{ETH LAE}

Emerging
Technologies
for Holistic Literacy
in Adult Education

D2.1. ETHLAE Methodological Framework

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TABLE OF CONTENTS

Contents

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List of abbreviations

Abbreviation	Description
ALE	Adult Learning and Education
CDP	Communication and Dissemination Plan
EC	European Commission
EU	European Union
GA	Grant Agreement
GDPR	General Data Protection Regulation
WP	Work Package
AI	Artificial intelligence
ET	Emerging technologies

Partners

No	Partner	Country	Acronym
P1	EUROPEAN ASSOCIATION FOR THE EDUCATION OF ADULTS	Belgium	EAEA
P2	SVEUCILISTE ALGEBRA	Croatia	AU
P3	ALL DIGITAL AISBL	Belgium	AD
P4	KANSANVALISTUSSEURA	Finland	KVS
P5	CENTRUL PENTRU PROMOVAREA INVATARII PERMANENTE TIMISOARA ASOCIATIA	Romania	CPIP
P6	VERBAND OSTERREICHISCHER VOLKSHOCHSCHULEN	Austria	VOV
P7	NATIONAL LEARNING AND WORK INSTITUTE	United Kingdom	L&W

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Executive Summary

Deliverable 2.1 - ETHLAE Methodological Framework outlines the methodological framework that will guide the ETHLAE project's core implementation activities: the development of the ETHLAE Toolbox (WP3), the design and delivery of upcoming capacity-building for adult learning and education educators (WP4), and the testing and piloting of tools and learning scenarios (WP5). This framework translates the project's vision - of advancing holistic literacy through the ethical use of emerging technologies in ALE - into a structured, practice-oriented approach.

The framework is grounded in the insights gathered through extensive field research across six European countries and at EU level, documented in Deliverable 2.2 ETHLAE Report on methods for holistic literacy and emerging technologies in Adult Learning and Education (ALE). Drawing on interviews with educators, non-profit organisation representatives, institutional actors, policy stakeholders, and adult learners - with a focus on those in vulnerable situations - the research identified persistent challenges in digital access, educator preparedness to work with emerging technologies, ethical dilemmas in using ET in education, and social inclusion. These key findings have directly informed the design, priorities, and safeguards articulated in this framework.

The methodology is structured around five key elements:

- Conceptual Foundations: The framework is informed by theories of transformative learning, participatory pedagogy, and holistic literacy. It aligns with existing European competence frameworks and policy instruments.
- Toolbox Design Principles (WP3): The ETHLAE Toolbox will be developed using a user-centred, iterative approach to ensure accessibility, adaptability, ethical integrity, and pedagogical relevance. It will provide curated learning resources and adaptable learning scenarios.
- Capacity Building Approach (WP4): MOOC and testing for educators, as well as expert, practitioners and civil society, will combine digital literacy, ethical reflection, and pedagogical innovation, and use participatory methods and leverage frameworks such as LifeComp: The European framework for the personal, social and learning to learn key competence.
- Testing and Piloting Methodology (WP5): The project will apply a validation strategy - testing the Toolbox with educators. Feedback loops, self-assessment tools, and real-world contextualisation are embedded throughout.
- Cross-Cutting Considerations: The methodology integrates key transversal principles including inclusion and accessibility, multilingualism and cultural relevance, digital equity, and data ethics - ensuring that outputs are inclusive, ethical, and scalable.

Taken together, these methodological choices ensure coherence across work packages, responsiveness to stakeholder needs, and alignment with European goals for inclusive, digitally enabled adult learning. This deliverable functions not only as a roadmap for the ETHLAE project's next phases, but also as a transferable model for ethical and inclusive digital transformation in ALE across Europe.

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1. Introduction

1.1. Description of the deliverable

This document is the official deliverable **D2.1 Methodological Framework - ETHLAE** project funded by the European Union's Erasmus Partnership for Cooperation in the field of Education and Training - European NGOs programme (**Project: 101184061 — ERASMUS-EDU-2024-PCOOP-ENGO**).

2. Purpose and Scope

This methodological framework sets out the guiding principles and conceptual grounding for the design of the ETHLAE project's core implementation activities, namely, the creation of the ETHLAE Toolbox (WP3), the capacity-building programme for ALE educators (WP4), and the testing and piloting of developed tools and scenarios (WP5). As such, it functions as both a conceptual and operational bridge between the research phase of the project and its practical, on-site applications.

