Co-funded by
the European Union

AI
IN MENTORING

ARTIFICIAL INTELLIGENCE IN APPRENTICESHIP MENTORING

SUPPORTING WORK-BASED MENTORING WITH AI: A GUIDE FOR TRAINERS AND COMPANY MENTORS

This document is published by the AI in Mentoring Team, formed by the Bulgarian Industrial Association (Bulgaria), Modern Education Foundation (Bulgaria), TRIBEKA Training Lab (Spain), New Mindset Coaching and Training (Belgium), and CuratedAI (Belgium).

Project reference № 2024-1-BG01-KA220-VET-000247196

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 European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Website: https://ai-mentoring.eu/

CONTENTS

INTRODUCTION 3

MODULE 1: FOUNDATIONS OF WORK-BASED LEARNING MENTORSHIP IN THE AI ERA 5

Topic 1: Revisit the work-based learning mentoring: overview and key elements 5

Topic 2: The foundation of quality mentoring process in work-based learning: The EMCC Framework for quality mentoring and its connection to learning & development 8

Topic 3: Introduction to AI. Overview of the main AI capabilities and limitations 11

Topic 4: AI in Action: Transforming work-based learning and vocational mentorship 14

MODULE 2: ETHICS AND PRACTICE RELATED TO WBL MENTORING 18

Topic 1: Bias in AI systems and the importance of transparency 19

Topic 2: Choosing the right tools: privacy and confidentiality considerations 22

Topic 3: When to use what – key features & security considerations of leading AI tools 25

Topic 4: Basics of prompt engineering, considering bias and privacy 28

MODULE 3: AI IN MENTORING – SUPPORTING EACH PHASE WITH AI TOOLS 31

Phase 1: Preparation – setting the foundation 32

Phase 2: Induction – welcoming the apprentice and introducing the workplace 36

Phase 3: Implementation – learning by doing 43

Phase 4: Evaluation – reviewing progress and wrapping up 48

MODULE 4: DEVELOPING YOUR OWN MENTORING APPROACH WITH AI SUPPORT 52

Topic 1: From AI tools to personal mentoring strategy 53

Topic 2: Making AI work for you: handling mistakes and misunderstandings 56

Topic 3: Designing your own AI-supported mentoring framework 61

WAY FORWARD 64

PROJECT REFERENCE № 2024-1-BG01-KA220-VET-000247196

INTRODUCTION

Work-based learning (WBL) is one of the most effective ways to turn education into real-life opportunity. It gives young people the chance to develop skills in real workplaces, connect theory with practice, and build the confidence they need to take their first steps into the world of work. Across Europe, WBL has become a key part of vocational education and training, with growing recognition of its role in addressing skills gaps and improving youth employment.

Company mentors are at the centre of this process. They are usually experienced staff members who take on the responsibility of supporting and guiding apprentices during their time in the company. A good mentor does not just explain how a task is done - they also help the apprentice understand the workplace, deal with challenges, and grow as a person. This kind of support takes time, attention, and a willingness to teach. Yet many mentors are asked to take on this role without proper preparation or support. They may feel confident in their job, but unsure of how to help someone else learn it.

In a broader sense, the term “mentor” can also refer to professionals who support the integration and development of less experienced colleagues in the workplace. These may include company staff who guide apprentices enrolled in work-based learning or dual education programmes, but also HR professionals, team leaders, and supervisors who are responsible for onboarding and upskilling newly employed staff.

Whether working with young VET learners or adult newcomers, these mentors offer guidance, hands-on support, and feedback tailored to individual needs. Their contribution is essential not only for transferring skills and knowledge, but also for building confidence and helping new colleagues navigate workplace culture and expectations.

Given the variety of roles mentors may play across different settings, it is important to provide flexible, practical guidance that supports both experienced professionals and those new to mentoring responsibilities.

That is why this guide was created: to support both the trainers who prepare company mentors and the mentors themselves. Whether you are leading a training session or mentoring an apprentice directly, you will find practical tools, real-life examples, and clear guidance to help you feel more confident and capable in your role. The content is designed to reflect the real challenges mentors face and to offer solutions that are easy to understand and apply in everyday work settings.

