EVALUATING WITH AI

To use AI to support the evaluation and assessment of collective and individual learning achievements, provide data-driven feedback, and foster continuous improvement.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- Identify **AI tools** that assist in **evaluating learning outcomes**.
- Use basic features of AI to **collect data on young learner achievements**.
- **Interpret the basic AI-generated assessment results.**

2
- **Explore AI tools** to gather data on individual and group learning.
- **Apply AI insights** to provide basic feedback to young people, seeking guidance as necessary.
- **Assist in the analysis of AI-driven assessment data** to support continuous improvement.

INTERMEDIATE

3
- **Use AI technologies** to evaluate learning outcomes independently.
- **Analyse data from AI assessments** to offer meaningful, data-driven feedback.
- **Facilitate young people's reflection** based on AI-generated insights.

4
- **Use AI to assess complex youth programme achievements** and provide targeted feedback.
- **Interpret diverse AI-generated datasets** to identify areas for youth improvement.
- **Develop personalised feedback** mechanisms using AI insights.

ADVANCED

5
- **Design comprehensive assessment strategies** using AI and mentor others in their application.
- **Evaluate the effectiveness of AI-driven assessments** and advice on best practices.
- **Lead initiatives to integrate AI** in assessment processes, fostering a culture of continuous improvement.

6
- **Innovate assessment methods** using AI in complex youth work environments, addressing diverse needs.
- **Empower learners with personalised, AI-driven feedback**, supporting their development.
- **Collaborate with communities** to establish advanced assessment frameworks leveraging AI.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding various platforms using AI for evaluating young people's personal, social, and learning achievements.
- Knowledge of AI-enhanced data analysis techniques to analyse and interpret assessment data.
- Familiarity with AI-driven feedback mechanisms and their application.
- Understanding different AI-driven assessment methodologies and frameworks for educational assessment.
- Insight into how AI analytics inform youth development and improvement.
- Knowledge of key performance metrics for assessing young learner progress using AI tools.
- Awareness of ethical considerations in AI-driven assessment.
- Understanding of adaptive learning technologies on how AI supports personalised learning paths.

SKILLS

- Commitment to growth and continuous improvement through AI-driven approaches in education.
- Ethical responsibility to ensure the ethical use of AI and safeguarding youth data privacy.
- Receptive to AI insights and using them to enhance youth work practices.
- AI-enhanced youth-centred focus to prioritise individual learner needs and customising feedback.
- Encouraging teamwork and shared learning through AI assessments.
- Empathy to understand and support diverse young learner experiences through AI evaluations.
- Innovative thinking, embracing new ideas and methods for using AI in assessment and feedback.

ATTITUDES

- Ability to analyse AI-generated data to assess learning outcomes.
- Skill in delivering meaningful, AI-driven and constructive feedback to youth.
- Proficiency in using AI tools to evaluate both individual and group achievements.
- Using AI-generated assessment data to foster ongoing youth work enhancement.
- Utilising AI for problem identification to pinpoint and address youth challenges.
- Working with teams to implement AI-driven evaluation strategies.
- Tailoring assessment approaches based on AI insights.
- Ability to effectively incorporate AI feedback into youth work.

5.
Empowering Young People

5.1 Employing inclusive AI systems
5.2 Differentiating and personalising learning with AI

5.1 Employing inclusive AI systems

DIMENSION 1: COMPETENCE AREA

5. EMPOWERING YOUNG PEOPLE

DIMENSION 2: COMPETENCE

5.1 EMPLOYING INCLUSIVE AI SYSTEMS

To employ AI systems that are accessible and inclusive, ensuring that all young people, regardless of their background or abilities, can benefit from them. To use AI systems that enhance inclusive non-formal education and youth work.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify various AI systems designed** to enhance inclusivity and accessibility (e.g., text-to-speech tools, AI translators, adaptive learning platforms).
- **Recall the basic features of an inclusive AI system** (e.g., voice recognition, multi-language support, accessibility settings).

2
- **Explain how AI** systems can be used to **support inclusivity** in youth work (e.g., using AI for personalised youth development paths, and adaptive content delivery).
- Recognise potential **benefits and challenges in terms of accessibility in AI systems.**
- Have **basic interactions with AI systems** that promote inclusivity (e.g., setting up a text-to-speech tool, using AI translation services).

INTERMEDIATE

3
- **Choose inclusive AI technologies** based on accessibility features to cater to diverse young people effectively.
- Use **AI systems to create inclusive educational and youth work activities** (e.g., designing activities that use AI to support learners with special needs).
- **Integrate AI tools that enhance inclusivity** into existing youth work programs (e.g., incorporating AI translators in workshops, using adaptive learning platforms).