The framework is firmly grounded in the findings of Deliverable 2.2, which synthesised insights from field research conducted in six national contexts, as well as through EU-level networks. Drawing on interviews with adult education stakeholders and adult learners from vulnerable contexts, Deliverable 2.2 illuminated the structural, pedagogical, and socio-emotional conditions that shape the uptake of emerging technologies (ET) in adult education. These insights now serve as the empirical foundation for defining the methodological approaches that will shape ETHLAE's tools, training activities, and testing processes.

In addition to the field evidence, this framework builds directly on the ETHLAE project proposal (101184061 – ETHLAE – Erasmus+ 2024 PCOOP-ENGO), ensuring alignment with the project's overarching goals. These include strengthening educators' capacity to use emerging technologies in inclusive, ethically informed, and learner-centred ways; promoting transformative and holistic approaches to adult learning; and supporting systemic change across European ALE ecosystems through evidence-based, transferable practices.

Deliverable 2.1, therefore, does not merely describe individual methodological choices for WP3–WP5. Instead, it articulates a shared methodological vision rooted in transformative learning, participatory design, and the co-creation of learning pathways that are relevant, accessible, and empowering for adult learners in different contexts and learning paths. It defines how the project will move from research to innovation, from insights to intervention, always keeping in focus the ethical, pedagogical, and inclusive dimensions of digital transformation in adult learning.

3. Conceptual Underpinnings

The ETHLAE project is situated at the intersection of two priorities in adult learning and education (ALE): the promotion of holistic literacy and the meaningful integration of emerging technologies (ET) into pedagogical practice. The methodological framework

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developed in this deliverable is grounded in a set of conceptual foundations that underpin the project's approach to innovation in ALE and inform the design of all tools, training activities, and piloting processes in WP3–WP5.

3.1 Holistic Literacy

The concept of holistic literacy, as elaborated in Deliverable 2.2, encompasses not only basic skills (literacy, numeracy, digital, science and citizenship, defined as such by the European Union) but also personal, social and learning to learn competence, and other lifelong learning competences such as financial literacy, health and environmental, entrepreneurship and cultural awareness and expression. A set of competences which are essential for navigating contemporary digital and social environments. It moves beyond narrow definitions of literacy to focus on adults active and meaningful participation in society, as well as their personal fulfilment, especially in times of accelerated technological change. Holistic literacy is thus inherently relational, context-dependent, and transformative. It builds upon learning experiences that are grounded in the lived realities and personal experiences of adult learners, particularly those in vulnerable situations, and that recognise the interplay between personal growth, critical awareness, and social inclusion.

This understanding draws on and aligns with several key European frameworks, including the _LifeComp framework_ for personal, social and learning to learn competence, _Council Recommendation on Key Competences for Lifelong Learning_, _Basic skills EU definition_, the _Life Skills for Europe framework_ developed by EAEA and its partners and the _Citizens' Curriculum approach_ elaborated by Learning and Work Institute (UK). These frameworks promote the development of transversal competences and learner agency across diverse life domains, reinforcing ETHLAE's commitment to learning that is human-centred, adaptive, and inclusive.

3.2 Emerging Technologies in ALE

Emerging technologies offer significant potential to support learner-centred, inclusive, and flexible approaches to adult learning. However, as the research in Deliverable 2.2 confirmed, their integration into ALE is not a neutral or merely technical process. It involves pedagogical rethinking, systemic adaptation, and critical attention to access, motivation, and digital equity. Technologies such as Artificial Intelligence (AI), digital platforms, learning analytics, and interactive tools can expand access to education and personalise learning pathways - but only if used ethically, inclusively, and in ways that respect learners' autonomy and their cultural contexts, and if they are relevant and appropriate for this target group.

The project adopts a pedagogically informed and ethically grounded understanding of emerging technologies, in line with the _Ethical Guidelines on the Use of AI and Data in Teaching and Learning for Educators_, designed by the European Commission. It treats emerging technologies not as ends in themselves, but as mediating tools that must serve broader educational purposes, particularly the promotion of learner empowerment, social cohesion, and digital citizenship.

3.3 Learner- and Educator-Centred Approaches

Co-creation is at the heart of the ETHLAE project, ensuring both educators and learners are active and participating agents. As highlighted in the project proposal and validated in the field research, educators need support not only in developing their digital and technical skills, but also in ethical reasoning, pedagogical adaptation, and curriculum innovation. Similarly, learners must be given the opportunity to help shaping the learning process according to their needs, preferences, and capacities.

