HeadStart

a future in AI for girls

HeadStart

Diversity, Equality & Inclusion Guidelines for AI Training Settings

www.headstart-ai.eu

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HeadStart a future in AI for girls

Introduction

*The Headstart project aims to equip young women and girls, particularly those from underrepresented backgrounds, with the **confidence, awareness, and foundational knowledge needed to engage with Artificial Intelligence (AI)**. By increasing their familiarity with AI technologies, concepts, and career pathways, the project seeks to bridge gender gaps in digital and STEM-related fields and empower young women to envision themselves as active contributors to the future of AI.*

The Headstart project aligns with Erasmus+ priorities by directly addressing the **horizontal priority of inclusion and diversity**, with a targeted focus on **gender equality in the field of Artificial Intelligence (AI)**. It also supports the **horizontal priority of digital transformation** by developing accessible, gender-sensitive learning resources and promoting ethical, hands-on use of AI technologies. Additionally, the project contributes to the **youth-specific priority of strengthening employability**, helping participants build the confidence, skills, and networks necessary for future careers in the digital and AI sectors. The AI Toolbox, including structured training modules, a Facilitator's Guide, and an inclusive pedagogical resource, serves as the central vehicle for translating Headstart's DEI commitment into concrete, adaptable tools for both formal and informal learning environments.

As AI technologies become more embedded in daily life, ensuring that **AI education is inclusive, equitable, and accessible** is essential. Diversity, equity, and inclusion (DEI) are not only ethical imperatives in education, they are key to developing fairer, more socially responsible AI systems. Inclusive AI education creates space for **multiple perspectives**, challenges embedded bias, and promotes broader participation in AI design, use, and policy. The **Headstart** project is committed to embedding diversity, equity, and inclusion (DEI) in all its educational activities. The entire project focuses on the Erasmus+ programme's policy priorities of Inclusion and diversity in all fields of education, training, youth and sport.

Introduction – Continued…

This document presents **DEI Guidelines specifically tailored to WP3**, the work package dedicated to the development of the **Headstart AI Toolbox**. The Toolbox includes a set of open, flexible training modules and a Facilitator's Guide designed to help educators, trainers and youth workers deliver inclusive, hands-on AI training. These resources were developed to:

- Promote gender-sensitive and culturally relevant AI learning,
- Provide accessible formats and multilingual content,
- Embed ethical reflection and DEI principles directly into activities,
- Be used across both **formal learning settings** (e.g., classrooms, VET programmes) and **informal spaces** (e.g., workshops, youth centres).

The purpose of this document is to provide **concrete, actionable DEI recommendations** for using the AI Toolbox to ensure that AI education is welcoming and empowering for all learners, especially girls and young women who are often excluded from digital and AI-related opportunities. The recommendations presented are fully aligned with the **Inclusion and Diversity Strategy (2021–2027)** of the **Erasmus+ and European Solidarity Corps** programmes. Our work directly supports the strategic objectives of making European programmes more inclusive, accessible, and equitable.

Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks

01

DEI Foundations in AI Learning

As a youth worker or educator, you play a key role in helping young women understand how Artificial Intelligence (AI) affects their lives and futures. The Headstart AI Toolbox was created to support you in this mission by offering practical, easy-to-use tools that also promote diversity, equity, and inclusion (DEI).

Why DEI Matters in AI

01.1

The importance of DEI in AI extends beyond ethical considerations; it is fundamental to the development of robust, fair, and beneficial AI technologies. Without diverse voices and perspectives, AI systems risk perpetuating existing societal inequalities.

Gender & racial bias in algorithms:

Many AI systems (like facial recognition or hiring tools) use data from the real world, data that may already reflect unfair treatment of women or people from minority backgrounds. If this data is incomplete, unrepresentative, or reflects historical biases, the AI system will inevitably replicate and even amplify these biases.

A **biased AI** can lead to discriminatory and even harmful outcomes across various applications: Face-recognition tools mis-identify women of colour 20 times more often than white men, or a CV-screening AI once downgraded résumés with the word "women's". Biased AI can affect scholarship offers, job ads, even social-media filters that shape self-image… (Washington Post 2019, OECD 2022, Amnesty International Canada 2021)

As a youth worker, you can help learners:

- Understand what **bias in data** looks like.
- Use activities from the **"Data and Bias in AI"** module to explore real-life examples.
- Talk about how we can build better, fairer technology.