4
- **Analyse the effectiveness of different AI systems** in promoting inclusivity and accessibility in youth work.
- **Evaluate the suitability of AI systems** for diverse youth groups, considering factors such as language, ability, and cultural background (e.g., testing AI tools with different user groups and gathering participant feedback).
- **Assess the ethical implications of using AI systems** in youth work, ensuring they promote inclusivity and do not reinforce biases (e.g., reviewing the outputs of AI systems for fairness and accessibility compliance).

ADVANCED

5

- **Evaluate the effectiveness of adopted AI** technologies in enhancing equitable access for all young people.
- **Criticising the inclusiveness of AI** education strategies to identify and address any shortcomings.
- **Reflect on the use of AI tools** for continuous improvement in approaches to inclusive youth work practices.

6

- **Continuously adapt AI integration strategy** in youth work to meet the evolving needs of young people from diverse backgrounds.
- **Train peers on selecting and using inclusive AI systems**.
- **Solve complex challenges** related to AI use in diverse learning contexts to enhance learning outcomes.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowledge of various assistive technologies (e.g., screen readers, speech-to-text software) and how these can be integrated with AI to support young people with physical or mental constraints and learning disorders.
- Familiarity with inclusive pedagogical strategies that leverage AI to accommodate diverse learning styles, contexts, and needs, ensuring all young people can engage effectively.
- Understanding of different cultural contexts and backgrounds, and how these can influence young people's engagement with AI technologies, non-formal learning activities and youth work programs.
- Knowledge of how to use educational data analytics to track and analyse young people's progress, identify gaps in engagement or performance among different groups, and make data-driven decisions to enhance the inclusivity and effectiveness of AI systems and strategies.
- Awareness of issues related to digital equity, including the digital divide, and strategies to provide equitable access to AI technologies and resources for all young people.
- Knowledge of legal and ethical considerations surrounding the use of AI in youth work, including data privacy, consent, and avoiding biases that may disadvantage certain groups.
- Understanding methods for evaluating the effectiveness and inclusivity of AI systems and strategies, and how to adapt these based on feedback and ongoing reflection to better serve diverse groups of young people.

SKILLS

- Ability to identify and select appropriate AI systems for promoting inclusivity and accessibility in youth work.
- Technical competence in using AI systems to create inclusive educational activities and resources.
- Ability to facilitate training sessions and workshops on using inclusive AI systems.
- Competence in analysing and evaluating the effectiveness of inclusive AI systems.
- Critical thinking and analytical skills to identify and address potential ethical issues in the use of AI systems.
- Ability to develop strategic plans for employing inclusive AI systems in youth work.
- Ability to creatively address and resolve issues related to digital equity and accessibility, finding innovative solutions to ensure all young people have equal opportunities to benefit from AI technologies.
- Proficiency in analysing data from AI systems to monitor young people's progress, identify trends, and adjust instructional strategies to better meet the needs of all young people.

ATTITUDES

- Valuing the importance of inclusivity and accessibility in AI systems used in youth work.
- Empathetic attitude towards understanding and addressing the diverse needs and challenges faced by young people with different backgrounds and abilities.
- Proactive approach to creating an inclusive learning environment by employing AI strategies that cater to a wide range of young people, including those with special needs.
- Openness to learning about and respecting different cultural contexts and backgrounds, ensuring that AI resources and practices are culturally sensitive and relevant.
- Willingness to continuously monitor, reflect on, and adapt AI strategies and resources to better suit the diverse needs and contexts of all young people.
- Collaborative spirit that values successful communication and teamwork among diverse groups to enhance the inclusivity of AI youth work practices.
- Dedication to ongoing professional development and reflective practice, constantly seeking ways to improve the accessibility and inclusivity of AI systems in youth work.

5.2 Differentiating and personalising learning with AI

DIMENSION 1: COMPETENCE AREA

5. EMPOWERING YOUNG PEOPLE

DIMENSION 2: COMPETENCE

5.2 DIFFERENTIATING AND PERSONALISING LEARNING WITH AI

To use AI to enhance the tailoring of non formal learning experiences to individual young people's needs, promoting personalised learning paths and addressing diverse learning styles.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify various AI tools available for personalising youth work experiences** (e.g., adaptive learning platforms, AI-driven tutoring systems or recommendation systems).
- **Recall the basic functions of a commonly used AI tool** for personalised learning (e.g., adaptive quizzes, personalised content recommendations).
- **Recognise the benefits of using AI** to personalise development experiences in youth work (e.g., tailored learning paths, increased engagement, improved learning outcomes, health, relationships, and self-confidence).