To this end, the ETHLAE approach draws from transformative learning theory,[1] which views adult learning as a process of critical reflection and perspective change. It also incorporates principles of participatory design[2], which emphasise inclusive, iterative development of tools and practices with the users themselves. These conceptual models inform the user-centred design of the ETHLAE Toolbox, the participatory structure of the capacity-building programme, and the testing methods that foreground lived learner experience. Together, these conceptual underpinnings establish a coherent foundation for methodological design in WP3–WP5. They ensure that the tools and activities developed in the ETHLAE project are responsive to context, grounded in evidence, and aligned with European values of inclusion, equity, and lifelong learning.

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[1] Mezirow, J. (2000). Learning as Transformation: Critical Perspectives on a Theory in Progress. San Francisco: Jossey-Bass.

[2] Schuler, D., & Namioka, A. (Eds.). (1993). Participatory Design: Principles and Practices. CRC Press

4. Design Principles for the ETHLAE Toolbox (WP3)

The ETHLAE Toolbox, developed under Work Package 3, is envisaged as a user-centred, practice-oriented repository that equips adult learning and education professionals with tools, resources, and learning scenarios to meaningfully integrate emerging technologies into their teaching. The methodological approach to developing the Toolbox reflects both the project's conceptual underpinnings and the findings of Deliverable 2.2, which underscored the need for accessible, context-sensitive, and ethical digital resources.

4.1 User-Centred Design

A core methodological commitment in WP3 is to apply a user-centred design (UCD)[3] approach, in which ALE educators are not merely recipients of tools but co-creators of the final product. This approach is grounded in participatory design principles and emphasises iterative development cycles that incorporate prototyping, testing, and user feedback. We have followed the approach by including the educators in the research phase strongly and therefore positioning them at the beginning of the co-creation process. Informed by the needs expressed in Deliverable 2.2, such as the call for practical, low-threshold tools, clearly explained functions, and culturally adapted materials, the Toolbox will be developed with the feedback from educators across the partner countries. User feedback loops, gathered through capacity-building events, will be embedded throughout the design process to ensure that the Toolbox remains relevant, intuitive and engaging. In line with findings from Austria, Finland, and Romania, where some educators expressed hesitancy or lack of confidence in adopting new technologies, the design will prioritise clarity, simplicity, and usability.

The ETHLAE Toolbox will consist of two main components:

- A curated repository of digital resources, including existing courses, guidelines, use cases, and tools.
- A set of adaptable learning scenarios, grounded in transformative learning and considering the main literacy frameworks.

4.2 Structure and Content of the Repository

The repository will draw upon high-quality, openly available materials developed in the past 5–10 years at both European and national levels. These include, among others:

- The Ethical Guidelines on the Use of Artificial Intelligence and Data in Teaching and Learning for Educators (European Commission, 2022),
- MOOCs and learning materials produced within the CodeWeek initiative,
- Digital SkillUp courses hosted by MinnaLearn,
- Courses and resources from the ALL DIGITAL Academy.

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[3] Norman, D. A. (2013). The Design of Everyday Things (Revised and Expanded Edition). MIT Press.

Materials will be selected based on a set of quality criteria, including relevance for ALE, clarity of use, alignment with ethical and inclusion principles, and potential for adaptation to diverse learning contexts. The repository will categorise resources by type, level, and intended use, ensuring quick and meaningful access for educators and other ALE practitioners.

4.3 Learning Scenarios for Holistic Literacy

The second core component of the Toolbox will be a series of adapted learning scenarios that integrate emerging technologies in ways that support holistic literacy development. These scenarios will be based on:

- Transformative learning theory, which provides a pedagogical rationale for critical reflection and perspective change.
- The principle of visiting subjects that complement and transcend traditional learning routes: 1) Literacy and Numeracy, 2) Democracy and Active Engagement, 3) Sustainability, 4) Personal and Interpersonal Capacities and 5) Digital spaces and communities.
- Reference competence models, including: LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence, The Life Skills for Europe framework (EAEA, European), The Citizen Curriculum approach (Learning and Work Institute, UK), all while taking into account Digital Competence Framework for Citizens (DigComp) and EntreComp: The entrepreneurship competence framework.

