# AI COMPETENCY FRAMEWORK

## FOR ADMINISTRATIVE STAFF

AI-ADU
BUILDING PATHS TO THE FUTURE

The AI-ADU: Building Paths to the Future project aims to empower adult education providers and professionals to embrace artificial intelligence (AI) as a tool for digital transformation, innovation, and inclusion. Bringing together partners from Cyprus, Lithuania, Italy and Greece, the project supports the development of AI competencies among educators, trainers and administrative staff working in the adult learning and education (ALE) sector.

Through the co-creation of a modular AI Competency Framework, a blended learning programme and practical resources, AI-ADU promotes responsible, ethical, and strategic use of AI tools in adult education. The project responds to the urgent need for upskilling in the digital era and supports adult learning organisations in becoming more future-ready, equitable and innovative.

More information: https://aipaths.eu

Co-funded by the European Union

Published in 2025 by the AI-ADU Consortium
As part of the AI-ADU: Building Paths to the Future Erasmus+ KA2 Cooperation Partnership Project (https://aipaths.eu/)


Design and layout: DOREA Educational Institute
Published online only.

# TABLE OF CONTENTS

# ABOUT THE PROJECT

AI-ADU: Building Paths to the Future is an innovative Erasmus+ initiative designed to empower adult education institutions and their staff, both teaching and administrative, with the knowledge, tools, and competencies needed to embrace the transformative potential of Artificial Intelligence (AI). As AI continues to reshape the way we live, work, and learn, this project aims to ensure that adult education does not lag behind but instead becomes a leader in digital transformation.

Artificial Intelligence is no longer a distant concept of the future - it is already integrated into our daily lives, often invisibly, through smartphones, online services and increasingly, through educational technologies. Despite this, many adult education providers remain underprepared to adapt their services to the opportunities and challenges posed by AI. With adult participation in lifelong learning still falling short of EU targets, it is critical to act now and build more engaging, inclusive, and future-oriented learning environments.

Through a comprehensive and inclusive approach, AI-ADU addresses this urgent need by supporting educators, institutions and stakeholders in their digital evolution. The project delivers key outputs including a pioneering AI Competency Framework for Digital Transformation Specialists, a blended learning programme, a network of digital transformation experts and various participatory activities such as focus groups, webinars, and multiplier events.

By equipping adult education professionals with AI literacy and strategic tools, the project not only enhances individual capacities but also enables organisations to reimagine their administrative and educational processes. This dual focus on both human and institutional development makes AI-ADU a unique and forward-thinking initiative. Ultimately, AI-ADU strives to promote a more innovative, accessible, and effective adult education system that supports all learners, regardless of age, background, or ability, on their lifelong learning journey.

2024 — 2025 — 2026



# PROJECT PARTNERSHIP

## SOCIALINIŲ INOVACIJŲ CENTRAS (SIC)

The success of the project is built on the strength of its diverse and complementary partnership, coordinated by VšĮ Socialinių inovacijų centras (SIC) from Lithuania. SIC is a well-established adult education centre with extensive experience in social work, non-formal education, and EU project implementation. With a strong team of professionals and a network of volunteers, SIC collaborates with both experts and vulnerable groups, delivering innovative social initiatives and training programs that reach over 2,000 learners annually.

## DOREA EDUCATIONAL INSTITUTE (DOREA)

DOREA is a provider of high-quality non-formal adult education and international training, active in over 12 countries with more than 45 courses focused on transversal skills, inclusion and lifelong learning. As part of its commitment to the digital transition, DOREA also develops innovative programmes that support adult educators and organisations in building AI competencies and adapting to emerging technologies.

## KINITRO AMKE

From Greece, KINITRO AMKE contributes with strong experience in inclusion, accessibility, and informal learning. Known for its award-winning "Labyrinth of Senses" initiative, KINITRO fosters inclusive education, promotes the 17 SDGS and works with over 1000 volunteers and 250+ institutions across Europe.

## FONDAZIONE AREZZO INNOVAZIONE (FAI)

Arezzo Innovazione Fondazione di Partecipazione (Italy) strengthens the partnership with its focus on innovation, digital transformation, and sustainability. Acting as a hub for technology transfer, FAI connects public and private actors, promotes gender equality and youth employability, and supports educational projects that drive social and economic development.

# FOCUS GROUPS & NEEDS ANALYSIS

## STAKEHOLDERS

To ensure the project responds to real and diverse needs across Europe, each project partner organised a national focus group involving professionals from the adult education sector. In total, 40 participants took part in these discussions, with each partner inviting 10 adult education experts, trainers or ALE organisation representatives to contribute.

## GUIDED DISCUSSIONS

The focus groups were conducted using a common set of guiding questions developed by the consortium. These served as the basis for structured discussions aimed at identifying key challenges, skill gaps, and opportunities related to adult learning and digital transformation. Depending on local contexts and preferences, partners held these sessions either in person or online.

## SURVEY INSIGHTS

To complement the qualitative input from the focus groups, an online questionnaire was also circulated to gather broader insights. The combination of live discussion and survey data allowed the project to collect in-depth and well-rounded input that served as a solid foundation for the development of the AI Competency Framework.

# AI COMPETENCY FRAMEWORK

## FOR DIGITAL TRANSFORMATION SPECIALISTS

The AI Competency Framework for Digital Transformation Specialists is a central output of the AI-ADU project, designed to guide adult educators, trainers and adult learning and education (ALE) institutions in navigating and leveraging AI technologies within their teaching practices and broader organisational transformation processes.

Inspired by the widely recognised EntreComp and DigiComp frameworks, this new framework highlights the transformative potential of AI in education. It outlines the essential knowledge, skills, attitudes, and proficiency levels needed to effectively use AI, offering a clear and structured roadmap for developing AI competencies.

This framework aims to:

- Equip educators and ALE leaders with the tools to assess current capabilities and identify learning needs.
- Support professional development through targeted training and upskilling pathways aligned with organisational goals.
- Establish a shared language around AI competencies, fostering stronger collaboration among educators, curriculum developers, and policymakers.

The development process included two focus groups organised in each project partner country, ensuring the framework is co-created with stakeholders and tailored to sector-specific realities. This Framework is a practical, comprehensive and future-focused resource that supports long-term innovation and inclusive digital transformation in adult education.

Rooted in both practice and policy, the framework also draws inspiration from well-established European and international references such as:

- DigComp 2.2: The Digital Competence Framework for Citizens
- UNESCO's AI Competency Framework for Educators
- The European Commission's 2030 Digital Compass and AI Act
- Additional sector-specific insights gathered through focus groups and needs analyses across five European countries.

The framework offers a flexible yet robust tool to help adult education providers:

- **Assess current AI competencies**
- **Identify training and development priorities**
- **Guide the design of learning programmes and organisational strategies**
- **Promote ethical, inclusive, and human-centred AI adoption**

It is not a checklist of tools or technologies, but a developmental guide - fostering reflection, upskilling and long-term transformation.

# STRUCTURE OF AI COMPETENCY FRAMEWORK

## MODULES

The AI Competency Framework for Digital Transformation Specialists in Adult Education consists of five modules that support educators, administrative staff and organisational leaders in integrating AI into their practice by outlining key skills, knowledge, and attitudes in a clear, practical structure. The modules are:

1

### MODULE 1. TECHNICAL SKILLS AND DATA LITERACY

Defines the foundational knowledge and abilities needed to understand how AI works and how data influences its outputs. Emphasises the capacity to critically assess, select and use AI tools and data sources in adult education contexts.

2

### MODULE 2: PEDAGOGICAL APPLICATIONS

Outlines key competencies for using AI to support adult learning processes, including content generation, assessment support and personalised learning. Focuses on aligning AI use with inclusive, learner-centred educational practices.

3

### MODULE 3: AI FOR ORGANISATIONAL PROCESSES

Describes the skills and mindsets required to apply AI within organisational and administrative functions. Highlights how adult education institutions can use AI to enhance planning, communication, efficiency and decision-making.

4

### MODULE 4: ETHICAL CONSIDERATIONS AND SAFETY

Identifies the competences needed to ensure that AI use is transparent, fair, and aligned with ethical standards. Covers issues such as bias, data protection, human oversight, and inclusive practice in the adult learning sector.

5

### MODULE 5: AI INTEGRATION STRATEGIES, LEADERSHIP AND ADVOCACY

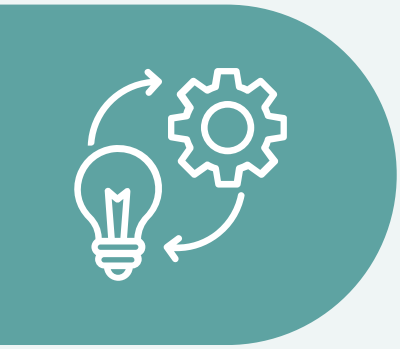
Focuses on strategic and leadership-oriented competences for guiding AI adoption within adult education settings. Includes advocacy, institutional vision, peer support and fostering a culture of responsible and future-focused AI use.

# COMPETENCY LEVELS

Each module begins with a short description, followed by clearly defined competencies structured across three progressive levels: **Explorer, Practitioner** and **Innovator**.

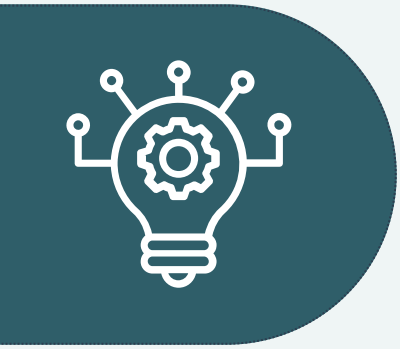
## Explorer

At the Explorer level, individuals are beginning their journey with AI in adult education. They may have limited experience and rely on basic knowledge or tools while exploring new possibilities. This stage is marked by curiosity, early experimentation and growing awareness of the opportunities and challenges AI presents. Explorers often require guidance and support as they build confidence in applying AI in simple or small-scale contexts.



## Practitioner

Practitioners demonstrate consistent and hands-on use of AI in educational or organisational activities. They actively apply AI tools, adapt them to suit diverse learner needs or administrative tasks and solve problems as they arise. Practitioners are often self-directed in their learning and contribute to team knowledge by sharing good practices. Their approach is grounded in real-world application and continuous improvement.



## Innovator

Innovators are experienced professionals who lead by example. They mentor others, shape organisational strategies and drive innovation in the use of AI in adult education. At this level, individuals critically assess emerging tools, develop new methods or frameworks as well as promote responsible, inclusive and ethical AI use. Innovators not only apply AI effectively but help create the conditions for its thoughtful integration across the organisation.

# STRUCTURE

Each module uses the same structure to stay clear and easy to follow:

**MODULE INTRODUCTION**
Offers a concise overview of the module's focus area and its relevance to AI integration in adult education.

**COMPETENCY TABLES**
Present key skills, knowledge and attitudes across three progressive levels - Explorer, Practitioner and Innovator.

**SELF-REFLECTION QUESTIONS**
Encourage users to reflect critically on their current practice, challenges, and development needs.

**CASE STUDIES**
Real-world examples illustrate how competences are applied in practice, providing inspiration and practical insights.

**ROADMAP**
Outlines key developmental steps adult educators can follow to gradually build confidence and competence in using AI.

This structured approach ensures that each module is easy to navigate, adaptable to different professional roles and focused on practical application.

By combining clear progression levels, role-specific guidance, reflective prompts, real-world case studies and tep-by-step roadmaps, the framework offers a comprehensive yet flexible tool to support adult education professionals in building AI-related competences over time.