2
- **Relate AI capabilities to inclusion objectives** of youth work activities.
- Recognise the importance of selecting AI tools that **support diverse learning styles and needs** (e.g., tools that offer visual, auditory, and kinesthetic learning options).
- **Have basic interactions with AI tools** that personalise youth development programmes (e.g., setting up a personalised learning path on an adaptive platform, using AI recommendations to guide learning sessions).

INTERMEDIATE

3
- **Integrate AI tools to create personalised development experiences for young people.**
- Select the most appropriate **AI tools for diverse youth work needs**.
- **Execute personalised learning plans with AI technology** to cater to each participant's unique requirements.

4
- **Analyse the effectiveness of different AI tools** in personalising learning experiences and meeting individual needs.
- **Evaluate the suitability of AI tools for different learning styles** and preferences, considering factors such as adaptability, ease of use, and accessibility.
- **Assess the quality and reliability of AI-driven personalised youth development systems**, ensuring they meet educational standards and ethical guidelines (e.g., verifying accuracy, and checking for biases).

ADVANCED

5

- **Validate the effectiveness of AI-driven non-formal learning strategies** to ensure that methods are evidence-based and reliable.
- **Criticise the limitations of current AI tools** to seek better solutions and improvements.
- **Reflect on the successes and challenges of AI** implementation for continuous refinement of approaches.

6

- **Design comprehensive strategies** for using AI to personalise youth development experiences tailored to specific contexts and individual needs.
- **Mentor peers on methods and practice**s to use AI for guidance personalisation.
- **Solve complex challenges** related to obstacles to participation with the support of AI technology.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowledge of various AI technologies and tools that can be used for personalised learning, such as adaptive learning platforms, AI-driven tutoring systems, and recommendation algorithms.
- Familiarity with different learning theories (e.g., constructivism, cognitivism) and pedagogical approaches that support personalised learning, enabling effective integration of AI into these frameworks.
- Understanding of various special education needs and how AI can be used to address these needs.
- Knowledge of how to use data analytics to monitor youth progress, identify individual learning patterns, and make data-driven decisions to enhance personalised learning experiences.
- Awareness of ethical issues related to the use of AI in youth work, including privacy concerns, data security, and the potential for algorithmic bias, ensuring responsible use of AI technologies.
- Competence in creating and implementing individualised youth work plans that leverage AI to support each young person's unique educational journey, goals, and pacing.

SKILLS

- Ability to identify and select appropriate AI tools for personalising learning experiences.
- Skill in analysing data from AI systems to monitor young people's progress, identify learning patterns, and make informed decisions to adjust youth work practices and support.
- Proficiency in designing and implementing individualised learning plans that leverage AI technologies, addressing each young person's unique goals, strengths, and challenges.
- Ability to adapt pedagogical strategies based on AI-generated insights to accommodate different learning styles, paces, and levels, ensuring that each young person is effectively supported.
- Skill in communicating effectively with youth, colleagues, and stakeholders about the use of AI in personalised learning, fostering a collaborative environment that supports individual learning paths.

ATTITUDES

- Valuing the importance of prioritising and supporting the individual learning needs and goals of each young person, recognizing and valuing their unique strengths and challenges.
- Openness to explore and integrate AI technologies and approaches that can enhance personalised learning experiences and outcomes.
- Valuing the importance of understanding the diverse needs of young people, including those with special needs and a willingness to adapt facilitation and training methods accordingly.
- Dedication to continuously improving personal competence in using AI for personalised learning through ongoing reflection, feedback, and professional development.
- Commitment to ensuring that AI technologies are used to create equitable learning opportunities for all, regardless of their background or abilities.

6. Facilitating Young People's AI Competences

6.1 Fostering young people's data literacy
6.2 Assessing and evaluating young people's AI competences
6.3 Fostering ethical and responsible use of AI systems