Scenarios will be developed with the support of ALE practitioners, and, where feasible, tested and refined in WP5. They will aim to embed digital competences in meaningful, real-life contexts, e.g. civic participation or health management, and will address cognitive, emotional, and ethical dimensions of digital interaction, as highlighted across Deliverable 2.2.

4.4 Ethical and Pedagogical Orientation

Consistent with ETHLAE's overarching vision, the Toolbox will reflect a pedagogically sound and ethically conscious approach to digital innovation in ALE. Resources will promote responsible use of technology, with explicit attention to the needs of learners from vulnerable, data privacy concerns, and the risk of exacerbating digital divides. This orientation responds to the concerns raised in the field research regarding mistrust, overuse of technology, and inequity, especially among rural, elderly, and migrant populations. The ETHLAE Toolbox will be a dynamic resource that support policies implementation, pedagogical innovation, and contextualised learning. The participatory development will empower ALE educators to confidently navigate the digital transformation in their daily practice.

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5. Approach to Capacity Building (WP4)

The ETHLAE capacity-building programme, developed under Work Package 4, aims to strengthen the competence of adult learning and education (ALE) professionals to critically and effectively integrate emerging technologies into their pedagogical practice. Building on both the field evidence and recognised international frameworks, the approach to the educator and other ALE practitioners training reflects a commitment to ethical digital innovation, inclusivity, and the co-creation of knowledge between educators and learners.

5.1 Participatory and Practice-Oriented Pedagogy

The methodology underpinning WP4 is rooted in participatory design and learning. This approach acknowledges educators as experts in their own contexts and promotes mutual learning among peers and between educators and adult learners. Field research in Deliverable 2.2 confirmed that successful technology adoption in ALE depends not solely on technical proficiency, but on building confidence of the educators, give space for pedagogical reflection, and build a sense of ownership over digital tools. Many educators, especially in rural or underfunded areas, described a sense of "being left behind" by rapid technological shifts. As such, the training programme will be structured to promote empowerment through collaboration, and shared reflection. The inclusion of learners remains a cornerstone of our approach throughout all our activities.

5.2 Competence Frameworks and Curriculum Foundations

The content and structure of the capacity-building activities will draw on recognised European and international frameworks for ALE educator competences, most notably the Curriculum globALE (2021). Developed jointly by the German Institute for Adult Education (DIE), DVV International, ICAE, and the UNESCO Institute for Lifelong Learning, Curriculum globALE provides a well-tested reference for key educator competences in adult learning settings worldwide. The ETHLAE programme will adapt and supplement this framework with content specifically related to emerging technologies and digital pedagogies, ensuring alignment with the ethical, inclusive, and transformative goals of the project.

Training modules will address, among others:

- Pedagogical integration of emerging technologies in adult learning settings.
- Ethical implications of AI, data use, and algorithmic bias.
- Inclusive digital facilitation strategies for diverse learner groups.
- Development of holistic literacy programmes through technology-enhanced learning.

This competence-oriented structure ensures coherence between WP4, and the tools developed in WP3, allowing educators to engage with practical applications and tested resources.

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5.3 Learning Design and Facilitation Strategy

The capacity-building programme will apply active learning methods, including workshops and collaborative design sessions, reflective tasks, to encourage digital experimentation. Emphasis will be placed on contextualised learning, encouraging educators to bring their own challenges and learner needs into the training environment. As highlighted in field research across countries such as Croatia, Romania, and the UK, ALE educators often operate in under-resourced, fragmented institutional settings. The programme will therefore provide low-threshold, adaptable tools that can be transferred to a wide range of teaching contexts. Asynchronous materials (MOOC, Toolbox) will enhance accessibility and allow for flexible engagement.

5.4 Embedding Ethics and Equity

Central to the capacity-building approach is an ongoing critical engagement with the ethical dimensions of emerging technologies. Informed by the Ethical Guidelines on the Use of AI and Data in Teaching and Learning for Educators, the programme will equip educators to question not only how digital tools function, but whose needs they serve, what risks they carry, and how to apply them in ways that reduce rather than reproduce inequalities. This concern was echoed across the field research: educators repeatedly pointed to issues of learner trust, data privacy, and digital fatigue. A critical, reflective lens will therefore be applied throughout the training activities to promote not just digital literacy, but also digital agency and responsibility. The ETHLAE capacity-building programme will support ALE educators navigating digital transitions. Its participatory, and competence-based design ensures both immediate relevance and long-term sustainability.