# TECHNICAL SKILLS AND DATA LITERACY

MODULE 1

# MODULE 1.
# TECHNICAL SKILLS AND DATA LITERACY

**Focus Areas:**
*Key concepts and history of AI; risks, benefits, and challenges of AI adoption; psychological and societal effects of AI, particularly in educational contexts; importance of accurate and high-quality data; techniques for assessing AI-generated content; selecting appropriate AI tools for different purposes; and adapting to AI advancements and their practical applications in adult education.*

**DESCRIPTION:**

This module outlines the core competencies needed by adult education professionals to understand, evaluate and use AI technologies responsibly. It introduces key concepts related to AI and data literacy, emphasising the importance of data quality and the critical assessment of AI-generated content.

The framework also defines the competencies administrative staff need to evaluate, select and use AI tools effectively for diverse educational and organisational tasks.

Each competence is presented at three levels - Explorer, Practitioner, and Innovator - offering a progressive path for adult educators to build confidence, awareness and leadership in the use of AI.

# MODULE 1. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **INTRODUCTION TO AI** | • Understands what AI is and can name few AI tools<br>• Knows the brief history of AI<br>• Understands key AI concepts<br>• Understands the benefits and risks of using AI | • Open to learning about AI<br>• Embraces new technologies like AI with a mindset of learning and adaptation<br>• Recognises both the benefits and limitations of AI | • Knows the different types of AI and can describe how they function<br>• Understands rapid advancements in AI and can adapt to the changes<br>• Knows how to address challenges and mitigate risks when using AI<br>• Understands the psychological impact of using AI | • Willing to stay flexible and adjust to the rapid changes and advancements in AI technology<br>• Questions and analyses AI outcomes to ensure accurate and responsible use.<br>• Maintains a positive attitude towards overcoming challenges in AI adoption | • Is able to fully explain complex AI concepts and train colleagues or learners<br>• Develops AI resilience skills and is capable of teaching others to develop these skills<br>• Proposes institutional AI use strategies or contributes to tool selection | • Is eager to stay current with AI developments.<br>• Takes the lead in promoting AI adoption that is inclusive, accessible and aligned with the organisation's goals.<br>• Is willing to train, mentor and support colleagues or learners in building their AI knowledge and skills |
| **DATA LITERACY AND AI CONTENT ASSESSMENT** | • Understands that AI systems rely on data to work well<br>• Knows that better data leads to more accurate AI results<br>• Recognises how cleaning and organising data affects AI performance | • Curious about how data shapes AI results<br>• Open to learning how data quality affects AI accuracy<br>• Aware that clean, well-organised data improves AI performance<br>• Interested in AI-generated content, but mindful of its limits due to data quality | • Can identify different types of data (structured vs. unstructured) and their role in AI<br>• Has critical judgment in using AI tools<br>• Knows how to verify AI-generated content against external sources | • Has a thoughtful approach to choosing, handling and using different data for AI tasks<br>• Takes initiative to verify and correct AI-generated content, addressing any potential issues before they affect the outcome | • Mentors colleagues in critically assessing AI-generated results<br>• Leads initiatives to improve data quality and AI content accuracy in the organisation<br>• Develops systems or guidelines to monitor AI output and content quality | • Advocates for high standards for data quality and content accuracy<br>• Helps colleagues build critical thinking for evaluating AI content<br>• Constantly seeks ways to improve data and AI assessment processes |

# MODULE 1. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **AI TOOLS AND TECHNOLOGIES** | • Has a basic understanding of different types of AI tools<br>• Recognises which AI tools are suitable for various tasks<br>• Demonstrates basic interaction skills when using AI-powered tool | • Eager to explore and learn about the variety of AI tools available and their applications<br>• Willing to engage and experiment with AI tools and try different technologies<br>• Recognises the value of AI tools in completing tasks efficiently and is mindful of their limitations | • Understands how to effectively use AI tools to enhance various tasks<br>• Uses AI-powered tools for a wide range of purposes, such as text, image, and video creation, transcription summarization, and content generation.<br>• Selects and adapts tools based on context and needs | • Thinks strategically about using AI tools for tasks and creates effective prompt strategies<br>• Is comfortable in using and exploring a variety of AI tools.<br>• Continuously seeks to improve and refine how AI tools are used, focusing on efficiency and effectiveness | • Understands how algorithms shape AI tool outputs and decision-making<br>• Guides and mentors others in effectively integrating AI tools<br>• Continuously evaluates AI advancements and applies relevant innovations in their work | • Takes the initiative to guide and mentor others in the strategic use and integration of AI tools<br>• Stays current with advancements in AI tools and their evolving capabilities<br>• Actively looks for ways to innovate and enhance workflows by integrating new AI technologies |
| **AI FOR ACCESSING AND ORGANIZING INFORMATION** | • Uses AI tools (e.g., search assistants, summarizers) to find or understand basic information<br>• Can retrieve insights and summaries from chatbots or voice tools | • Curious about how AI can support content discovery<br>• Is willing to assess the value and accuracy of information returned | • Compares AI summaries with original sources<br>• Uses AI to organise teaching material, lesson plans, or admin workflows | • Reflects on when AI enhances vs. replaces critical thought<br>• Values AI's potential to reduce information overload | • Designs or supports systems that help learners or staff retrieve and organise information with AI<br>• Trains others in structured content selection | • Advocates for informed AI use.<br>• Encourages independent thinking alongside AI-assisted discovery<br>• Promotes digital literacy and empowerment in general |

# SELF-REFLECTION QUESTIONS



| | LEVEL 1: EXPLORER | LEVEL 2: PRACTITIONER | LEVEL 3: INNOVATOR |
|---|---|---|---|
| INTRODUCTION TO AI | • What do I already know about how AI works and where are my gaps in understanding?<br>• Am I open to learning about AI and its potential impact on my work?<br>• Do I recognize both the benefits and limitations of AI in my professional field?<br>• How do I feel about learning and using AI - am I open to adapting to new technologies or do I have concerns?<br>• Do I understand the key concepts of AI well enough?<br>• What excites me most about AI, and what aspects make me cautious? | • Do I understand the difference between various types of AI (e.g., generative vs. predictive)?<br>• How do I assess whether an AI tool is appropriate for use with adult learners?<br>• Am I aware of the psychological impact AI might have on students, colleagues, or myself? How can I address these concerns?<br>• What challenges do I see in AI adoption in my organisation?<br>• Am I ready to actively keep up with the latest advancements in AI? | • Am I helping others in my organisation better understand the fundamentals of AI?<br>• Do I advocate for or shape responsible AI strategies that are human-centred?<br>• Am I staying up to date with AI trends, tools, and policy developments that affect my field?<br>• What challenges do I see in AI adoption in my organisation and how can I help overcome them?<br>• Am I ready to actively promote inclusive and accessible AI solutions within my organisation?<br>• How ready am I to effectively explain AI concepts and support colleagues in understanding and using AI |
| DATA LITERACY AND AI CONTENT ASSESSMENT | • Do I understand how data quality impacts the accuracy of AI-generated content?<br>• Am I aware of how AI models rely on data to function effectively?<br>• How mindful am I about the importance of cleaning and organizing data before using AI tools?<br>• Am I curious to explore how AI processes data and generates results? | • Do I take the initiative to verify AI generated information against reliable external sources?<br>• How do I approach identifying and addressing gaps or errors in AI outputs?<br>• How do I support learners or colleagues in becoming critical consumers of AI content? | • How do I contribute to improving data quality and AI content accuracy in my organisation?<br>• Do I take the initiative in implementing systems for ongoing monitoring of AI outputs?<br>• Am I mentoring others in developing data literacy and content assessment skills? |

# SELF-REFLECTION QUESTIONS



| | LEVEL 1: EXPLORER | LEVEL 2: PRACTITIONER | LEVEL 3: INNOVATOR |
|---|---|---|---|
| AI TOOLS AND TECHNOLOGIES | • Which AI tools have I tried and what was my experience with them?<br>• Am I open to exploring and experimenting with AI tools in my daily work?<br>• How can AI tools help me work more efficiently?<br>• Am I comfortable interacting with AI-powered tools, or do I need more practice? | • Am I comfortable creating effective prompts to get the best results from AI tools?<br>• Do I know how to select the right tool for a specific educational or organisational need?<br>• Have I explored the limits of the tools I use (e.g., where they fail, where human input is needed)?<br>• Do I regularly evaluate how well AI tools are performing for my specific needs? | • Do I feel confident in guiding others to integrate AI tools within their daily tasks and workflows?<br>• How do I ensure that the AI tools I use align with organizational goals and drive positive results? |
| AI FOR ACCESSING AND ORGANIZING INFORMATION | • Have I tried using AI to help me search for or summarise information?<br>• How confident am I in assessing the accuracy of the information returned by AI tools?<br>• Have I tried using it to reduce information overload in my work? | • Do I compare AI-generated summaries to original sources to check for accuracy or completeness?<br>• How do I organise and store AI-generated information for teaching, planning or communication?<br>• Can I support learners or colleagues in doing the same? | • Am I designing or guiding systems that help discover, organise and suggest relevant content using AI?<br>• Do I train others to think critically and use AI productively in finding or managing information?<br>• How do I balance the convenience of AI with the need for independent thinking and analysis? |

# CASE STUDY 1

# CHATGPT IN EDUCATION

## BACKGROUND

ChatGPT, a powerful AI tool, has become widely adopted by students at Ho Chi Minh City University of Technology and Education (HCMUTE) to aid in learning and academic tasks. Students use it for idea generation, assignment completion and summarizing content. While it provides significant benefits in terms of accessibility and efficiency, concerns about over-reliance, ethical issues and academic integrity have arisen.

## THE CHALLENGE

ChatGPT's integration into the learning process has had a transformative effect on students, with many using it daily for a variety of academic purposes. However, its increasing adoption has led to several concerns:

*1. Overreliance:* Students are becoming dependent on AI tools like ChatGPT, which may impair their ability to think critically and solve problems independently.

*2. Academic integrity:* Issues related to plagiarism, information accuracy and the potential for cheating have surfaced, leading to ethical concerns about the tool's use in academic settings.

3.*Decreased creativity:* The convenience of using AI to generate ideas or summarize content might discourage students from engaging deeply with the material, reducing opportunities for creative thinking.

## BIAS DILEMMA

While ChatGPT is a useful tool for generating academic content, it does not replace the need for critical evaluation and independent thinking. However, there are concerns about equity and fairness in how students use ChatGPT. For example:

- *Information Reliability:* Not all information generated by AI tools is accurate, which can mislead students and lead to incorrect conclusions.
- *Cultural and Linguistic Bias:* Similar to AI detection tools in plagiarism cases, ChatGPT might not be fully attuned to the cultural and linguistic context of all students, potentially reinforcing biases against non-native English speakers.
- *Ethical Concerns:* Students using ChatGPT may not fully understand the ethical implications of relying on AI for academic tasks, which could lead to issues of academic dishonesty.

# CASE STUDY 1



## FOOD FOR THOUGHT

Although ChatGPT offers clear educational advantages in terms of efficiency and accessibility, educators must approach its integration carefully to avoid reinforcing inequities and compromising academic integrity. Here are some questions to consider:

- How can educators ensure students use AI tools like ChatGPT responsibly, without fostering over-reliance or academic dishonesty?
- When might the use of ChatGPT be more of a obstacle than a help, particularly in terms of developing problem-solving and critical-thinking skills?
- How can educators balance the convenience of AI with the need to develop students' creativity and original thinking?
- What policies or practices can be implemented to ensure the ethical use of AI in educational settings, ensuring that it serves all students equitably?

## KEY INSIGHTS

1. **Responsible use of AI:** Teachers should guide students on how to use AI tools like ChatGPT in a way that fosters independent learning while also ensuring academic integrity.
2. **Ethical guidelines:** Clear ethical guidelines should be put in place for using AI tools, emphasising the importance of verifying AI-generated content and avoiding plagiarism.
3. **Cultural sensitivity:** Educators need to be aware of potential biases in AI tools and ensure that these tools are used in a way that accommodates students from diverse linguistic and cultural backgrounds.
4. **Balanced integration:** A balanced approach, combining AI tools with traditional teaching methods and fostering critical thinking, is essential to ensure the tool enhances learning without replacing essential skills.