Headstart Module 2, of the AI Toolbox, "AI Ethics," directly addresses these issues, exploring how AI can reflect and reinforce social biases and providing activities to examine stereotypes in AI image tools.

01.2

Underrepresentation in AI roles

In 2021, **less than 1 in 4 people working in AI were women**, and even fewer from low-income or minority backgrounds, and this gap is even more pronounced in leadership and technical roles (UNESCO).

Many girls never see someone like them working in tech, which makes it harder to imagine that they belong in those spaces. Moreover, the lack of diversity among AI developers, researchers, and policymakers directly contributes to the creation of biased AI systems. When the teams building AI are not representative of the diverse populations they serve, crucial perspectives and experiences are often overlooked.

Headstart helps you:

- Run activities made **for and with young women** in mind.
- Show **diverse female role models** working in AI and tech fields
- Create learning spaces where everyone feels **safe, seen, and supported**.

Headstart Module 1, "Introduction to Artificial Intelligence", and Module 4, "AI in the Job Market," specifically highlight this gender gap and encourage young women to envision themselves in AI careers.

01.3

The ethical imperative for Inclusive Design

Beyond avoiding harm, an ethical approach to AI demands active inclusion and thoughtful design. Inclusive AI design ensures that AI systems are developed with a diverse user base in mind, **promoting fairness, transparency, and accountability**.
AI systems should treat all individuals and groups equitably, avoiding discriminatory outcomes. This requires careful consideration of data, algorithms, and impact assessments.

Moreover, the decision-making processes of AI should be understandable and explainable, allowing for scrutiny and accountability, especially when AI impacts critical aspects of people's lives.

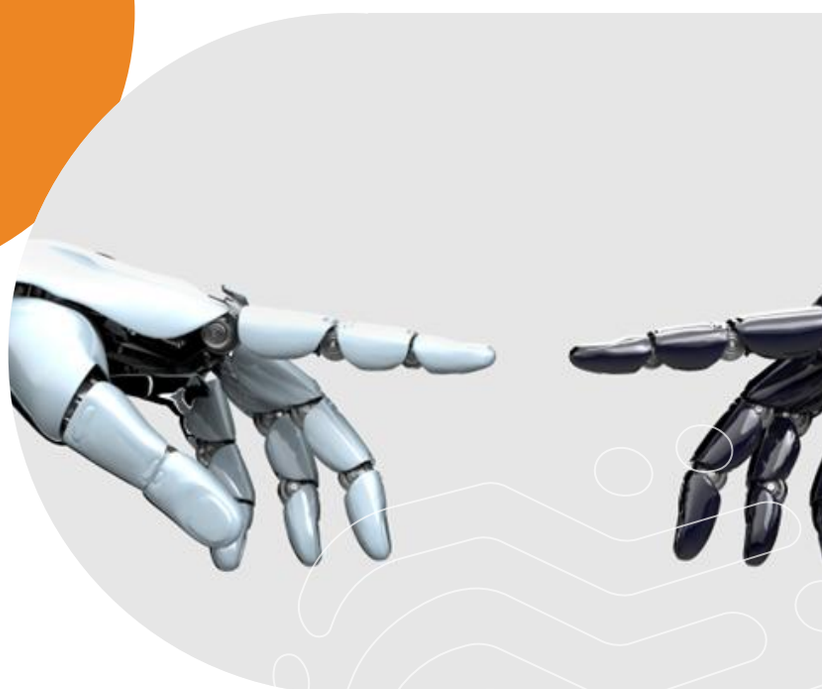
Module 5, "AI for Social Good," showcases how AI can be leveraged for positive societal impact, including in areas like healthcare and accessibility. Therefore, it underscores the importance of ethical and inclusive development. By fostering an understanding of these ethical imperatives, the Headstart project aims to cultivate a generation of AI users and creators who are committed to building AI for a better, more equitable future.