6. Testing and Piloting Methodology (WP5)

The methodological approach to testing and piloting in WP5 is designed to ensure that the tools and scenarios developed in ETHLAE are not only theoretically sound but also practically effective, context-responsive, and user-validated. Informed by the project's participatory ethos and the findings of Deliverable 2.2, this phase focuses on engaging both educators and learners across diverse settings to refine the ETHLAE outputs and generate transferable lessons for ALE ecosystems across Europe.

6.1 Dual-Level Validation Approach

Testing and piloting will be conducted on two interlinked levels:

- Toolbox testing with ALE educators across the five partner countries and via online outreach to broader networks (EAEA and ALL DIGITAL).
- Scenario piloting in real learning contexts, involving educators and adult learners, particularly those from vulnerable groups.

This two-level design allows for the simultaneous evaluation of both usability and pedagogical effectiveness, providing a comprehensive view of the applicability and impact of ETHLAE's core innovations.

6.2 Toolbox Testing: Focus on Usability and Relevance

The ETHLAE Toolbox will be tested with ALE educators through the organisation of interactive online user experience meetings. These activities will examine:

- Ease of navigation and accessibility.
- Clarity and usefulness of content.
- Perceived applicability to different teaching contexts.
- Potential for adaptation and reuse.

The testing process will follow an iterative model, allowing for real-time adjustments and refinements based on educator input. This aligns with the user-centred development approach outlined in WP3 and reflects the field research findings (Del 2.2), which stressed the importance of simplicity, cultural fit, and ethical clarity in digital resources. Feedback will be collected through online workshops, in-person meetings and discussion forums, with attention paid to engaging educators from diverse backgrounds. The use of the EAEA and ALL DIGITAL networks will ensure participation beyond the immediate consortium, extending the reach and representativeness of the testing phase.

6.3 Scenario Piloting: Focus on Pedagogical Practice and Learner Experience

The ETHLAE learning scenarios will be piloted in at least four (4) national/local ALE organisations, with each pilot involving a minimum of five (5) educators and fifteen (15) adult learners. These pilots will focus on observing how the scenarios function in real-life teaching and learning environments and whether they effectively promote holistic literacy through the integration of emerging technologies.

Each pilot will include:

- A preparatory phase of educator training on the use of the scenarios.
- Implementation of the scenario with learner groups.
- Post-pilot reflection and feedback from participants.

The piloting methodology is grounded in action research logic, in which practice and reflection are intertwined. Educators will be encouraged to share learner responses, and challenges encountered. Learners will be invited to share their experiences in structured formats, contributing to the project's understanding of digital inclusion and learner agency.

6.4 Evaluation and Learning Loops

Evaluation tools will be developed to measure key aspects of the pilots, including:

- Educator confidence and pedagogical innovation.
- Learner engagement, skill acquisition, and comfort with digital tools.
- Fidelity and adaptability of scenarios.
- Barriers and enablers in the implementation process.

These data will inform final adjustments to the ETHLAE Toolbox and scenarios and will also feed into the sustainability and transferability strategies of the project. Particular attention will be paid to documenting what works in diverse contexts, to ensure the outputs are not only validated but scalable across European ALE systems. The WP5 methodology ensures that ETHLAE's innovations are rigorously tested, critically assessed, and improved through real-world application. It closes the methodological loop between research, development, and practice, anchoring the project in the lived realities of both educators and adult learners.

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7. Cross-Cutting Considerations

The ETHLAE methodological framework is underpinned by a set of transversal principles that reflect the project's commitment to ethical, inclusive, and context-aware adult learning. These considerations ensure that all activities across WP3, WP4, and WP5 remain sensitive to the realities of adult learners and educators in Europe and aligned with the broader values of the European Education Area.

6.1 Inclusion, Diversity and Accessibility

A foundational element of the ETHLAE approach is the commitment to ensuring that emerging technologies in adult learning do not exacerbate existing inequalities but instead serve as tools for inclusion. As demonstrated in Deliverable 2.2, many ALE educators work with learners from vulnerable communities, including migrants, low-income groups, older adults, and those living in rural areas. These groups often face overlapping barriers related to digital literacy, socioeconomic exclusion, and educational disengagement. To address this, ETHLAE applies a participatory, low-threshold approach to tool and scenario development, engaging ALE partitioners in co-design, testing, and feedback. The Toolbox and learning scenarios are designed to be accessible in form (simple interfaces, simple language) and in content (grounded in learners' real-life challenges). Training and piloting activities will include accessibility considerations across cognitive, linguistic, and physical dimensions.