6.1 Fostering young people's data literacy

DIMENSION 1: COMPETENCE AREA

6. FACILITATING YOUNG PEOPLE'S AI
COMPETENCES

DIMENSION 2: COMPETENCE

6.1 FOSTERING YOUNG PEOPLE'S DATA
LITERACY

To support young people in developing the knowledge, attitudes, and skills to recognise, analyse, interpret and use data ethically and effectively.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION	1	• **Describe different data types** and their uses in society. • **Explain sources of data** (e.g., apps, sensors, and GPS) and formats. • **Describe basic data collection methods**, such as surveys, observations and experiments.
	2	• **Discuss how data is processed, stored, and manipulated** by algorithms and apps. • **Explain the concepts of data security,** surveillance, and data rights. • **Discuss the trade-offs** related to data sharing.
INTERMEDIATE	3	• **Describe how to configure privacy settings,** revoke access, or request data erasure. • **Present basic methods and tools** to collect, manage and share data. • **Present examples of how collected data** can be applied to change behaviour (e.g., from a health app) and make informed decisions.
	4	• **Guide young people in synthesising, visualising, and representing data** in different formats using tools such as Excel or Google Sheets. • **Explain different principles, methods and practices to assess the quality of data** sources and identify misrepresentations or biases in datasets. • **Guide young people in recognising and self-regulating** their data footprint.
ADVANCED	5	• Guide young people in **using data to address community issues**, fostering civic engagement and practical problem-solving skills. • **Enhance collective data awareness** on the opportunities and challenges in data use. • Lead **collaborative evaluations on the ethical implications of data use**.
	6	• Organise and lead workshops, hackathons, and community projects on data literacy. • Lead the design and evaluation of large-scale initiatives aimed at improving data literacy on a regional or national level. • **Participate in data-based policy-making processes**.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Knowledge of what data is, its different forms, how it is created and applications in society.
- Knowledge of data analysis techniques such as machine learning and predictive analytics.
- Knowledge of relevant national, European and international regulation about data, including GDPR.
- Familiarity with AI data collection processes (e.g., collecting, organising, and curating data from different sources to feed AI algorithms).
- Understanding how data is processed, stored, and manipulated by algorithms and apps.
- Awareness of data security, surveillance, and data rights.
- Knowledge of the benefits and risks associated with sharing data.
- Knowledge of tools and methods for collecting, managing, and sharing data.
- Knowledge of principles, methods, and practices to assess the quality of data sources and identify misrepresentations in datasets.

- Ability to recognise potential biases in data.
- Ability to customise privacy and data settings of common applications.
- Ability to collect, organise, and clean data using simple tools (e.g., spreadsheets).
- Ability to guide young people to use basic AI tools for data analysis, (e.g., Excel or Google Sheets with AI add-ons).
- Ability to use AI-driven analytics tools (e.g., Tableau) for more complex data analysis.

ATTITUDES

- Respect for privacy, quality and integrity of data, and access to data.
- Critical mindset towards data, questioning sources, and methodologies.
- Valuing the role of data in making informed and evidence-based decisions.
- Encouraging ongoing training and curiosity about data science.

6.2 Assessing and evaluating young people's AI competences

DIMENSION 1: **COMPETENCE AREA**

6. FACILITATING YOUNG PEOPLE'S AI COMPETENCES

DIMENSION 2: **COMPETENCE**

6.2 ASSESSING AND EVALUATING YOUNG PEOPLE'S AI COMPETENCES

To assess and evaluate the AI competences of young people, providing targeted feedback and support.

DIMENSION 3: **PROFICIENCY LEVELS**

FOUNDATION

1
- **Identify AI tools** to evaluate basic AI competences.
- **Use simple metrics** to collect data on young people's AI skills.
- Provide **basic feedback** to support AI skill development.

2
- **Explore AI assessment tools** to evaluate competences autonomously, seeking guidance as needed.
- **Apply basic AI insights** to offer targeted feedback for AI skill improvement.
- **Support youth in understanding their AI competences** and identifying growth areas.

INTERMEDIATE

3
- **Implement AI technologies** to assess straightforward AI competences.
- **Analyse AI assessment results** to provide constructive feedback to young learners.
- **Facilitate skill enhancement** by addressing straightforward challenges in AI competences.

4
- Use AI tools to **assess non-routine and well-defined competence**.
- **Interpret complex data** to identify areas for improvement in young learners' AI skills.
- **Develop personalised support strategie**s to enhance youth AI competences.

ADVANCED

5
- **Design comprehensive evaluation frameworks for AI competences** and mentor peers in their implementation.
- **Evaluate and refine AI assessment strategies** to ensure they meet young learners' needs effectively.
- **Lead initiatives to integrate AI assessments**, fostering a culture of continuous competence development.

6
- **Innovate strategies** for assessing AI competences in complex learning environments.
- **Empower youth with tailored feedback and support** to enhance their AI skills.
- **Collaborate with educational communities** to develop advanced frameworks for assessing and supporting AI competences of youth.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding of AI frameworks for assessing AI skills in youth.
- Knowledge of tools used to evaluate youth AI competences effectively.
- Familiarity with interpreting data from AI assessments.
- Understanding how to deliver targeted, AI-driven constructive feedback for youth.
- Awareness of methods to support and enhance learners' AI competences.