## REFERENCES

Nguyen, T. N. T., Lai, N. V., & Nguyen, Q. T. (2024) 'Artificial Intelligence (AI) in Education: A Case Study on ChatGPT's Influence on Student Learning Behaviors' [Case Study], Education and Practice International Journal, 13(2), pp. 105–121. Published Online: May 2024. Available at: https://www.edupij.com/index/arsiv/64/335/artificial-intelligence-ai-in-education-a-case-study-on-chatgpts-influence-on-student-learning-behaviors.

# CASE STUDY 2

# AI INTEGRATION IN HIGHER EDUCATION

## OVERVIEW

This case study explores the integration of AI at Skyline University College (SUC), aiming to assess how AI tools are enhancing educational experiences for students and faculty while identifying barriers and challenges to their effective use.

## BENEFITS AND CHALLENGES OF AI IN EDUCATION

AI has become a transformative tool in various industries, including education. At SUC, AI tools like chatbots and automated systems have helped improve administrative tasks and personalized learning. AI's ability to tailor content to individual student needs can significantly enhance learning outcomes. However, challenges such as technical issues, resistance to change, and privacy concerns persist. Additionally, AI systems may inherit biases, impacting fairness and equity in education.

## RESEARCH GAPS

While AI's potential in education is widely acknowledged, there is a lack of empirical research on its practical implementation at specific institutions, such as SUC. The study aimed to fill this gap by providing insights into the challenges and opportunities of AI integration at SUC.

## STUDY OBJECTIVES

1. Explore AI tools used at SUC.
2. Evaluate their effectiveness in improving learning and administrative processes.
3. Assess perceptions of students and faculty regarding AI.
4. Identify barriers to AI adoption.
5. Determine the training needed to enhance AI use.
6. Provide actionable recommendations for better AI integration.

## FINDINGS

The study found that AI adoption at SUC is widespread, with students and faculty using AI tools for tasks like plagiarism checking and improving administrative efficiency. However, challenges such as a lack of technical expertise and resistance to AI remain. Students and faculty generally have a positive view of AI, recognizing its benefits but also acknowledging the need for better training and addressing privacy concerns.

# CASE STUDY 2



## CONCLUSION

AI integration at SUC has led to improvements in learning personalization and administrative processes, but challenges persist. Addressing these obstacles is critical for maximizing the benefits of AI in education. The findings contribute valuable insights into AI's role in higher education and provide recommendations for optimizing its integration at SUC.

## KEY INSIGHTS

1. **AI enhances learning and administrative efficiency.** At SUC, AI tools like chatbots and plagiarism checkers have improved both the student learning experience and administrative workflows. Personalized content delivery has led to more engaging and effective education.
2. **Students and faculty show cautious optimism.** While most students and faculty view AI positively and recognize its benefits, they also express concerns about data privacy, transparency, and potential bias in AI-driven systems.
3. **Key barriers - skills gaps and resistance to change.** Lack of technical expertise and reluctance to adopt new technologies remain major obstacles to fully leveraging AI. Addressing these barriers is crucial for successful integration.
4. **Training and support are essential for effective AI use.** The study highlights the need for structured training programs that go beyond technical skills to include ethical and pedagogical guidance, helping users apply AI responsibly and confidently.

## REFERENCES

Sebihi, A. (2024) 'AI Integration in Higher Education: A Case Study of Skyline University College' [Case Study], Skyline University College. Available at: https://www.skylineuniversity.ac.ae/knowledge-update/from-different-corners/ai-integration-in-higher-education-a-case-study-of-skyline-university-college

# Module 1.
# ROADMAP

### KEEP GROWING

Stay informed about new tools and improve your digital confidence over time

### ACT ETHICALLY

Promote safe, transparent, and fair use of AI across administrative systems

### THINK CRITICALLY

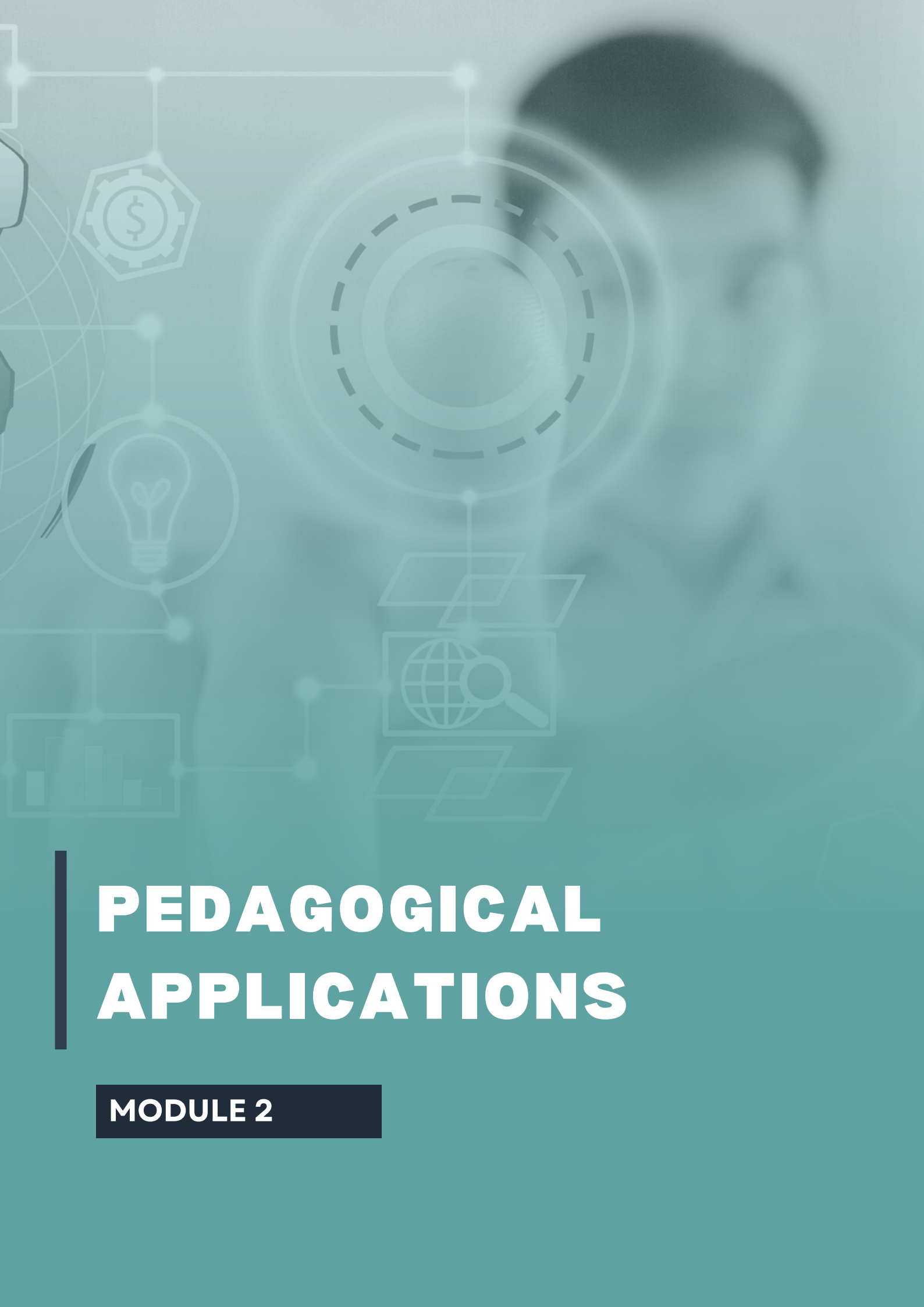
Assess AI outputs, check for bias, and question automated recommendations

### EXPLORE USE CASES

Learn where AI can support planning, communication, or decision-making

### UNDERSTAND THE BASICS

Get familiar with AI concepts, capabilities, and limitations



# PEDAGOGICAL APPLICATIONS

MODULE 2

# MODULE 2.
# PEDAGOGICAL APPLICATIONS

**Focus Areas:**
*Supporting AI-driven personalization, facilitating interactive and personalized learning experiences, streamlining assessment and feedback, and pedagogical support in the context of AI use in education and adult training organizations.*

**DESCRIPTION:**

This module outlines the core competencies required to understand and support the pedagogical use of AI in adult education from an administrative and organisational perspective. It focuses on how AI can enhance learning processes such as personalisation, interaction, feedback and assessment - and how administrative staff can help create the conditions for their effective, ethical and inclusive implementation.

Each competence is structured across three levels – Explorer, Practitioner, and Innovator – enabling administrative staff to identify their current level of engagement and plan for growth toward more strategic and supportive use of AI in educational planning, resourcing and institutional coordination.

# MODULE 2. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | *Knowledge/Skills* | *Attitudes* | *Knowledge/Skills* | *Attitudes* | *Knowledge/Skills* | *Attitudes* |
| SUPPORTING AI-DRIVEN PERSONALISATION | • Recognises AI tools that assist personalised learning (e.g., enrollment trackers)<br>• Identifies basic admin uses of AI (e.g., automated reminders)<br>• Understands how AI collects and analyses learners' performance data | • Curious about how AI can aid learners but unfamiliar with details<br>• Open to exploring AI with guidance<br>• Willing to support data-driven decision-making while respecting privacy | • Manages AI systems that support personalised schedules or resources for learners<br>• Uses AI data to coordinate tailored support (e.g., notifying staff of learner needs)<br>• Uses AI analytics to predict learner needs and personalize interventions. | • Willing to stay flexible and adjust to the rapid changes and advancements in AI technology<br>• Questions and analyses AI outcomes to ensure accurate and responsible use<br>• Maintains a positive attitude towards overcoming challenges in AI adoption | • Implements AI tools to align resources with learner profiles (e.g., course suggestions)<br>• Collaborates with educators to ensure AI personalization meets institutional goals<br>• Implements AI in scalability for institutional decision-making | • Promotes AI as a key enabler of personalized education support<br>• Advocates for AI-driven support systems across departments<br>• Supports institutional policies that ensure transparency and accountability |
| FACILITATING INTERACTIVE LEARNING EXPERIENCES WITH AI | • Supports basic AI tools for learner interaction (e.g., chatbot setup)<br>• Understands AI can enhance event logistics (e.g., scheduling)<br>• Learns how AI improves accessibility (e.g., real-time translation, speech-to-text) | • Willing to assist despite limited technical skills<br>• Open to learning how AI improves admin tasks<br>• Is aware of any bias risks in AI-powered content generation | • Coordinates AI tools (e.g., virtual event platforms) to enable interactive sessions<br>• Ensures AI tools run smoothly for learners and staff during interactive activities<br>• Ensures AI-powered tools comply with data privacy laws | • Confident in AI's role in supporting engaging learning events<br>• Values AI's contribution to seamless learning experiences<br>• Advocates for responsible AI use in education | • Manages advanced AI systems (e.g., virtual labs) to facilitate interactive programs<br>• Partners with tech teams to deploy cutting-edge interactive AI solutions<br>• Monitors AI policy development for ethical interactive learning | • Encourages innovative AI use to enhance learner participation<br>• Leads efforts to integrate AI into admin support for interactive learning<br>• Ensures AI remains human-centric and ethically guided |

# MODULE 2. COMPETENCES

**STREAMLINING ASSESSMENT AND FEEDBACK PROCESSES WITH AI**

| LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|
| ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| • Uses AI to automate basic admin tasks (e.g., grade entry)<br>• Recognises AI can reduce manual workload in assessments<br>• Explores AI-driven survey tools for student and teacher feedback collection | • Curious about AI's efficiency but cautious about errors<br>• Willing to adopt AI with support<br>• Recognises the importance of balancing AI automation with human oversight | • Manages AI tools to compile assessment data (e.g., progress reports)<br>• Ensures AI-generated reports are accessible to educators and learners<br>• Ensures AI-based assessments comply with ethical and data privacy laws | • Sees AI as a reliable aid for administrative accuracy<br>• Committed to using AI to improve process efficiency<br>• Encourages transparency in AI-driven assessment methodologies | • Designs AI workflows to support complex assessment needs (e.g., analytics dashboards)<br>• Trains staff on AI tools to enhance assessment support and data management<br>• Oversees the integration of AI-driven adaptive learning models | • Advocates for AI to optimize assessment-related admin processes<br>• Drives scalable AI solutions for transparent, efficient feedback systems<br>• Leads AI policy discussions on data protection and bias mitigation |

# SELF-REFLECTION QUESTIONS



## SUPPORTING AI-DRIVEN PERSONALIZATION

### LEVEL 1: EXPLORER

- Can I identify an AI tool that helps personalise learner support?
- Am I curious about how AI can assist learners administratively?
- Can I produce a safe process to collect and analyse learners' performance data?