7.2 Multilingualism and Cultural Relevance

Given the cultural diversity across European ALE contexts, multilingualism and cultural relevance are essential to ensuring meaningful access to and engagement with ETHLAE outputs. Many adult learners are non-native speakers of the language of instruction, and educators often work across multicultural environments with differing norms, expectations, and digital readiness levels. Scenarios will be localised and responsive to the socio-cultural realities of learners. Field research (Del 2.2) confirmed that relevance to learners' everyday lives, such as employment, health, and civic participation, greatly enhances motivation and learning outcomes. The Toolbox will therefore provide flexible, context-sensitive resources that can be adjusted for local use without losing methodological integrity.

7.3 Digital Equity and Infrastructure Challenges

While digital transformation is an opportunity for ALE, it also poses risks of reinforcing digital divides. Several national reports (Romania, Croatia, Finland) revealed gaps in infrastructure, such as access to devices, connectivity, or institutional support, as well as low levels of digital readiness among both learners and educators. These disparities are particularly acute in rural areas, underfunded organisations, and among older populations. ETHLAE responds to these challenges by promoting digital equity as a design principle. The Toolbox will prioritise tools that work in low-connectivity settings and can be used on basic devices. Training activities will include strategies for teaching with

limited resources, and piloting will deliberately include contexts where digital constraints are most visible. By recognising and addressing infrastructure-related barriers, the project aims to make digital innovation inclusive rather than exclusive.

7.4 Ethics and Data Protection in Technology-Enhanced ALE

The use of emerging technologies in adult learning raises important questions around ethics, privacy, and agency. Fieldwork revealed educator concerns around data handling, learner consent, and algorithmic opacity, particularly when working with vulnerable learners. At the same time, many educators feel underprepared to navigate these issues, calling for clearer guidance and ethical literacy. In line with the _Ethical Guidelines on the Use of AI and Data in Teaching and Learning for Educators_, ETHLAE integrates ethical reflection into its methodology at every stage. Educators will be trained to critically assess the tools they use and to build awareness among learners about how their data is used. Resources included in the Toolbox will be reviewed regarding ethics, and scenarios will explicitly address questions of digital responsibility and learner autonomy. The aim is not only to inform but to empower educators to become ethical stewards of technology in ALE.

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8. Conclusion and Path Forward

This methodological framework lays the foundation for the ETHLAE project's core activities across WP3 (Toolbox development), WP4 (capacity building), and WP5 (testing and piloting). Grounded in both empirical findings from field research (Deliverable 2.2) and the pedagogical and ethical commitments articulated in the project proposal, the framework reflects an integrative, participatory, and inclusive approach to integrating emerging technologies in adult learning and education.

Throughout the development of this framework, a consistent theme has emerged: the need to ensure that digital innovation in ALE is not only technically sound, but ethically grounded, contextually relevant, and pedagogically meaningful. The field research confirmed that while ALE educators and learners show interest and openness toward digital tools, significant gaps in digital readiness, access, and confidence continue to challenge the use of such technologies. This framework responds directly to those findings, offering a blueprint for designing tools, training, and piloting strategies that are both scalable and sensitive to diverse realities on the ground.

The ETHLAE methodology:

- Places educators and learners, especially those from underrepresented and vulnerable groups, at the centre of the design process.
- Leverages established European frameworks while remaining adaptable to a variety of local contexts.
- Promotes sustainable, scalable, and open-access outputs that extend beyond the lifespan of the project.

Looking ahead, the next phases of ETHLAE will operationalise this framework through the co-creation of learning tools and scenarios (WP3), an educator training programme grounded in participatory and critical pedagogies (WP4), and piloting and evaluation activities that close the loop between research, design, and practice (WP5). Continuous feedback will be embedded across all work packages, ensuring that the project remains agile, relevant, and capable of informing broader European policy and practice in the field of adult education. This methodological framework is not a fixed template, but a living document - a compass for guiding inclusive and ethical digital transformation in ALE. As such, it will continue to evolve in response to the insights and innovations generated throughout the ETHLAE project lifecycle.

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