SKILLS

- Commitment to growth and continuous development of AI competences in youth.
- Responsibility to ensure ethical AI assessment practices and youth data privacy.
- Understanding of individual young learner needs and tailoring AI-driven support accordingly.
- Openness to technology: new AI tools and methods for assessment.
- Working with others to enhance AI-based assessment processes and outcomes.

ATTITUDES

- Proficiency in using AI tools to assess competences.
- Ability to analyse AI-generated assessment data to identify young people skill gaps.
- Skill in providing clear, actionable AI-driven feedback to young learners.
- Tailoring support strategies based on AI-generated individual assessment outcomes.
- Addressing challenges in assessing and developing AI competences of youth.

6.3 Fostering ethical and responsible use of AI systems

DIMENSION 1: COMPETENCE AREA

6. FACILITATING YOUNG PEOPLE'S AI COMPETENCES

DIMENSION 2: COMPETENCE

6.3 FOSTERING ETHICAL AND RESPONSIBLE USE OF AI SYSTEMS

To support young people to make responsible use of AI systems.

DIMENSION 3: PROFICIENCY LEVELS

FOUNDATION

1
- **Identify the ethical challenges of AI**, such as bias, privacy issues, and misinformation, to guide young people in responsible technology use.
- **Describe how AI systems can influence information and behaviour**, such as shaping social media feeds or personalising advertisements.
- Explain the **social implications of AI technologies**, highlighting both their benefits and potential risks.

2
- Illustrate the concept of **filter bubbles and echo chambers created by AI** algorithms in social media.
- Describe **applicable national, EU and international regulations** related to AI use, including GDPR.
- Discuss the **risks related to overconfidence in or overreliance** on AI systems.

INTERMEDIATE

3
- Explain the **functioning mechanisms** of an AI system.
- Train young people on **basic interactions with AI** (e.g., how to interact with generative AI tools while preserving privacy, confidentiality or intellectual property).
- List examples of **ethical and unethical uses of AI**.

4
- Guide young people to **critically evaluate outputs of AI systems**.
- Train youth on **methods and practices to recognise and mitigate biases** in AI systems.
- Develop **practical youth development experiences on AI** to help young people learn about ethics of AI and data use.

ADVANCED

5
- Lead **collaborative personal, social, and educational development projects** on AI.
- **Evaluate the effectiveness of educational initiatives focused on AI** ethics and responsible use.
- **Adapt educational programs** to include the latest development in AI ethics.

6
- Guide young people and peers in **assessing the trustworthiness of AI systems**.
- **Initiate and promote initiatives across the organisation and its wider community** that promote ethical and responsible use of AI among young people.

DIMENSION 4: **KNOWLEDGE, SKILLS AND ATTITUDES**

KNOWLEDGE

- Understanding issues such as bias, privacy concerns, and misinformation in AI systems.
- Knowledge of recognised principles and requirements for ethical use of AI, such as those outlined in the *Ethics guidelines for trustworthy AI* by the High-Level Expert Group on AI set up by the European Commission.
- Knowledge of how AI systems shape social media feeds and personalise advertisements.
- Familiarity with national, EU, and international regulations, including GDPR.
- Knowledge of the dangers of excessive dependence on AI systems.
- Knowledge of methods and good practices to interact with AI tools while maintaining privacy, confidentiality, and IP rights.
- Knowledge of methods and good practices to identify and reduce biases in AI systems.

SKILLS

- Facilitating open discussions and dialogues about ethical considerations related to AI, encouraging critical thinking and reflection among young people.
- Ability to develop non-formal education programs and youth work activities that integrate discussions and exercises on AI ethics and responsible use.
- Critical thinking, to critically analyse AI-generated content, such as identifying deep fakes or understanding how algorithms shape information presented on social media platforms.
- Ability to address ethical dilemmas and challenges related to AI use, guiding young people in finding solutions that promote fairness, transparency, and respect for privacy.
- Communication and collaboration skills to collaborate with stakeholders, including educators, parents, and community members, to develop strategies and resources for promoting ethical AI use among young people.
- Critical thinking and analytical skills to evaluate the effectiveness of educational or advocacy initiatives focused on AI ethics and responsible use, and providing constructive feedback for improvement.