### LEVEL 2: PRACTITIONER

- Do I manage AI tools to provide tailored admin support for learners?
- Do I use AI data to coordinate personalised support effectively?
- How much faster can I analyse data with AI tools?

### LEVEL 3: INNOVATOR

- Am I implementing AI to align resources with learner needs?
- Do I promote AI-driven personalisation across departments?
- How do I engage in institutional policy making regarding AI?

## FACILITATING INTERACTIVE LEARNING EXPERIENCES WITH AI

### LEVEL 1: EXPLORER

- Have I supported an AI tool for a learner event or activity?
- Do I see how AI can improve event logistics for learners?
- Do I possess the skills and tools to ensure improved accessibility for learners?

### LEVEL 2: PRACTITIONER

- Do I coordinate AI tools to enable smooth interactive sessions?
- Do I ensure AI tools enhance engagement without technical issues?
- Does my engagement comply with data privacy laws and AI use?

### LEVEL 3: INNOVATOR

- Am I managing advanced AI systems for interactive learning programs?
- Do I lead efforts to deploy innovative AI for interactive support?
- Can I transform my institution into a leader on AI ethics?

# SELF-REFLECTION QUESTIONS

STREAMLINING ASSESSMENT AND FEEDBACK PROCESSES WITH AI

## LEVEL 1: EXPLORER

- Have I used AI to automate an assessment-related task?
- Am I open to AI reducing my manual workload?
- Do I recognise the importance of balancing AI automation with human oversight?

## LEVEL 2: PRACTITIONER

- Do I manage AI tools to compile accurate assessment data?
- Do I ensure AI reports are useful for educators and learners?
- How can I ensure transparency and legal compliance in AI-driven assessment methodologies?

## LEVEL 3: INNOVATOR

- Am I designing AI workflows to optimise assessment support?
- Do I train staff on AI tools to improve assessment processes?
- Can I cultivate a data protection and bias mitigation culture at my institution?

# CASE STUDY 1

# BERLITZ VIRTUAL LANGUAGE PRACTICE

## BACKGROUND

Berlitz integrated Azure AI Speech to enhance spoken language practice for adult learners in virtual settings, enabling flexible skill development for work or travel. This AI-driven tool assesses pronunciation in real time, generates diverse accents and dialogues, and adapts exercises to learners' proficiency levels, allowing educators to focus on refining teaching strategies rather than basic correction. By scaling language practice online, it reaches thousands of learners efficiently. However, the tool has limitations: it may not fully capture conversational fluency or cultural nuances, and its reliance on clear audio input can falter in noisy environments, requiring human oversight for comprehensive learning.

## BIAS DILEMA

Early versions of Azure AI Speech struggled with recognizing non-standard accents, as noted in VKTR's 2024 case study analysis, potentially penalizing learners from diverse linguistic backgrounds (e.g., non-native speakers or those with regional dialects). This could reinforce inequities for adult learners whose pronunciation deviates from "standard" models, particularly in professional contexts where fluency expectations vary. A balanced approach, combining AI feedback with instructor guidance, ensures equitable skill development across diverse learners.

## FOOD FOR THOUGHT

While Berlitz's AI promises scalable language practice, it risks disadvantaging learners with unique speech patterns. Pairing AI with human input fosters inclusivity. Some questions to think about:

- How can educators use Berlitz's AI to enhance speaking skills while ensuring fairness for all accents?
- In what ways might this tool be unfair to learners with non-standard speech (e.g., non-native speakers), and how can educators address this? Have you seen such issues?
- In which situations might an AI pronunciation error mislead learners, if not corrected by a teacher?
- What other methods (beyond AI tools) can improve spoken proficiency, like peer practice or role-playing?
- What guidelines can ensure this AI supports all learners, especially those with diverse linguistic backgrounds?

# CASE STUDY 2

# BE MY EYES BY BE MY AI

## BACKGROUND

Be My Eyes, partnered with OpenAI, introduced Be My AI to support visually impaired adults in education by providing real-time visual descriptions via a mobile app. This tool uses image-to-text generation and NLP to describe materials and environments, enabling independent engagement with coursework and reducing reliance on human volunteers. Educators can focus on teaching rather than facilitation. However, Be My AI struggles with complex scenes (e.g., crowded classrooms) and requires stable connectivity, limiting its effectiveness without supplementary support.

## BIAS DILEMA

Be My Eyes (2024) notes that Be My AI occasionally misidentifies objects in low-light or cluttered settings, disproportionately affecting learners in under-resourced areas (e.g., rural adult programs). It may also prioritize standard formats over diverse materials (e.g., handwritten notes), excluding learners with unique needs, as per American Foundation for the Blind insights. Pairing AI with human or tactile aids ensures equitable access.

## FOOD FOR THOUGHT

Be My AI enhances independence, but it risks excluding learners with environmental or format barriers. Combining AI with diverse methods fosters inclusion. Some questions to think about:

- How can educators use Be My AI to support visually impaired learners while ensuring fairness in all settings?
- In what ways might this tool disadvantage certain learners (e.g., those in low-tech areas), and how can educators address this? Have you seen this?
- In which situations might an AI misdescription confuse learners, if not verified by a person?
- What other methods (beyond AI tools) can aid visually impaired adults, like braille or audio guides?
- What guidelines can ensure Be My AI supports all learners, especially those with limited resources?

## REFERENCES

1. VKTR (n.d.) 5 AI Case Studies in Education [Web article]. VKTR. Available at: https://www.vktr.com/ai-disruption/5-ai-case-studies-in-education
2. Be My Eyes (2024) Be My AI: A New Era of Visual Assistance [Case Study]. Be My Eyes. Available at: https://www.bemyeyes.com/be-my-ai

# Module 2.
# ROADMAP

### PROMOTE GOOD PRACTICE

Encourage ethical, learner-centred, and effective use of AI across your organisation

### COORDINATE SUPPORT

Work with educators and teams to ensure smooth and inclusive AI adoption

### PILOT RESPONSIBLY

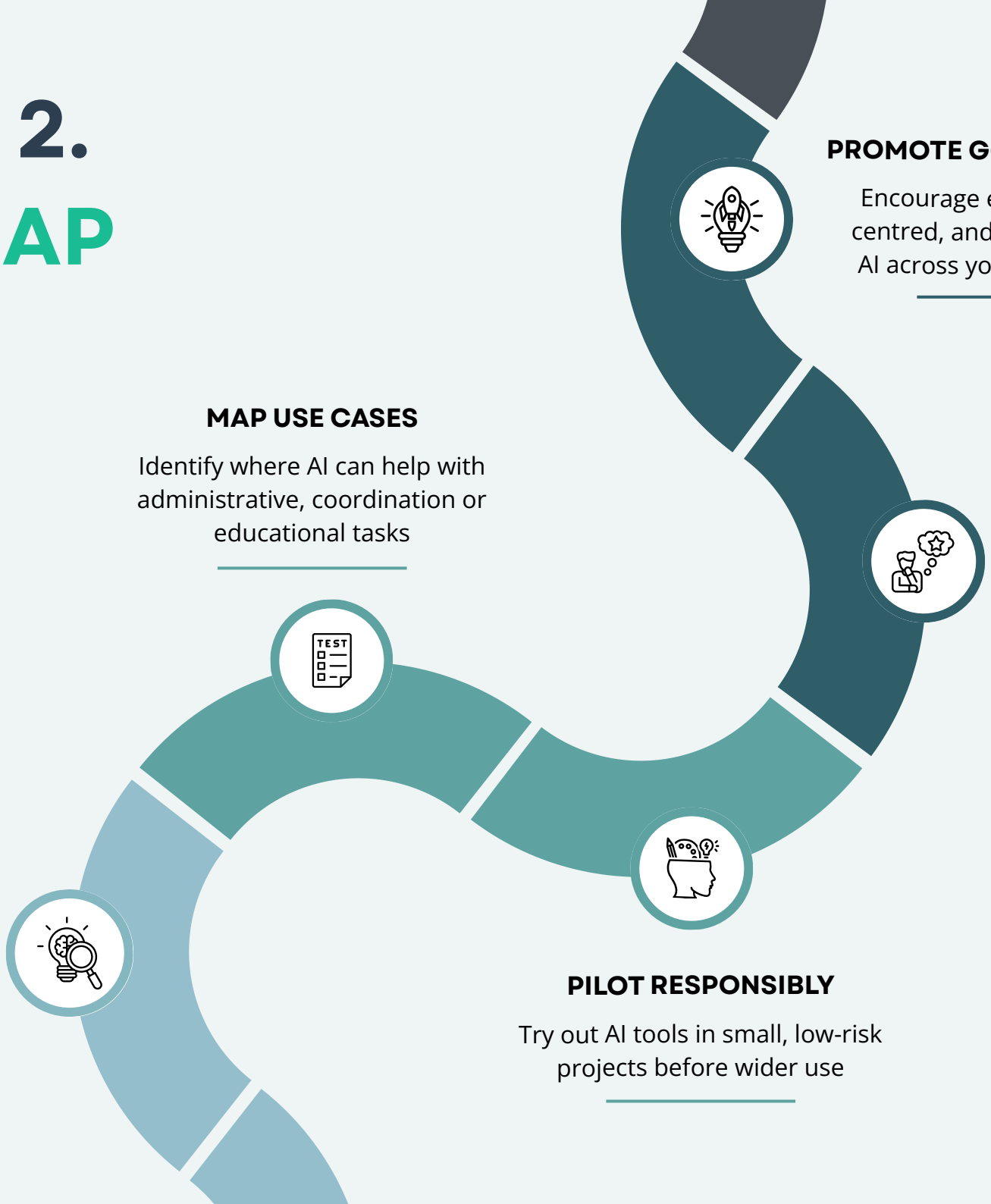
Try out AI tools in small, low-risk projects before wider use

### MAP USE CASES

Identify where AI can help with administrative, coordination or educational tasks

### DISCOVER OPPORTUNITIES

Explore how AI can improve learning processes and services for learners and staff



# AI FOR ORGANISATIONAL PROCESSES

MODULE 3

# MODULE 3.

# AI FOR ORGANISATIONAL PROCESSES

**Focus Areas:**
*Automation, workflow management, predictive analytics, digital transformation strategies, big data, data integration, data governance in the context of AI use in education and training organisations.*

## DESCRIPTION:

This module outlines the key competences related to the use of AI in organisational processes within adult education institutions. It addresses areas such as internal workflows, interdepartmental collaboration, data-informed planning and communication - all increasingly influenced by AI technologies.

Each competence is described across three progressive levels – Explorer, Practitioner, and Innovator – allowing administrative and management staff to assess their current practices and reflect on future development needs. The module supports institutions in identifying how AI-related skills can contribute to more coordinated, responsive and future-ready organisational strategies.