One special feature of this guide is its focus on Artificial Intelligence (AI). New digital tools are becoming more common in vocational education, and mentors may wonder how they fit into their work. This guide shows how AI can help with some everyday mentoring tasks - like giving feedback, organising tasks, or adapting activities to different learning needs. Used well, AI can save time and support better decision-making. But it is not a replacement for the human side of mentoring. Trust, encouragement, and good communication still matter most.

The guide follows the main stages of the mentoring process - from preparation and induction, to learning and evaluation. In each stage, you will find examples of how AI can be used in simple and practical ways, without needing advanced technical skills. The goal is to make AI feel useful and approachable, and to help mentors and their trainers use it in a way that fits their everyday work.

The following modules have been developed to support trainers of work-based learning mentors and mentors themselves in exploring and embedding the opportunities of artificial intelligence in their work with students.

The presented content is a framework and should be seen in the concrete context of each trainer and mentor. In other words, we encourage tailoring to concrete needs of learners and curriculum to be followed.

The materials cover two main domains: ***AI Literacy*** and ***AI Mentoring***.

The content reflects the expertise and know-how of partners in the AI in Mentoring project supported by the European Union.

For any questions and queries, please contact partners directly. We will appreciate your feedback and proposals for expanding the content.

Contact us here: https://ai-mentoring.eu/

MODULE 1: FOUNDATIONS OF WORK-BASED LEARNING MENTORSHIP IN THE AI ERA

Topic 1: Revisit the work-based learning mentoring: overview and key elements

Developed by: [New Mindset Coaching & Training (BE)]

Work-Based Learning Overview

Work-Based Learning refers to the effective acquisition of knowledge, hands-on practice, and career confidence by young people aged 16 to 25. While numerous definitions of WBL exist, they share a common emphasis on entering the workforce early through apprenticeships or training programs that integrate theoretical and practical learning. According to CEDEFOP data, in most EU countries, "individuals aged 15–34 who have participated in work-based learning experience lower unemployment rates than their peers without work experience".

WBL Country Overview

Bulgaria: The Ministry of Education and Science has initiated reforms in Vocational Education and Training (VET) and dual VET systems. Over half (55%) of pupils in medium-level education are enrolled in vocational programs, surpassing the EU average of 52.4%.

Belgium: Nearly 57% of medium-level students pursued vocationally oriented programs in 2022, exceeding the EU average of 54.2%.

Spain: The country has been striving to improve employability and align VET courses with labor market needs. In 2023, the government introduced measures to expand dual vocational training and enhance employability. Despite these efforts, enrolment in dual VET programs remains low, at just 4.4% in 2021-22. Detailed data on EU countries can be found in the European Commission's Education and Training Monitor 2024.

WBL Mentoring – Ensuring an Effective WBL Experience

A successful WBL experience depends heavily on providing the right support to learners, particularly as many young participants are engaging in the world of work for the first time. According to CEDEFOP, the EU agency responsible for VET activities, creating an inclusive WBL environment is essential. A critical role in this ecosystem is played by the WBL mentor – an experienced professional tasked with guiding, supporting, and monitoring the progress of trainees.

The mentor’s impact cannot be overstated. Every apprenticeship experience is initially designed to align with a learner’s professional aspirations, values, but even in less-than-ideal circumstances, a skilled and empathetic mentor can help transform the experience into a meaningful learning journey. By offering guidance, reflection, and support, the “right” mentor can help learners gain clarity about their career direction - even in a “wrong” WBL experience, when the field of work proves unsuitable for trainee’s long-term professional or life goals.

On the other hand, when learners enter WBL in a field they are passionate about, the presence of an effective mentor can significantly amplify their engagement, satisfaction, and skill development, leaving a lasting positive impact.