02 Key Definitions

To ensure a shared understanding and consistent application of DEI principles within Headstart activities, the following key terms are defined:

- Diversity, Equality, Inclusion
- Ethics
- Intersectionality in AI learning

Key Definitions



Diversity

Diversity encompasses a range of human differences, including race, ethnicity, gender, socioeconomic status, disability, language, and cultural background. In the Headstart project, embracing diversity means valuing and respecting these differences in all learning activities

Equity

Equity refers to fairness and justice in dealing with people, providing different levels of support based on individual needs to achieve equal outcomes. It means recognising that not everyone starts from the same place, and that intentional efforts are needed to address historical and systemic disadvantages. In Headstart, equity means ensuring that all young women, especially those from underrepresented backgrounds, have the necessary resources, support, and opportunities to engage with and succeed in AI education.

Inclusion

Inclusion is the practice of ensuring that all individuals feel welcomed, respected, supported, and valued within a given environment. It's about creating a sense of belonging where every voice is heard and every contribution is recognised. In Headstart, inclusion means fostering a learning environment where young women feel safe to explore, experiment, and express themselves in their AI journey, regardless of their background or prior experience.

Ethics

A set of moral principles that govern a person's behaviour or the conduct of an activity. In the context of AI, ethics refers to the principles that guide decisions about what is right or wrong in the design, development, deployment, and use of artificial intelligence systems. This includes considerations of fairness, accountability, transparency, and responsible impact on individuals and society.

Intersectionality in AI Learning

A framework for understanding how multiple social identities (such as gender, race, class, disability, sexual orientation, etc.) combine to create unique experiences of discrimination or privilege. In AI learning, it highlights how the biases in AI systems, and the barriers to participation in AI fields are often not due to a single factor but rather the interplay of several intersecting identities. Recognising intersectionality is crucial for developing AI solutions and educational approaches that are truly equitable and inclusive for all young women.

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03

Informal Learning & Teaching Spaces

03.1

Informal Learning & Teaching Spaces

Informal learning spaces play a vital role in reaching young women who might not engage with traditional educational settings. These include community-based workshops, extracurricular clubs, youth-led initiatives, mentorship programmes, and similar environments.

Barriers

- **Lack of representation in AI role models:** Young women, particularly from marginalised groups, may not see themselves reflected in the existing AI workforce, leading to a perception that AI careers are not for them.
- **Limited access to tech or mentorship:** Disparities in access to technology (computers, internet) and knowledgeable mentors can hinder participation and skill development.
- **Cultural/linguistic exclusion:** Materials or teaching approaches may not be culturally relevant or available in languages accessible to all learners, creating barriers to understanding and engagement.

03.1

Informal Learning & Teaching Spaces

Recommendations

- **Use inclusive visuals & storytelling:** Drawing inspiration from Headstart Module 4, which encourages learning from "real women working in AI," youth workers should actively showcase diverse AI professionals through images, videos, and personal stories, or using our Visual Resource Showcase (WP2) featuring 13 diverse female role models.

- **Facilitate peer-led learning & mentoring**: Encouraging older or more experienced participants to mentor newer ones, ensuring that female and minority voices are visible and amplified. This is a key area for the next phase of the Headstart project.

- **Hosting AI taster sessions in local community centres, libraries, or youth clubs:** Bring AI education directly to learners in their familiar environments, reducing logistical barriers and making it more accessible

- **Provide multilingual resources & culturally relevant content:** Consistent with the project's foundational commitment to "multilingual content" and "culturally relevant AI learning," translate key materials and adapt examples to resonate with the cultural contexts of diverse communities, ensuring accessibility for all participants.

- **Encourage participation through hands-on activities, gamification & problem-based challenges that relate to community issues:** Inspired by the "hands-on activities" and "simple creative tasks" in Headstart Module 3, and the focus on "AI for Social Good" in Module 5, design interactive and fun challenges that connect AI concepts to real-world problems relevant to the participants' local communities.