# MODULE 3. COMPETENCES

| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **AI-DRIVEN PROCESS OPTIMISATION** | • Basic understanding of AI tools and technologies used for process optimisation<br>• Awareness of how AI can automate routine tasks in various industries | • Curiosity to explore AI's potential in improving business processes<br>• Openness to learning about automation possibilities | • Identify areas where AI can optimise workflows<br>• Practical experience in using AI tools to automate specific tasks and enhance operational efficiency | • Proactive in seeking opportunities to apply AI for process improvement<br>• Focus on continuous learning and adapting AI technologies for tangible results | • Advanced expertise in implementing AI-driven process optimization across multiple business functions<br>• Ability to design and lead the integration of AI solutions that transform business operations | • Leadership mindset focused on fostering innovation<br>• Resilience in driving change and motivating teams to adopt AI technologies for operational excellence |
| **DATA INTEGRATION AND MANAGEMENT** | • Basic understanding of data structures and types of data used in AI systems<br>• Awareness of the role of data in supporting AI tools for process optimisation | • Interest in learning how data is structured and used in AI-driven systems<br>• Willingness to explore various data management techniques | • Integrate and manage data from multiple sources<br>• Understanding of how to clean, organise and analyse data for AI applications within an organisation | • Detail-oriented approach to managing data<br>• Focus on ensuring data quality and reliability to support AI-driven processes | • Expertise in designing advanced data management systems for AI implementation<br>• Ability to develop strategies for data governance, security and ethical data use in AI-driven initiatives | • Strategic thinking in managing data as a business asset<br>• Commitment to fostering a culture of data-driven decision-making and innovation |

# MODULE 3. COMPETENCES

AI STRATEGY DEVELOPMENT AND IMPLEMENTATION

| LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|
| ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| • General understanding of AI's role in digital transformation<br>• Awareness of how AI aligns with overall business strategies in enhancing organisational efficiency | • Open to learning about the strategic applications of AI in business<br>• Inquiry mindset regarding how AI can impact various organisational functions | • Develop and execute AI strategies at a functional level<br>• Understanding of how to align AI technologies with business goals and key performance indicators | • Solution-oriented approach to integrating AI into organisational processes<br>• Willingness to collaborate with other departments to implement AI strategies effectively | • Expertise in designing and leading organisation-wide AI strategies for digital transformation<br>• Ability to measure and optimise the impact of AI on business performance<br>• Leadership in scaling AI innovation | • Visionary mindset focused on long-term digital transformation<br>• Commitment to driving change and leading the organisation towards sustainable innovation through AI |

# SELF-REFLECTION QUESTIONS



| | LEVEL 1: EXPLORER | LEVEL 2: PRACTITIONER | LEVEL 3: INNOVATOR |
|---|---|---|---|
| AI-DRIVEN PROCESS OPTIMISATION | • How familiar am I with the concept of AI and its role in process optimisation?<br>• What are some areas within my current organisation where I see potential for automation using AI?<br>• What is my understanding of the different AI tools available for process optimisation? | • Have I successfully identified areas in my organisation where AI can improve efficiency?<br>• What AI tools or systems have I used to automate or optimise business processes?<br>• How do I evaluate the effectiveness of AI-driven optimisation in my day-to-day tasks? | • How do I envision AI transforming core processes within my organisation in the long term?<br>• What strategies have I used to lead AI-driven process transformation across different teams?<br>• How do I ensure that AI optimisations are continuously improving organisational efficiency and scalability? |
| DATA INTEGRATION AND MANAGEMENT | • What is my understanding of the types of data used in AI-driven systems?<br>• How familiar am I with the basic concepts of data integration and its importance for AI applications?<br>• How can I begin to explore data sources in my organisation that could benefit from AI analysis? | • How effectively am I managing and integrating data from various sources for AI applications?<br>• What tools or systems have I used to clean and organise data for AI processes?<br>• How confident am I in ensuring data quality and accuracy for AI decision-making? | • How have I designed or contributed to a data strategy that supports the integration of AI at scale in my organisation?<br>• How do I ensure data governance and security in AI projects across multiple departments?<br>• What innovative data management practices have I introduced to ensure the organisation's AI strategies are effective and sustainable? |

# SELF-REFLECTION QUESTIONS

AI STRATEGY DEVELOPMENT AND IMPLEMENTATION

## LEVEL 1: EXPLORER

- What is my understanding of how AI can align with broader organisational strategies?
- How do I see AI playing a role in transforming processes within my industry?
- How familiar am I with the basic elements of developing an AI strategy for an organisation?

## LEVEL 2: PRACTITIONER

- How successfully have I contributed to developing AI strategies within my organisation?
- What AI technologies have I helped integrate into organisational strategies to improve productivity or performance?
- How do I assess whether an AI strategy is achieving the expected goals and results?

## LEVEL 3: INNOVATOR

- How have I led the development and implementation of an AI strategy across the organisation?
- How do I measure the success of AI strategies in achieving long-term transformation?
- What leadership steps have I taken to foster a culture of AI innovation and drive organisation-wide change?

# CASE STUDY 1

# IBM SKILLS BUILD

## BACKGROUND

IBM SkillsBuild (formerly known as 'SkillsBuild Reignite') is a digital learning program aimed at supporting adult learners, particularly job seekers, career changers, and individuals from underserved communities, to develop highly marketable digital skills. The program is free and leverages AI to personalise educational content, streamline administrative tasks, and foster partnerships with local training providers worldwide.

## THE CHALLENGE

Many adult learners face challenges such as limited time, shifting career paths, or returning to education after long gaps. These learners require highly flexible, tailored learning experiences that align with real-world job demands. IBM aimed to move beyond traditional static e-learning by embedding artificial intelligence into the platform to offer personalised learning, automate support services, and better connect skills development to employment outcomes.

## AI SOLUTION

- *Adaptive learning paths*: AI recommends modules based on each learner's performance, goals, and assessments, allowing for more personalised and efficient learning journeys.
- *Skills profiler and labour market matching*: An AI-based tool analyses learners' existing skills and compares them with real-time labour market data to suggest in-demand career paths and relevant training.
- *AI-powered support:* A chatbot addresses frequently asked questions, while virtual mentors provide learners with feedback on exercises and projects.
- *Analytics dashboards:* Partner organisations and educators use AI-based dashboards to track learner progress, identify drop-out risks and offer timely support interventions

# CASE STUDY 1

## FOOD FOR THOUGHT

The growing use of AI for personalised learning offers efficiency and improved outcomes, but it also raises important questions for adult education providers:

- How can we ensure that AI-generated learning paths still leave room for broader skill exploration and critical thinking?
- What additional support do learners need to engage meaningfully with AI-driven content, especially those with limited digital skills?
- In what ways can human facilitators complement AI systems to ensure learners stay motivated and feel supported?
- How do we maintain transparency in AI recommendations so that learners understand and trust the process?

## KEY INSIGHTS

1. AI personalisation increased learner progression, with 60% of participants advancing to higher-level modules based on tailored suggestions.
2. Automation of administrative tasks enabled staff to spend more time on learner support and mentoring.
3. AI-supported job-matching tools helped align training to real labour market needs, improving employability outcomes.
4. Combining self-paced AI-driven learning with human mentorship proved especially effective in supporting adult learners with varied educational backgrounds.

## REFERENCES

IBM Corporation (2023) IBM SkillsBuild: AI-Driven Personalized Learning for the Future Workforce [Case Study], IBM Newsroom. Published Online: 18 September 2023. Available at: https://newsroom.ibm.com/2023-09-18-IBM-Commits-to-Train-2-Million-in-Artificial-Intelligence-in-Three-Years,-with-a-Focus-on-Underrepresented-Communities

# CASE STUDY 2

# NORDSTADT LEARNING CENTRE, GERMANY

## BACKGROUND

The “Nordstadt Learning Centre” is a fictional adult education provider used to show how AI tools could support day-to-day operations and improve how services are managed in a typical community-based learning setting.

The centre is focused on delivering flexible, learner-centred programmes. As demand for personalised learning increased, the institution faced mounting administrative pressure, with inefficiencies in enrollment processes, course planning, and resource allocation affecting service delivery.

## THE CHALLENGE

The organisation identified several constrictions in its operations, including:

- Repetitive manual tasks slowing down administration
- Delays in learner enrollment and communication
- Difficulty in predicting learner interest and demand
- Inefficient use of teaching staff and facilities

These challenges created a need for AI-driven systems to streamline internal operations, reduce delays, and better match resources with learner needs

## AI SOLUTION

- *Workflow automation:* AI systems integrated data across internal platforms, automating routine administrative tasks such as enrollment and confirmation emails.
- *Smart scheduling:* AI tools were used to optimise staff and facility scheduling based on real-time demand and availability.
- *Predictive analytics:* AI analysed historical enrolment data and local demand trends to forecast interest in specific subjects and formats.
- *Adaptive resource management:* Insights from AI helped tailor course offerings more closely to learner needs and organisational capacity.

# CASE STUDY 2



## FOOD FOR THOUGHT

The use of AI in back-office operations raises key strategic and ethical questions for adult education providers:

- What safeguards are needed to ensure that automation enhances service without dehumanising learner support?
- How can organisations maintain flexibility and equity when AI recommends data-driven adjustments in course offerings or locations?
- To what extent should staffing decisions be influenced by algorithmic predictions?
- How can we ensure that smaller or low-demand learner groups still receive equal access?

## KEY INSIGHTS

1. *Small steps, big gains.* Even basic AI tools, like automated registration forms or scheduling support, can save valuable time and reduce staff workload in adult learning centres.
2. *Data can guide, not decide*. Using past learner data helps plan better programmes, but human judgment is still essential to interpret what learners need.
3. *More time for people.* When routine admin tasks are handled by AI, staff can focus more on learner support, programme development, or outreach — areas where human connection matters most.
4. *Involve the whole team*. Successful integration of AI tools works best when all staff, from admin to programme managers, are engaged and trained. It builds confidence and improves results.