ATTITUDES

- Commitment to understanding and promoting ethical considerations related to AI, including issues of privacy, bias, and the potential for misuse such as deepfake content.
- Willingness to critically evaluate AI technologies and their impact on society, including their ability to perpetuate biases and affect social behaviours and opportunities.
- Sense of responsibility for ensuring that AI systems are used in ways that protect personal data, privacy, and the well-being of individuals and communities.
- Understanding of how AI technologies can impact social inclusion and well-being across different cultural contexts, and a commitment to promoting inclusive and equitable AI practices.
- Openness to staying informed about the latest developments in AI technologies and their ethical implications, and a commitment to ongoing professional development in this area.
- Openness to fostering learning environments where AI technologies are seen as tools that complement and support educational journeys, promoting critical engagement and responsible use among young people.

4. WAYS FORWARD

This framework provided a conceptual reference model of knowledge, skills, and attitudes youth workers need to address and leverage AI technologies in their work. It could serve multiple purposes, from raising awareness about the importance of AI competences for youth workers to designing training opportunities on AI for youth professionals.

Designing inclusive training opportunities - There are significant differences between youth workers who are well-versed in digital tools and enthusiastic about AI, and those who feel alienated and excluded from these topics. This has been noted by Pawluczuk (2023) and further supported by research conducted by the AI4YouthWork project consortium (Lanzetta et al., 2024). Many youth workers feel confused and fearful about how AI tools will be used in their field. Their emotions and viewpoints range from apprehension, scepticism, and resistance to feelings of enthusiasm and recognition of the significance of AI's role in their work. As a result, on the one hand, youth workers are missing opportunities to use AI to improve their work. On the other hand, they risk being unprepared for the challenges faced by the new generation of digital natives. Many AI-powered tools have the potential to affect youth work's efforts to enhance social inclusion, empower young people to become critical thinkers and engage in meaningful communication with them.

Training programs aimed at developing youth workers' AI competences should take these differences into account and provide targeted support and resources to ensure a positive impact on both digitally included and AI-enthusiastic youth workers, as well as those with limited digital competences who feel burdened by digital fatigue.

Lifelong learning and continuous professional development - AI competences must be continually developed and updated to keep pace with technological advancements. Lifelong learning should incorporate AI competences across disciplines to prepare youth workers for the evolving demands of their roles. Recommendations include:

- Integrating AI competences into continuous professional development programs for youth work professionals.
- Encouraging youth workers to engage in ongoing professional development opportunities, such as workshops, online courses, and conferences focused on AI and digital transformation.
- Promoting a culture of lifelong learning within youth organisations, supporting youth workers in staying current with AI developments.

Practical guidelines for developing AI competences - To effectively develop youth workers' AI competences, the following pedagogical approaches, practices, and strategies may be adopted:

- Concept-based learning: concept-based learning can be an effective approach to developing AI competences among youth workers. It focuses on understanding broader concepts and principles, helping youth workers grasp the key concepts and fundamental principles of AI applications that are relevant to their work.

- Active learning experiences: engaging youth workers in hands-on activities that involve the practical application of AI tools and technologies to their activities and daily challenges.
- Gameful design: gameful learning experiences can make AI concepts more accessible and engaging. Through collaborative challenges, narrative and storytelling, youth workers may be engaged in contextual learning experiences, making AI concepts more relatable and easier to understand.
- Case studies and simulations: analysing real-world case studies and conducting simulations can be useful to illustrate the ethical and practical implications of AI technologies in youth work.
- Blended and online learning: incorporating digital technologies to provide flexible and accessible learning opportunities.
- Collaborative approaches: Encouraging cooperation with external partners, such as tech companies, educational institutions, and community organisations, can help provide diverse learning experiences and resources.

Promoting ethical AI practices - Ethical and responsible AI use is a cornerstone of this framework. Youth workers should be equipped to:

- Advocate for positive AI policies and practices that protect young people's rights and interests.
- Ensure transparency and ethical standards in AI applications, addressing issues such as data privacy and consent.

- Promote AI literacy and critical evaluation skills among young people, enabling them to make informed decisions about AI technologies.

Engaging policymakers and stakeholders - To support the widespread adoption of this framework, engagement with policymakers and stakeholders is essential. Recommendations include:

- Collaborating with policymakers to develop guidelines and regulations that support ethical AI use in youth work.
- Engaging with providers of professional development opportunities for youth workers to integrate AI competences into their programs.
- Working with industry partners to develop and disseminate AI tools and resources tailored to the needs of youth workers.