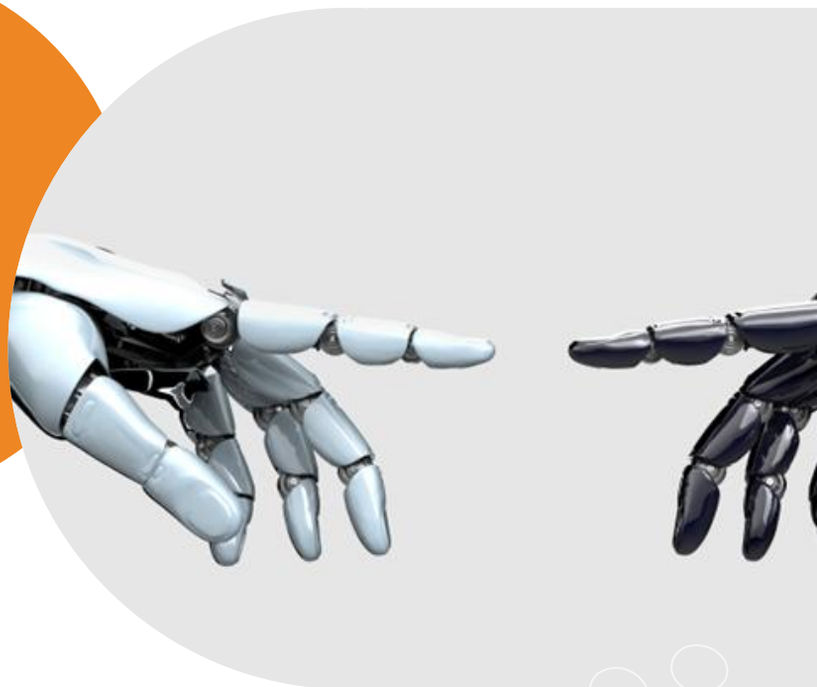
- **Establish "safe spaces" for learning:** As emphasised in Headstart Module 2 ("AI Ethics"), which tackles sensitive topics like bias and stereotypes, create an atmosphere where participants feel comfortable asking questions, making mistakes, and exploring ideas without fear of judgment, fostering confidence as highlighted in Module 3.

04

Educational Technologies & Systems

04

Educational Technologies & Systems



The digital tools and platforms used for AI education are central to the Headstart project. As AI becomes a part of mainstream education, the tools and systems we use to teach it must be inclusive, ethical, and accessible. However, not all learners have equal access to the digital infrastructure or educational technologies needed to participate in AI learning, and many existing tools are not designed with diversity and equity in mind.

Barriers

- Language and format: Most AI tools and resources are only in English or in complex formats which can limit participation from non-native speakers and learners.
- Digital divide: unequal access to reliable devices, internet or tech tools can exclude rural youth or low-income learners.
- Non-inclusive design of learning platforms: Digital platforms may lack accessibility features or user interfaces that are intuitive for all learners, particularly those with disabilities or diverse digital literacy levels. Also, some tech platforms focus on coding or heavy technical content that can intimidate beginners.
- Lack of ethical checks: EdTech tools may track data or use biased AI without transparency that undermines trust and safety in the learning **process.**

Recommendations

Our AI toolbox was designed with these challenges in mind.

- All AI Toolbox resources are openly licensed (Creative Commons), allowing you to adapt them to your learners' languages, interests, or contexts. Our toolbox is translated into French, Portuguese and Danish already, but could be translated into your national language or simply the text for your target age group.
- The Toolbox follows UDL principles: multiple ways to engage (videos, group work, visuals), represent (slides, stories, hands-on), and express (discussions, drawing, writing).
- The Toolbox includes. **screen-reader-friendly formats, captioned videos**, and **print-friendly worksheets**
- Some activities in the toolbox can also be done without computers or the internet.

05

Monitoring & Evaluation

In order to ensure that DEI principles are not only implemented but continuously improved, it is essential to monitor your AI learning programmes using meaningful indicators.

This section offers practical tools for tracking diversity and inclusion in your AI workshops, and/or using the Headstart AI Toolbox.

