





# From Digital Gaps to Green Impact: Transforming Adult Education for a Sustainable Future [2025-1-DE02-KA122-ADU-000331623]

# Climate Literacy in Adult Education: Tools and Approaches

Date: October 2025 Helsinki & Espoo, Finland





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#### 1. Introduction

Climate literacy is more than understanding climate science—it is the ability to act. In adult education, developing climate-literate citizens means equipping learners with knowledge, critical thinking, and problem-solving skills to make informed decisions and take meaningful climate action. This OER builds on the Finnish approach observed during our Erasmus+ KA122-ADU job-shadowing mobility at LFI – Learning for Integration – and offers practical tools and strategies for embedding climate literacy into adult learning.

# 2. Why Climate Literacy in Adult Education?

Climate change disproportionately affects vulnerable communities. Adult learners—especially migrants, jobseekers, and older adults—must be supported to:

- Understand local and global environmental challenges.
- Reflect on personal and community-level impacts.
- Participate in green transitions and sustainable innovation.

In Finland, educators integrate climate literacy across disciplines through interdisciplinary projects, digital simulations, and local environmental engagement.

#### 3. Core Competencies for Climate-Literate Learners

Adapted from UNESCO (2022) and Finnish practice, adult climate literacy includes:

- Scientific Knowledge: Basic understanding of climate systems, emissions, and mitigation.
- Systems Thinking: Understanding interdependence between ecological, economic, and social factors.
- Civic Engagement: Ability to participate in local sustainability initiatives.
- Emotional Resilience: Facing eco-anxiety with constructive action.





# 4. Tools for Climate Literacy in Adult Classrooms

Tool	Purpose	Use Case
En-ROADS (MIT)	Climate simulation	Learners model global policy decisions
WWF Footprint Calculator	Personal impact tracking	Used for awareness campaigns
Climate Visuals (CC-BY)	Visual storytelling	Posters, presentations, group debate
SDG Compass Toolkit	Framing lessons via SDGs	Connecting local action to Goal 13
European Climate Pact Map	Mapping citizen projects	Inspiration for community learning

All tools are free and suitable for classroom and blended learning.

# 5. Case Example: "My Climate Story" Project

At LFI, adult learners participated in a two-day module titled "My Climate Story." Activities included:

- Creating a digital timeline of climate-related events in their home countries.
- Conducting interviews with older adults about environmental changes.
- Designing visual narratives (video, collage, map) reflecting personal experience.

One learner from Germany shared: "Back home, we never called it climate change—we just noticed the rivers drying up. Now I understand the bigger picture and want to teach others."

#### **6. Suggested Activity Flow for Educators**

- Warm-Up Discussion: "What does climate change mean to you?"
- Interactive Simulation: Use En-ROADS or WWF tools.
- Group Task: Analyze a local climate problem and propose solutions.
- Reflection: Personal journal or podcast "What action will I take?"
- Micro-Credential: Recognize participation with badge: "Climate-Literate Adult Learner – Level 1"

#### 7. Assessment and Recognition

#### Evaluation methods:

- Reflection journals and group presentations
- Visual projects (maps, posters, infographics)





Peer feedback and self-assessment forms

#### Micro-credentials can certify:

- "Climate Awareness and Action"
- "Eco-literacy and Sustainable Thinking"

Credentials can be issued via Europass Digital Credentials and integrated into adult learner portfolios.

# 8. Resources and Further Reading

- UNESCO (2022). Education for Climate Action: A Roadmap. Paris.
- European Commission (2024). *Education for Climate Coalition*. https://education-for-climate.ec.europa.eu
- WWF (2023). Footprint Calculator. https://footprint.wwf.org.uk
- En-ROADS Climate Simulator. https://en-roads.climateinteractive.org
- EPALE (2024). Climate Change and Adult Learning. <a href="https://epale.ec.europa.eu">https://epale.ec.europa.eu</a>

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