Encouraging community and network building - Building networks and communities of practice can enhance the impact of the AI Competence Framework. Youth workers should be encouraged to:

- Participate in professional networks and online communities focused on AI and digital literacy.
- Organise and attend conferences, workshops, and training sessions on AI competences.
- Share best practices, resources, and experiences with peers to foster a collaborative approach to AI integration.

GLOSSARY

ADAPTIVE LEARNING
A method of education or training using computers, that uses algorithms (= sets of mathematical rules) to change teaching material, exercises, etc. according to the needs and performance of each learner:

Source: https://dictionary.cambridge.org/dictionary/english/

ALGORITHMIC BIAS
Algorithmic bias describes systematic and repeatable errors in a computer system that create "unfair" outcomes, such as "privileging" one category over another in ways different from the intended function of the algorithm.

Source: https://en.wikipedia.org/wiki/Algorithmic_bias

ARTIFICIAL INTELLIGENCE
Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions.

Source:
https://digital-strategy.ec.europa.eu/en/library/definition-artificial-intelligence-main-capabilities-and-scientific-disciplines

ASSISTIVE TECHNOLOGY
Assistive technology (AT) is a generic term used to refer to a group of software or hardware devices by which people with disabilities can access computers. They can be specially developed and marketed devices or off-the-shelf products that have been modified. Assistive technology can include devices such as alternative keyboards and mice, voice recognition software, monitor magnification software, multiple switch joysticks, and text-to-speech communication aids.

Source: http://www.webopedia.com

ATTITUDES
Attitudes describe the disposition and mind-sets to act or react to ideas, persons or situations

Source:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)

CHATBOT
A chatbot is a software application or web interface that is designed to mimic human conversation through text or voice interactions. Modern chatbots are typically online and use generative artificial intelligence systems that are capable of maintaining a conversation with a user in natural language and simulating the way a human would behave as a conversational partner.

Source: https://en.wikipedia.org/wiki/Chatbot

CONCEPT-BASED LEARNING
Concept-based learning is a form of learning structured around conceptual and transferable understandings rather than subject-specific content. It encourages

learners to understand and apply knowledge across disciplines and to think critically and creatively.

Adapted from: Erickson, H. L., Lanning, L. A. & French, R. (2017). *Concept-Based Curriculum and Instruction for the Thinking Classroom.* Corwin. ISBN: 9781506355399.

CONTINUOUS PROFESSIONAL DEVELOPMENT
CPD is the means by which members of professions maintain, improve and broaden their knowledge and skills and develop the personal qualities required in their professional lives, usually through a range of short and long training programmes, some of which offer accreditation. This job-related continuing education and training refers to all organised, systematic education and training activities in which people take part in order to obtain knowledge and/or learn new skills for a current or a future job.

Source: Redecker C. (2017). *European Framework for the Digital Competence of Educators: DigCompEdu. Punie,* Y. (ed). EUR 28775 EN. Publications Office of the European Union, Luxembourg. ISBN 978-92-79-73494-6, doi:10.2760/159770. *Adapted from* http://www.umultirank.org/#!/glossary?trackType=home&sightMode=undefined &section=undefined - http://creativecommons.org/about

DATA
A collection of discrete or continuous values that convey information, describing the quantity, quality, fact, statistics, other basic units of meaning, or simply sequences of symbols that may be further interpreted formally.

Source: https://en.wikipedia.org/wiki/Data

DATA LITERACY
Data literacy refers to the competences needed to use data effectively for making informed decisions in everyday life and various contexts. It includes understanding data, recognising biases, and having the skills to collect, select, store, preserve and manage data; analyse, evaluate, interpret, critique, apply, use,

and work with data; and represent, visualise, and communicate stories from data. This also includes critically evaluating claims, considering ethical and legal aspects, and using data for problem-solving and decision-making.

Adapted from: https://dalicitizens.eu/

ECHO CHAMBER
Situations in social media and online discussion groups in which beliefs are amplified or reinforced by communication and repetition inside a closed, insulated system. Participants usually receive information that reinforces their existing views without encountering opposing views.

Source: Vuorikari, R., Kluzer, S. and Punie, Y. (2022). DigComp 2.2: The Digital Competence Framework for Citizens. EUR 31006 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-48882-8, doi:10.2760/115376. *Modified from:* en.wikipedia.org/wiki/Echo_chamber_(media)

FILTER BUBBLE
A filter bubble is a state of intellectual isolation that can result from personalised searches, recommendation systems, and algorithmic curation. The search results are based on information about the user, such as their location, past click-behaviour, and search history.