# Module 3.
# ROADMAP

### STRENGTHEN STRATEGY

Build on what works and make AI part of your organisation's long-term plans

### COLLABORATE WITH OTHERS

Work together with admin, teaching and IT staff to reach shared goals

### USE DATA WISELY

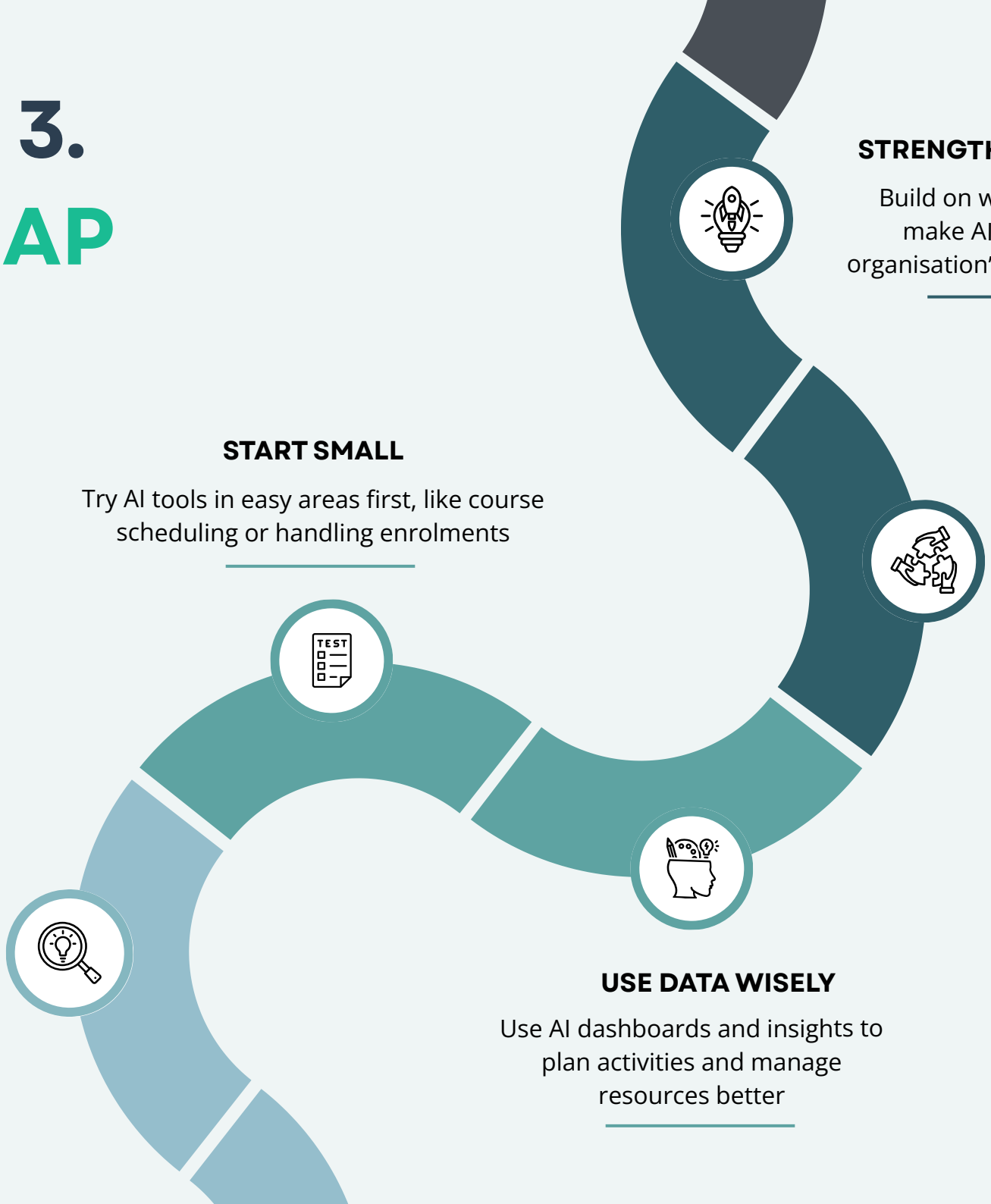
Use AI dashboards and insights to plan activities and manage resources better

### START SMALL

Try AI tools in easy areas first, like course scheduling or handling enrolments

### IDENTIFY OPPORTUNITIES

Look for tasks where AI could help save time or support better decisions



# ETHICAL CONSIDERATIONS AND SAFETY

MODULE 4

# MODULE 4.
# ETHICAL CONSIDERATIONS AND SAFETY

**Focus Areas:**
*Bias, Transparency, Explainability, Human Agency, Privacy, and Data Security in the context of AI use in adult education and training.*

**DESCRIPTION:**

This module focuses on helping adult education professionals understand and apply ethical principles when working with AI tools and systems. It supports users in identifying key risks such as bias, lack of transparency, diminished human oversight and data privacy breaches.

The aim is to help administrative staff reflect on their own practice and institutional systems and to take informed steps toward fair, transparent and inclusive AI use. The module encourages self-assessment and continuous improvement aligned with EU and international frameworks, including the AI Act, DigComp 2.2, and UNESCO's AI ethics guidelines.

Each competence in this module is presented at three levels - Explorer, Practitioner, and Innovator - providing a developmental path for professionals to build confidence, understanding and leadership in ethical AI use across various roles.

# MODULE 4. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **RECOGNISING AND MITIGATING AI BIAS** | • Is aware that AI tools (e.g. for course recommendations, resource allocation, staff performance tracking) can reflect unfair patterns<br>• Begins to consider how AI-supported decisions might affect different groups of staff or learners in different ways | • Curious and open to learning more about fairness and bias in AI systems used across organisations<br>• Willing to reflect on how AI tools might unintentionally disadvantage some individuals or groups, whether staff or learners | • Reviews AI-supported processes (e.g. automated messaging, staff evaluations) to check for unequal treatment or unintended consequences<br>• Takes action when needed - choosing a more inclusive tool, reporting issues, etc. | • Proactively works to create a more inclusive and equitable environment for both staff and learners<br>• Values diverse perspectives and is attentive to how AI may work differently for different people | • Leads regular meetings/reviews of AI-supported processes to make sure outcomes are fair and inclusive<br>• Helps develop internal guidance or checklists to support decision-making that is aware of possible bias | • Actively promotes equity in institutional systems<br>• Supports staff in identifying and addressing hidden bias in digital tools |
| **ENSURING TRANSPARENCY AND EXPLAINABILITY** | • Can identify which systems or processes in the organisation use AI (e.g. automated learning pathways, analytics dashboards, workload planning)<br>• Can explain in plain language what the tool does and why it's being used | • Believes in open communication and that staff and learners have a right to understand how decisions are made, what data is collected, etc.<br>• Willing to explain tools clearly and honestly | • Ensures that information about AI tools used is shared clearly across teams and with learners (e.g. website FAQs, orientation briefings, training sessions)<br>• Creates opportunities for staff and learners to ask questions, share concerns and provide feedback on AI-related processes | • Values transparency as a way to build trust in the organisation's digital systems<br>• Actively supports clear communication and helps ensure staff and learners feel informed and heard | • Develops communication strategies, policies or guidelines to ensure that AI use is clear, open and well-understood at all levels<br>• Supports colleagues in explaining AI systems and building confidence among stakeholders | • Positions transparency as a key organisational value, not just a communication task<br>• Encourages a culture where AI use is openly discussed and where all staff feel confident to explain and improve transparency in their own work |

# MODULE 4. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **HUMAN AGENCY AND OVERSIGHT** | • Understands that AI systems used in educational settings (e.g. automated scheduling, performance analytics, etc.) should allow for human review<br>• Can identify which systems rely on automated decision-making and when human oversight is needed | • Believes humans must remain involved, especially when AI may impact staff members' or learners' rights, opportunities or well-being<br>• Curious about when and how human judgment should be prioritised | • Ensures AI-supported decisions (e.g., staff evaluations) are subject to human review or validation<br>• Checks that systems can be explained and manually overridden if needed<br>• Establishes ways for individuals to raise concerns or appeal decisions | • Values transparency and fairness in AI-supported decisions<br>• Proactively ensures staff and learners know when a human review is available<br>• Sees human oversight not as a formality but a core ethical safeguard | • Helps create procedures and policies that ensure meaningful human oversight in AI-supported processes<br>• Supports choosing AI tools that can be explained and overridden<br>• Assists others in recognising when human judgment must intervene | • Encourages a human-centric approach to AI governance<br>• Sees human oversight as part of institutional trust-building<br>• Advocates for policies that prioritise dignity, consent and fairness in all AI-supported decision-making |
| **PRIVACY AND DATA SECURITY** | • Understands that AI systems often use sensitive data from staff and learners (e.g. age, background, etc.)<br>• Follows institutional rules for storing, sharing and accessing personal data (e.g. secure platforms, passwords, access limits) | • Respects privacy and understands the need to protect learner and staff information<br>• Willing to learn more about data protection and how it relates to AI use | • Reviews data collection and use in AI tools to ensure compliance with privacy regulations (e.g. GDPR)<br>• Ensures that only authorised people have access to personal data and that retention and deletion policies are followed | • Promotes responsible data use across the organisation<br>• Recognises that strong data protection builds trust and supports ethical practice | • Helps create or update policies on data protection and responsible AI use for both staff and learners<br>• Provides advice and training to colleagues on how to safely manage and protect data in AI-supported systems | • Leads by example in building a privacy-first culture<br>• Sees privacy and data protection not just as legal requirements but as part of ethical leadership |

# SELF-REFLECTION QUESTIONS



## RECOGNISING AND MITIGATING AI BIAS

### LEVEL 1: EXPLORER

- Do I know that AI tools used in our organisation (e.g. for learner support, staff planning or monitoring) can sometimes produce unfair outcomes?
- Have I thought about whether the AI tools used might affect different groups of staff or learners in different ways?

### LEVEL 2: PRACTITIONER

- Have I looked at AI-supported systems or reports to check whether they are treating all groups fairly (e.g. part-time staff, learners with low digital skills)?
- Have I ever raised concerns, adjusted a system or supported changes when I thought something was unfair or unbalanced?

### LEVEL 3: INNOVATOR

- Am I helping create or improve procedures to regularly check for fairness and bias in how we use AI?
- Do I support others (e.g. programme coordinators, HR staff, trainers, teachers, etc.) in identifying and addressing possible bias in AI tools?

## ENSURING TRANSPARENCY AND EXPLAINABILITY

### LEVEL 1: EXPLORER

- Do I know which of our systems use AI and can I explain in simple terms what they do and why we use them?
- Do I tell staff or learners when an AI tool is being used in a process or decision?

### LEVEL 2: PRACTITIONER

- Do we give clear information about how AI tools work (e.g. in learner guides, staff briefings, FAQs)?
- Do I listen to questions or concerns from learners or staff and make sure they get clear answers?

### LEVEL 3: INNOVATOR

- Am I helping to create or improve the way our organisation explains AI use (e.g. through policies, templates, training)?
- Do I encourage open discussions about AI tools and support staff to feel confident to explain them to others?

# SELF-REFLECTION QUESTIONS



## HUMAN AGENCY AND OVERSIGHT

### LEVEL 1: EXPLORER

- Do I know which AI systems in our organisation make or support decisions that affect staff or learners (e.g., planning tools, analytics, automated notifications)?
- Have I considered whether these decisions are reviewed by a human, or if staff/learners can challenge or appeal them?
- Am I aware of when and where human oversight is necessary to prevent possible harm or unfairness?

### LEVEL 2: PRACTITIONER

- Do I actively ensure that human review is part of critical decision processes supported by AI (e.g., learner progress alerts, staff performance tracking)?
- Have I checked whether the AI tools we use offer clear explanations or manual override options for staff?
- Do I communicate to colleagues and learners that AI decisions are not final and that human judgment is available when needed?

### LEVEL 3: INNOVATOR

- Am I leading efforts to build institutional safeguards that ensure human oversight in all AI-supported decision-making?
- Have I helped develop policies or protocols that clarify when and how human intervention must happen?
- Do I encourage a culture where staff and learners feel empowered to question AI-supported outcomes and trust that someone will review them?

## PRIVACY AND DATA SECURITY

### LEVEL 1: EXPLORER

- Do I understand what kind of personal data is collected from learners and staff when we use AI tools?
- Am I following basic rules to protect that data (e.g. using secure systems, not oversharing, respecting permissions)?

### LEVEL 2: PRACTITIONER

- Do I check that the AI tools we use meet privacy and security standards (e.g. GDPR compliance, limited access, data retention policies)?
- Do I help ensure that learner and staff data is only used when needed, and only by the right people?

### LEVEL 3: INNOVATOR

- Am I helping shape or improve data protection policies related to AI use in our organisation?
- Do I support or train others on how to safely handle and protect personal data in digital and AI-supported systems?

# CASE STUDY 1

# AI DETECTION TOOLS

## BACKGROUND

AI detection tools are increasingly being used by educators to identify plagiarism, AI-generated content, or other forms of academic dishonesty. These tools can analyse vast amounts of text quickly, flagging potential issues and saving educator's valuable time. By automating the initial review process, AI detection tools allow educators to focus on fostering academic integrity and providing meaningful guidance to students.

## THE CHALLENGE

However, these tools are not without limitations. While they can efficiently detect patterns or anomalies in text, distinguishing genuine intent, contextual understanding, or complex nuances often requires human judgment and contextual understanding, especially important in adult learning, where many learners may have non-standard writing styles, language barriers, or neurodiverse ways of expressing themselves.

Relying too much on AI detection tools can lead to false results or unfair accusations. This might especially affect students from different backgrounds.