05.1

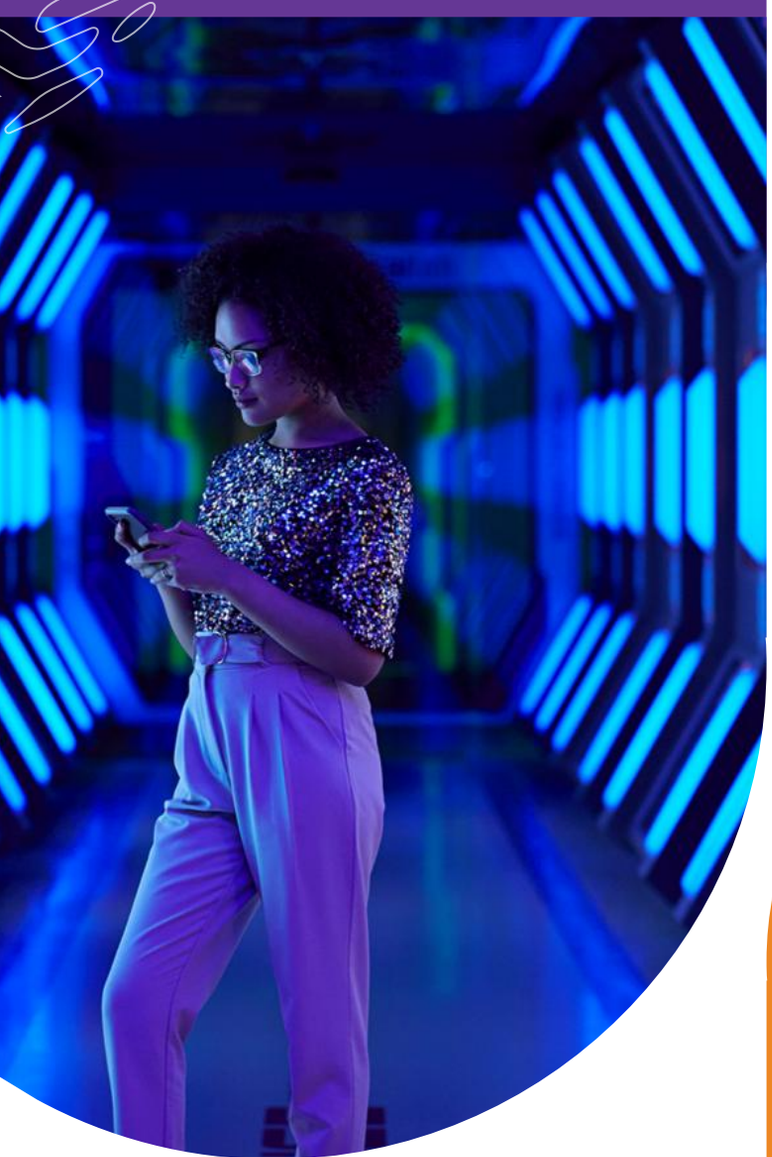
Why Monitor DEI?

- **Representation matters**: Are we reaching underrepresented learners, especially girls and young women, youth from rural areas, migrants, and/or NEETs.
- **Retention matters**: Who is completing the activities? Who is dropping out or disengaging? Why?
- **Learning environments matter**: Are all participants feeling welcome, respected, and able to contribute?

Category	Example of KPIs	How to collect the data
Participant Demographics	% of participants identifying as: - Female - Migrant background - From rural or low-income areas - With disabilities or additional learning needs	Short anonymous intake form (Make sure to include “prefer not to say” options)
Access & Engagement	- % with access to devices or internet - # who complete all modules - # attending follow-up sessions	Workshop sign-ins Facilitator records
Participant Experience	- % reporting feeling included or respected - % who saw someone “like them” or "they want to become" in AI - % increase in confidence using AI tools	Post-session surveys Verbal feedback circles/open discussions Confidence journals

05.2

Some Guidelines for DEI Audits



Conducting a **DEI audit** helps ensure that your learning materials, activities, and facilitation practices are as inclusive as possible.

Example of a checklist to review your programme:

- Are role models and examples diverse in gender, race, culture, and experience?
- Do activities use inclusive and neutral language?
- Are all materials accessible (including captions, alt text, and screen reader–friendly content)?
- Have you created space for participants to give feedback anonymously?
- Are there flexible formats for participation (oral, visual, written)?