Source: https://en.wikipedia.org/wiki/Filter_bubble

GAMEFUL DESIGN
In a learning context, gameful design refers to the design of learning and teaching experiences as a game-like experience, It focuses on fostering intrinsic motivators like positive emotion, relationships, meaning, and accomplishment, encouraging active participation and deep engagement through frameworks such as player-centric design and feedback systems that support autonomy and stimulate exploration.

Adapted from: Dichev, C., Dicheva, D., Angelova, G., & Agre, G. (2014). *From gamification to gameful design and gameful experience in learning.* Cybernetics and Information Technologies, 14(4).

GENERATIVE AI (GenAI)

Generative AI systems are AI systems that generate, in response to a user prompt, synthetic audio, image, video or text content, for a wide range of possible uses, and which can be applied to many different tasks in various fields.

Source: https://ec.europa.eu/commission/presscorner/detail/en/ip_24_85

KNOWLEDGE

Knowledge is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject.
Source:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)

MACHINE LEARNING

Machine learning (ML) is a branch of artificial intelligence (AI) and computer science that focuses on using data and algorithms to enable AI to imitate the way that humans learn, gradually improving its accuracy.

Source: https://www.ibm.com/topics/machine-learning

NATURAL LANGUAGE PROCESSING

Natural language processing (NLP) is a subfield of computer science and artificial intelligence (AI) that uses machine learning to enable computers to understand and communicate with human language.

Source: https://www.ibm.com/topics/natural-language-processing

NEURAL NETWORKS

A neural network is a machine learning program, or model, that makes decisions in a manner similar to the human brain, by using processes that mimic the way biological neurons work together to identify phenomena, weigh options and arrive at conclusions.

Source: https://www.ibm.com/topics/neural-networks

SKILLS

Skills are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results.

Source:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)

TRUSTWORTHY AI

AI systems meeting the seven key requirements outlined in the Ethics Guidelines for Trustworthy Artificial Intelligence developed by the High-Level Expert Group on AI set up by the European Commission:

- *Human agency and oversight*: AI systems should empower human beings to make informed decisions and uphold their fundamental rights. At the same time, proper oversight mechanisms must be ensured, which can be achieved through human-in-the-loop, human-on-the-loop, and human-in-command approaches.

- *Technical Robustness and Safety*: AI systems need to be resilient and secure. They must be safe, ensure fairness in case something goes wrong, and be reliable and reproducible. This is the only way to ensure unintentional harm can be minimised and prevented.

- *Privacy and data governance*: In addition to ensuring full respect for privacy and data protection, adequate data governance mechanisms must also be

ensured, taking into account the quality and integrity of the data and ensuring legitimised access to data.

- *Transparency*: The data, system, and AI business models should be transparent. Traceability mechanisms can help achieve this. Moreover, AI systems and their decisions should be explained in a manner that is adapted to the stakeholders concerned. Humans must be aware that they are interacting with an AI system and must be informed of its capabilities and limitations.

- *Diversity, non-discrimination and fairness*: Unfair bias must be avoided, as it could have multiple negative implications, from the marginalisation of vulnerable groups to the exacerbation of prejudice and discrimination. Fostering diversity, AI systems should be accessible to all, regardless of any disability, and involve relevant stakeholders throughout their entire life circle.

- *Societal and environmental well-being*: AI systems should benefit all human beings, including future generations. Hence, they must be sustainable and environmentally friendly. Moreover, they should consider the environment, including other living beings, and their social and societal impact should be carefully considered.

- *Accountability*: Mechanisms should be implemented to ensure responsibility and accountability for AI systems and their outcomes. Auditability, which enables the assessment of algorithms, data, and design processes, plays a key role in this, especially in critical applications. Moreover, adequate and accessible redress should be ensured.

Source:
https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai

YOUTH WORK

Youth work is a broad term covering a wide variety of activities of a social, cultural, educational, environmental and/or political nature by, with and for young people, in groups or individually. Youth work is delivered by paid and volunteer youth workers and is based on non-formal and informal learning processes focused on young people and on voluntary participation. Youth work is quintessentially a social practice, working with young people and the societies in which they live, facilitating young people's active participation and inclusion in their communities and in decision making.

Source: https://www.coe.int/en/web/youth/youth-work

YOUTH WORKER

A professional or a volunteer involved in non-formal learning who supports young people in their personal socio-educational, and professional development.

Source:
https://erasmus-plus.ec.europa.eu/programme-guide/part-d/glossary-youth#:~:text=formal%20learning%20approach.-,Youth%20worker,%2Deducational%2C%20and%20professional%20development.

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