## BIAS DILEMMA

Stanford University raised concerns about AI detection tools that were found to penalize non-native English speakers. The tools emphasized writing mechanics, such as grammar and syntax, over the quality of ideas, reinforcing inequities based on students' language proficiency.

The Geneva Graduate Institute publication AI and Digital Inequities notes that remote testing platforms using AI to detect off-task behaviour fail to recognize Black students, creating situations where Black students are locked out of or receive failing grades on exams or are subjected to unfair infractions.

A balanced approach, combining AI tools with human oversight, ensures fair and equitable evaluation in educational settings.

# CASE STUDY 1



## FOOD FOR THOUGHT

Although AI tools promise efficiency, they can inadvertently discriminate against students from diverse backgrounds. A balanced approach, combining AI tools with human oversight, ensures fair and equitable evaluation in educational settings. Some questions to think about:

- How can educators use AI for academic integrity without replacing human judgment?
- Should flagged content automatically trigger disciplinary procedures or be reviewed first by a person?
- How might AI systems unintentionally disadvantage learners who use language differently due to cultural, linguistic or cognitive factors?
- Are there fairer ways to assess learning than relying heavily on writing mechanics?
- What institutional policies or safeguards can help ensure AI supports inclusion rather than deepening disparities?

## KEY INSIGHTS

1. **Responsible use of AI detection.** Educators should apply AI detection tools as part of a broader strategy to support academic integrity, not as the sole authority on misconduct**.**
2. **Human oversight is essential.** AI-generated flags must be reviewed by a person who can assess intent, context, and learner background before making decisions.
3. **Transparent review processes.** Institutions should ensure learners are informed about how detection tools work and are given a chance to explain flagged content.
4. **Inclusive assessment practices.** AI should not overemphasise grammar or standardised writing norms; alternative ways of demonstrating understanding should be considered.
5. **Ongoing monitoring and improvement.** Detection tools should be regularly checked for potential bias or unintended effects, with feedback from educators and diverse learner groups.

## REFERENCES

EDUCAUSE (2024) Striking a Balance: Navigating the Ethical Dilemmas of AI in Higher Education [Article], EDUCAUSE Review. Published Online: December 2024. Available at: https://er.educause.edu/articles/2024/12/striking-a-balance-navigating-the-ethical-dilemmas-of-ai-in-higher-education

# Module 4.
# ROADMAP

### LEAD WITH INTEGRITY

Encourage fair, transparent and inclusive AI use at an institutional level

### PROMOTE SAFE PRACTISES

Support colleagues in applying ethical standards and recognising risk in in everyday digital processes

### ACT RESPONSIBLY

Use AI tools in ways that prioritise data protection and uphold human oversight in processes

### REFLECT ON IMPACT

Consider how AI decisions affect staff and learners, especially from underrepresented groups

### NOTICE THE RISKS

Understand ethical concerns like bias, misuse of data or lack of transparency in AI systems

# AI INTEGRATION STRATEGIES, LEADERSHIP AND ADVOCACY

MODULE 5

# MODULE 5.

# AI INTEGRATION STRATEGIES, LEADERSHIP AND ADVOCACY

**Focus Areas:**
*Strategic planning for AI integration; organisational readiness and vision-setting; staff engagement and motivation; mentoring and peer support in AI adoption; building a shared culture of ethical, inclusive AI use; advocating for responsible AI policies and practices in education and training*

**DESCRIPTION:**

This module defines the competences needed to lead, coordinate or influence the meaningful integration of AI within adult education institutions and networks. It focuses not on technical implementation, but on the strategic, motivational and ethical aspects of guiding digital transformation. The competences in this module are relevant to professionals who take initiative, whether formally or informally, in shaping responsible and inclusive AI practices across teams, programmes or communities.

Each competence is structured across three levels - Explorer, Practitioner, and Innovator - offering a pathway for progression from initial awareness to strategic leadership. By mapping their position within these levels, professionals can gain a better understanding of how they contribute to building AI maturity in their working environments.

# MODULE 5. COMPETENCES



| | LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|---|
| | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| **STRATEGIC THINKING FOR AI INTEGRATION** | • Understands the potential of AI to support specific functions (e.g. communication, scheduling, learner data, feedback, etc.)<br>• Identifies areas where AI could improve processes | • Is open to exploring how AI can benefit the organisation<br>• Is willing to learn how AI use could fit into or improve existing systems & processes | • Integrates AI into planning for projects, programmes or organisational operations<br>• Selects tools or processes that meet the needs of staff, learners and the organisation overall | • Is focused on using AI to solve problems and achieve long-term improvements<br>• Values practical and realistic use | • Leads or contributes to strategic decision-making about AI adoption<br>• Aligns AI use with organisational goals and values<br>• Supports innovation that includes all staff | • Leads with purpose<br>• Looks for sustainable and inclusive ways to integrate AI in the organisation<br>• Encourages long-term thinking and planning |
| **SUPPORTING AND MOTIVATING OTHERS TO USE AI** | • Encourages staff to try AI tools and share ideas<br>• Takes part in open conversations about what works and what doesn't | • Is supportive and approachable<br>• Values learning from each other and lifelong learning in general | • Organises or supports learning opportunities on AI for staff (e.g. peer sessions, informal training, etc.)<br>• Helps respond to concerns or resistance | • Believes in building staff confidence and skills<br>• Shows patience when guiding others and takes initiative to share useful AI tools or tips | • Creates a culture of shared learning and experimentation<br>• Encourages ongoing peer learning and collaboration around AI<br>• Encourages staff leadership in AI use | • Positions transparency as a key organisational value, not just a communication task<br>• Believes that staff growth is essential<br>• Motivates others to be creative but also responsible in using AI<br>• Fosters a positive learning culture |

# MODULE 5. COMPETENCES

PROMOTING RESPONSIBLE AI USE AND DIGITAL CITIZENSHIP

| LEVEL 1: EXPLORER | | LEVEL 2: PRACTITIONER | | LEVEL 3: INNOVATOR | |
|---|---|---|---|---|---|
| ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** | ***Knowledge/Skills*** | ***Attitudes*** |
| • Can explain what responsible and inclusive AI use means in their organisational context<br>• Engages in conversations with staff or partners about ethical issues related to AI use at work | • Cares about using AI in ways that are fair, transparent and respectful of people's rights | • Encourages staff to reflect on how ethical and inclusive principles apply to the AI tools they use or manage<br>• Supports communication with learners, staff or stakeholders on safe and inclusive AI practices | • Acts as a role model by using AI responsibly and promoting ethical behaviour across the team<br>• Creates space for open, respectful dialogue about AI's potential and risks, including ethical and social concerns | • Leads advocacy, partnerships or public dialogue to promote responsible AI in adult education<br>• Represents the organisation in national or European initiatives | • Actively creates a culture of trust, fairness and inclusion around digital transformation<br>• Believes that leading AI use should benefit people and support ethical values |

# SELF-REFLECTION QUESTIONS



## STRATEGIC THINKING FOR AI INTEGRATION

### LEVEL 1: EXPLORER

- Where, in our organisation, could AI help improve processes or support staff & learners?
- Am I aware of the opportunities and risks of using AI in our programmes, processes or systems?

### LEVEL 2: PRACTITIONER

- Am I integrating AI into planning or decision-making in a way that supports our goals?
- Do I involve the right people when selecting or applying AI tools?

### LEVEL 3: INNOVATOR

- How do I align AI strategies with our long-term goals, vision and mission?
- Am I helping others connect innovation and AI with the organisation's values, purpose and long-term goals?

## SUPPORTING AND MOTIVATING OTHERS TO USE AI

### LEVEL 1: EXPLORER

- Have I encouraged my team to explore AI or discuss it openly?
- Do I listen to their concerns and learning needs around AI?

### LEVEL 2: PRACTITIONER

- Am I helping staff feel more confident and capable in using AI?
- What kinds of support, learning or time do they need - and am I providing it?

### LEVEL 3: INNOVATOR

- Am I creating a culture where people feel safe to experiment, share and grow with AI?
- How do I encourage peer learning or informal mentoring within our team?

# SELF-REFLECTION QUESTIONS



## LEVEL 1: EXPLORER

- Do I understand the key ethical issues in AI use, like bias, fairness or transparency?
- Have I helped raise these issues in staff discussions or team meetings?

## LEVEL 2: PRACTITIONER

- Am I actively communicating our commitment to safe, inclusive and fair AI use?
- Do I make sure that learners, staff and partners know where we stand on responsible AI?

## LEVEL 3: INNOVATOR

- Am I leading or contributing to conversations about ethical AI in adult education, within or beyond our organisation?
- How do I lead by example and advocate for AI that respects people and supports positive change?

# CASE STUDY 1

# VOLKSHOCHSCHULEN NETWORK, GERMANY

## BACKGROUND

The Volkshochschulen (VHS) are Germany's non-formal adult education centres, serving millions of learners across the country. In response to the growing relevance of digital transformation, several VHS associations began embedding artificial intelligence into their long-term strategic planning. A leading example is the Lower Saxony VHS Association, which in 2023 launched the programme "KI in der VHS" (AI in Adult Education Centres), aimed at building AI capacity among staff and integrating AI across both educational and administrative practices.

## THE CHALLENGE

As adult education providers with diverse staff and decentralised operations, VHS centres faced multiple challenges:

- A need to increase operational efficiency without reducing the quality of learner support
- Limited experience among staff in using AI tools in practical, day-to-day contexts
- Fragmented adoption of digital tools, without shared strategies or consistent support
- An interest in applying AI to both curriculum innovation and internal processes, but uncertainty about where to begin

## AI STRATEGY

The Lower Saxony programme introduced a sustainable, hands-on model for upskilling staff. Through 1–2 day workshops, VHS employees, including directors, program planners, instructors, and administrators, received practical training on generative AI and related tools. Each session focused on real tasks:

- Program planners used AI to analyse course demand and draft outlines
- Communication staff explored AI for writing press releases and social media content
- Administrators applied AI in managing enrolments and funding applications

Following the workshops, participants implemented small-scale AI uses at their institutions and returned for online follow-ups to share results and address challenges. New modules were then introduced in cycles, focusing on different applications such as educational content creation or AI for office management.

The programme explicitly supported pedagogical innovation: instructors tested AI tools like image generators for creating visual aids or chatbots for language practice. A dedicated module helped academic staff redesign learning content using AI to simplify complex topics or generate practice materials.

# CASE STUDY 1



## EARLY OUTCOMES

- Greater Efficiency: Staff reported time savings in content creation, curriculum planning, and admin tasks
- Enhanced Services: AI-supported processes allowed for quicker responses and more personalised learning support
- Increased Engagement: Educators noted improved interactivity and learner motivation when using AI-driven tools
- Sustained Growth: The programme created a repeatable, evolving model for capacity-building and peer learning

## KEY INSIGHTS

1. **Hands-on learning works.** Training that focuses on real-world tasks helps staff adopt AI meaningfully, not just conceptually.
2. **Follow-up activities are critical.** Reinforcement through peer exchange and follow-up sessions builds confidence and supports long-term use.
3. **Broaden the scope.** AI integration should extend across both teaching and administrative workflows to increase impact.
4. **Lead by example.** Regional networks like VHS Lower Saxony can set a powerful precedent, demonstrating how even traditional adult education centres can lead the way in digital transformation.

## FOOD FOR THOUGHT

The VHS case demonstrates that successful AI integration is not only about tools, but about creating the right conditions:

- What support structures (training, time, follow-up) are needed for real adoption of AI in adult education?
- How can institutions move from one-off digital projects to continuous learning and long-term digital strategies?
- In what ways can AI help traditional providers remain relevant while preserving their core values of inclusion and learner-centredness?
- What role should national or regional networks play in setting the pace and direction for sector-wide digital transformation?