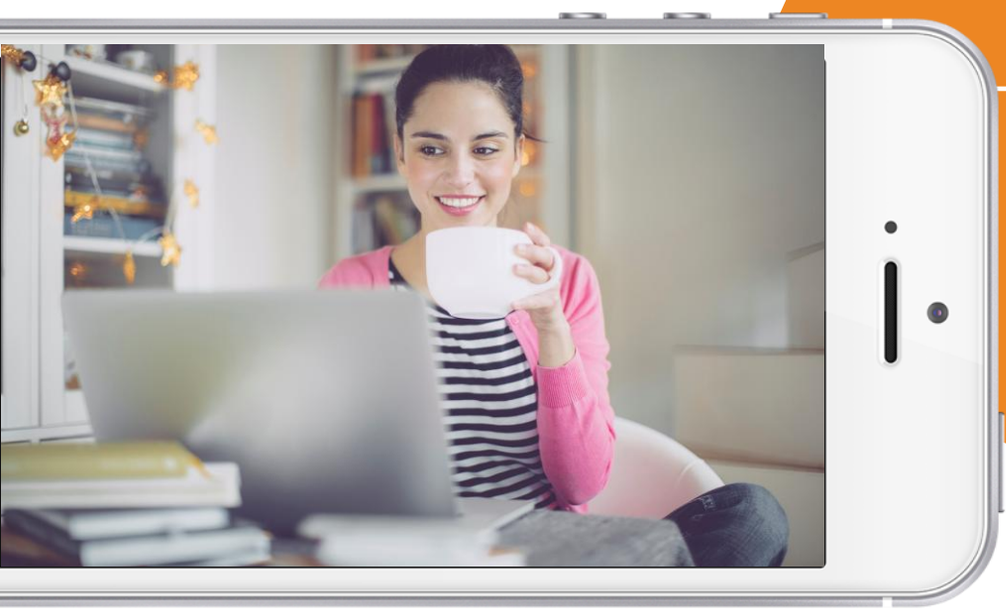
A detailed checklist for an AI learning environment is available at the end of this document. (pg 23-24)

When organising workshops, it is important to focus on continuous improvement. In fact, feedback and KPIs should be reviewed after each session or even each module. You can also use your findings to adjust delivery formats or adapt the language.

The key to artificial intelligence has always been the representation

06

Conclusion



06

Conclusion

Diversity, equity, and inclusion (DEI) are not optional add-ons; they are the **foundation of responsible, ethical, and impactful AI education**. In the context of the Headstart project, DEI is not a side objective; it is at the heart of how we design, deliver, and evaluate learning experiences for young women.

The AI Toolbox (WP3) was intentionally developed to reflect this belief. Through its inclusive content, flexible learning formats, and ethical engagement strategies, it supports youth workers and educators in building AI learning spaces that are accessible, empowering, and fair.

But achieving equity in AI education is not a one-time task. It is a continuous, collective effort that involves everyone in the ecosystem:

- **Educators and youth Workers** must actively apply DEI principles in their planning, teaching, and interactions with learners.
- **Policy makers and institutions** must support inclusive curriculum design, fund equitable learning environments, and prioritise representation in STEM.
- **Learners** themselves must be given the tools and space to reflect on their role in shaping ethical AI systems and to co-create inclusive learning environments.

To continue building inclusive and ethical AI education environments, we recommend:

- ✓ **UNESCO** Digital Technologies for Inclusive Education **(2024)**
- ✓ **UNESCO** Recommendation on the Ethics of Artificial Intelligence **(2022)**
- ✓ Universal Design for Learning (UDL) Framework – CAST (2024)
- ✓ UNDP Digital Inclusion Playbook 2.0 (2024)
- ✓ **Headstart AI Toolbox Facilitator's Guide** (available at headstart-ai.eu/ai-toolbox)
- ✓ **Visual Role Model Hub** (WP2): short videos featuring diverse women in AI careers (available at https://headstart-ai.eu/visual-resource-hub/)

Call to Action

We invite all educators, facilitators, trainers, curriculum designers, and decision-makers involved in youth education and digital upskilling to:

- **Review** your existing materials and systems through a DEI lens (using e.g. our checklist)
- **Adopt** inclusive formats and ethical engagement practices
- **Amplify** the voices and participation of girls, marginalised youth, and underrepresented learners
- **Share** your findings and improvements with your networks and the Headstart community → Join our LinkedIn group here: https://www.linkedin.com/groups/13009206/)

Together, we can ensure that **AI education is not only technically excellent but also socially fair,** preparing all young people to thrive in a digital future shaped by equity, ethics, and innovation!

DEI Checklist for AI Learning Environments

1. Purpose & Values

- ❑ DEI Statement: Clearly present a commitment to diversity, equity, and inclusion. This could be in your class rules, workshop intros, or on posters.
- ❑ Personalisation: Invite learners to share pronouns, learning preferences. Get to know their unique backgrounds.

2. Representation & Curriculum

- ❑ Diverse Role Models: Include stories or guest talks featuring women and underrepresented individuals working in AI.
- ❑ Inclusive Content: Use case studies and examples from different cultures, communities, and perspectives.
- ❑ Bias Awareness: Teach about how AI can be biased, why diverse data is important, and how to check for fairness (using our modules or tools like Fairlearn or AI Fairness 360 for example)
- ❑ Interdisciplinary Projects: Encourage projects combining AI with social impact, design, humanities and/or subjects they care about like music, gaming, art…

3. Teaching & Facilitation

- ❑ Educator Training: Participate in or provide training for youth workers on DEI/ inclusive teaching and how to recognise unconscious bias.
- ❑ Safe Spaces: Set ground rules for open dialogue, respectful challenges, and non-judgment.
- ❑ Peer Mentoring: Match learners with mentors from varied gender, cultural, and career backgrounds.
- ❑ Active Dialogue: Foster constructive discussions on ethics, including gender, racial, and social justice.

4. Learning Environments

- ❑ Environmental Cues: Decor, visuals, name badges with pronouns, and symbols that show everyone is welcomed (e.g. poster of famous female scientists…)
- ❑ Accessibility: Ensure content works with screen-readers, captions, adjustable fonts/colours.
- ❑ Language Diversity: Offer materials or support in learners' home languages, when feasible.

5. Technology & Tools

- ❑ Audit potential Bias: You can use AI tools for fairness to question models biases (e.g. IBM AI Fairness 360 or Google's What-If Tool)
- ❑ Privacy & Equity: Ensure student data isn't used without consent, especially in AI tool training. This implies that, before using an AI tool, one to verify its data policies. Look for a clear option to disable the AI's ability to use your/the student data for training or information that they do not use inputs for model retraining.
- ❑ Open or Low-Cost Access: Provide tools without paywalls or with free access to avoid economic exclusion. (When a tool is free, you should still double-check how your data will be used when creating an account!)

DEI Checklist for AI Learning Environments

6. Participation & Engagement

- ❑ Inclusive Recruitment: share the workshop invites in diverse communities (schools, youth centres, underrepresented networks such as migrant associations…).
- ❑ Flexible Scheduling: Include after-school/evening sessions, childcare options. Off both in-person and online options, use asynchronous activities for those who cannot attend live.
- ❑ Hands-On Relevance: Gamify AI challenges that address real-world issues in learners' communities (community recycling, public transport planning…)

7. Monitoring & Feedback

- ❑ Demographic Tracking: Collect anonymised gender, background, and participation data to track retention and equity.
- ❑ Learner Feedback: Run post-session surveys to gather input on DEI experience, safe space effectiveness, and content relevance.
- ❑ DEI Audit Cycles: Annually or termly review your programme's inclusivity using this checklist as a guideline.

8. Policy & Governance

- ❑ Clear AI Policies: Establish and share clear rules around AI use, academic integrity, and fairness with learners.
- ❑ Inclusive Governance: Include diverse voices/stakeholders (including youth) in course planning and DEI decision-making.
- ❑ Report Mechanisms: Provide safe, anonymous ways (channels, forms…) for young people to flag DEI concerns.

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