## REFERENCES

Landesverband der Volkshochschulen Niedersachsens e.V. (2025) Qualifizierung für vhs-Mitarbeitende: KI in der vhs [Project Overview], Landesverband der Volkshochschulen Niedersachsens e.V. Published Online: 12 February 2025. Available at: https://vhs-nds.de/projekte/qualifizierung-ki-in-der-vhs/

# CASE STUDY 2

# UNIVERSITY OF MURCIA, SPAIN

## BACKGROUND

Since 2021, the University of Murcia (UMU) in Spain has taken a strategic approach to digital transformation, implementing more than 35 AI-driven initiatives. These initiatives were not isolated experiments but part of a broader institutional commitment to enhancing teaching, student support, and operational efficiency. The university's model demonstrates how AI integration can be embedded into long-term planning, supported by leadership and cross-functional collaboratio

## THE CHALLENGE

UMU aimed to address multiple institutional needs:

- Reduce administrative workload while maintaining high-quality student services
- Offer timely, individualised support to a growing and diverse student population
- Use data more effectively to support learner success and tailor interventions
- Establish ethical and responsible approaches to automation and AI use

## AI STRATEGY

UMU's AI integration includes a broad set of applications:

- *AI-powered chatbot (Lola)*: Developed with 1MillionBot, Lola supports students with 24/7 information on admissions, course offerings, and key deadlines. Since its launch, Lola has answered over 38,000 questions with over 91% accuracy, reducing the load on administrative teams.
- *Automated grading and course recommendations*: AI tools assist educators with routine assessments and offer learners personalised course suggestions.
- *Learning analytics*: AI monitors learner behaviour, identifies students at risk, and enables more personalised teaching strategies and timely interventions.

This comprehensive approach improves both learner experience and internal efficiency, while allowing educators to focus on meaningful interactions and pedagogical quality.

# CASE STUDY 2



## FOOD FOR THOUGHT

The University of Murcia's example illustrates that real AI leadership isn't just about adopting tools - it's about shaping a culture that supports digital transformation with responsibility and inclusion at its core.

Like the VHS in Germany, UMU went beyond one-off pilots and developed a strategic, institution-wide vision.

Yet leadership in AI also brings questions:

- How do we ensure that AI helps rather than overwhelms?
- Who sets the direction for what tools are used and why?
- How do we build trust and inclusion while navigating rapid digital change?

## KEY INSIGHTS

1. **Vision beyond tools.** Strategic AI integration requires leadership that looks beyond individual applications and supports systemic change.
2. **Collaboration drives success.** Digital transformation is not just an IT project - it involves educators, administrators and students working together.
3. **Ethics must be embedded.** Responsible use of AI includes transparency, fairness and ensuring learners' autonomy and trust.
4. **Start small, think big.** Even large-scale change can begin with practical steps like chatbot support or automated scheduling - if guided by a broader vision.
5. **Build momentum through shared learning.** Peer training, internal champions and a culture of experimentation can help organisations move from isolated use to meaningful, long-term integration.

## REFERENCES

Wooclap Team (2025) The University of Murcia and AI: Innovation in Education [Case Study], Wooclap. Published Online: 4 March 2025. Available at: https://www.wooclap.com/en/blog/universidad-murcia-ai/

# Module 5.
# ROADMAP

### PLAN FOR FUTURE GROWTH

Develop a long-term vision for how AI can evolve within your organisation and invest in the systems, training and policies to support it

### EMPOWER OTHERS

Support your colleagues to experiment with AI tools and lead initiatives that promote safe, ethical innovation

### ALIGN WITH VALUES AND MISSION

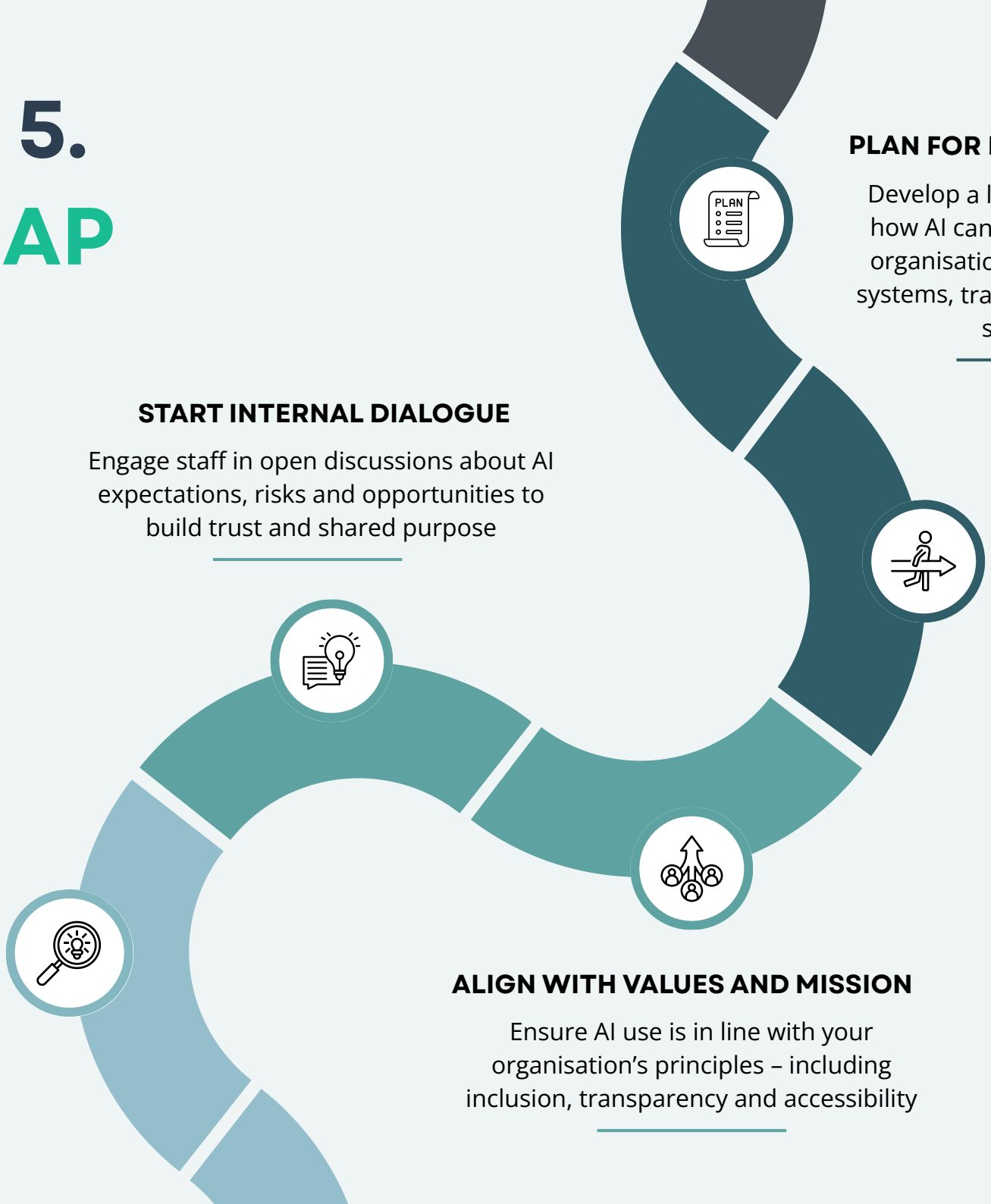
Ensure AI use is in line with your organisation's principles – including inclusion, transparency and accessibility

### START INTERNAL DIALOGUE

Engage staff in open discussions about AI expectations, risks and opportunities to build trust and shared purpose

### EXPLORE STRATEGIC POTENTIAL

Understand how AI can help your organisation meet long-term goals – from operational efficiency to improved learner services



# CONCLUSION

The AI-ADU Competency Framework provides a structured yet flexible tool to support adult education professionals in navigating the opportunities and challenges of artificial intelligence. The framework defines the key competences, skills and attitudes needed for responsible and effective AI integration across educational and organisational contexts.

By presenting each competence at three progressive levels - Explorer, Practitioner, and Innovator - the framework supports individual and institutional self-reflection, capacity-building and long-term strategic planning. Whether you are just beginning your journey or already leading innovation, the levels help you identify where you are now and what growth could look like.

Across all five modules - from technical foundations to ethical leadership - the framework emphasises the human side of AI. It highlights the importance of intention, inclusion, collaboration and long-term vision. Case studies and reflection questions provide real-world grounding and spark critical thinking, ensuring that the framework is both aspirational and practical.

We invite adult educators, administrative staff and organisational leaders to use this framework not as a checklist, but as a compass - guiding ongoing development, peer learning and thoughtful digital transformation in a rapidly evolving world.

*AI–ADU project management team*

# BIBLIOGRAPHY




1. Axon Park. (2023). How effective is AI in education? 10 case studies. Axon Park. https://axonpark.com/how-effective-ai-education
2. Be My Eyes. (2024). Be My AI: A New Era of Visual Assistance. https://www.bemyeyes.com/be-my-ai
3. Council of Europe. (n.d.). Regulating AI in Education. Council of Europe Standing Conference of Ministers of Education.
4. Cukurova, M., Kralj, L., Hertz, B., & Saltidou, E. (2024). Professional development for teachers in the age of AI: European Schoolnet Academy thematic seminar report. European Schoolnet.
5. Duan, H., & Zhao, W. (2024). The effects of educational artificial intelligence-powered applications on teachers' perceived autonomy, professional development for online teaching, and digital burnout. International Review of Research in Open and Distributed Learning, 25(3).
6. European Commission. (2021). 2030 Digital Compass and AI Act. https://artificialintelligenceact.eu/
7. European Commission. (2022). DigComp 2.2: The Digital Competence Framework for Citizens. https://publications.jrc.ec.europa.eu/repository/handle/JRC128415
8. Google AI Blog. (2023). Project Euphonia: AI for Speech Accessibility.https://sites.research.google/euphonia/about/
9. Herdem, M. S., & Nathwani, J. (2024). Navigating the digital transformation and AI in education and peer review. Balsillie Paper, 6(2).
10. High-Level Expert Group on Artificial Intelligence. (2019). Ethics Guidelines for Trustworthy AI. European Commission.
11. iTransition. (2024). AI in education: 8 use cases & real-life examples. iTransition. https://www.itransition.com/ai/education
12. Klopov, I., Shapurov, O., Voronkova, V., Nikitenko, V., Oleksenko, R., Khavina, I., & Chebakova, Y. (2023). Digital transformation of education based on artificial intelligence. TEM Journal, 12(4), 2625–2634. https://doi.org/10.18421/TEM124-74
13. Pedro, F., Subosa, M., Rivas, A., & Valverde, P. (2019). Artificial intelligence in education: Challenges and opportunities for sustainable development. (UNESCO Working Papers on Education Policy 07). UNESCO.
14. Quy, V. K., Thanh, B. T., Chehri, A., Linh, D. M., & Tuan, D. A. (2023). AI and digital transformation in higher education: Vision and approach of a specific university in Vietnam. Sustainability, 15(14), Article 11093. https://doi.org/10.3390/su151411093
15. UNESCO. (n.d.). AI Competency Framework for Educators. https://www.unesco.org/en/articles/ai-competency-framework-teachers
16. VKTR. (2024). 5 AI case studies in education. VKTR. https://www.vktr.com/ai-disruption/5-ai-case-studies-in-education/

AI-ADU

BUILDING PATHS TO THE FUTURE



Published in 2025 by the AI-ADU Consortium
As part of the AI-ADU: Building Paths to the Future Erasmus+ KA2 Cooperation Partnership Project (https://aipaths.eu/)


Co-funded by the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency. Neither the European Union nor National Agency can be held responsible for them.

Socialinių inovacijų centras

KINITRO

DORSA EDUCATIONAL INSTITUTE

FONDAZIONE AREZZO INNOVAZIONE