Explore Further

To further explore WBL and WBL Mentoring in general, here are few resources to accompany your curious mind on the subject:

Educational and Training Monitor 2024, EU countries, European Commission

Work-Based Learning, EfVET

Listen to a Podcast - Work-based learning

Articles, documents for Belgium

Apprenticeship-type schemes and structured work-based learning programmes – Belgium, CEDEFOP, 2014

Apprenticeships in Practice, Belgium, Dutch and French speaking communities

Articles, documents for Bulgaria

Implementing European priorities in VET: Bulgaria 2024

Practical Guidelines: Dual education

Strategic Vision for the Development of Dual Education in Bulgaria until 2030
Ministry of Education and Science, Bulgaria (2023)

Inclusive work-based learning environments, Intervention approach, CEDEFOP

Articles, documents for Spain

Organic Law 3/2022 on the Organisation and Integration of Vocational Education and Training
Official State Gazette (BOE), Spain

PRACTICE:

Exercise 1: Understanding the Role of Mentorship

Reflect on a time when someone provided mentorship or guidance in your life, being or not in WBL format. How did their support influence your personal or professional growth?

On the contrary, if you happen not to have had mentors in your life – reflect on what might have been different for you as a professional, if you had mentors?

Exercise 2: Exploring Country Comparisons

Why do you think dual VET programs in countries like Bulgaria and Belgium have higher enrollment rates compared to Spain, based on the EC's monitor?

What lessons can other countries learn from EU nations with successful vocational training systems?

Exercise 3: First steps in defining the WBL Mentor - exercise for self-paced learning

Create a list of around 5 qualities you believe are most important for an effective WBL mentor. Next, reflect on how these qualities might differ depending on the industry or type of vocational training.

What are some qualities in your view of a WBL mentor in your industry?

Topic 2: The foundation of quality mentoring process in work-based learning: The EMCC Framework for quality mentoring and its connection to learning & development

Developed by New Mindset Coaching & Training (BE)

What makes a WBL mentoring process a success?

A successful WBL mentoring process involves structured in-company training, guidance in practical tasks, and ensuring workplace adjustment. Effective mentors, as suggested in the "Training Methodology for Trainers of Mentors in Dual Education" (see Explore Further below), monitor progress, provide feedback, and evaluate performance in real work environments. According to the authors, successful mentors possess and develop a certain set of competencies:

- ✓ **Social competencies** like coaching skills, such as listening well, communicating effectively, setting achievable targets, supporting the trainee to achieve them while gaining learning and further insight on the profession.
- ✓ **Organisational competencies** relate to planning, conducting, and evaluating in-company practical training at specific workplaces in the company, as well as compliance with occupational, health, safety, and fire protection regulations.
- ✓ **Pedagogical competencies** mean the mentor is able successfully to transfer knowledge and skills to their trainees.
- ✓ **Managerial competencies** refer to the ability to lead and manage the learning process effectively, while modeling authority and adhering to schedules, company's policies, strategy, and culture.
- ✓ Finally, as a competence comes the **attitude of the mentor** to **apply an individual approach** in the work with the mentee.

These competencies align with the concept of coaching: **goal-oriented process that empowers individuals to maximize their potential** by focusing on personalized guidance (mentor-mentee/trainee), effective communication, goal-setting, knowledge transfer, and fostering professional and personal growth.

In WBL environments coaching and mentoring are two sides of the same coin. The way they complement each other is elaborated in the EMCC's - European Mentoring and Coaching Council's competency framework. The eight mentoring/coaching competence categories include:

- ✓ **Understanding Self**, where self-awareness is used to enhance practice;

- ✓ **Commitment to Self-Development**, ensuring continuous professional growth;
- ✓ **Managing the Contract**, establishing clear expectations and boundaries;
- ✓ **Building the Relationship**, fostering effective connections with clients and sponsors;
- ✓ **Enabling Insight and Learning**, guiding clients toward self-discovery;
- ✓ **Outcome and Action Orientation**, supporting meaningful change;
- ✓ **Use of Models and Techniques**, applying tools to enhance insight; and
- ✓ **Evaluation**, assessing effectiveness and promoting a culture of outcome measurement.

We can see that in professional coaching and mentoring contexts, similarly to WBL mentoring, coaching and mentoring are interconnected through their shared focus on personalized guidance, effective communication, and fostering growth.

A key takeaway for a successful WBL mentor is to continuously develop their social, organizational, pedagogical, and managerial competencies while applying an individualized approach to empower mentees and support meaningful learning experiences.

Explore further:

To further explore this topic, here are few resources to accompany your curious mind on the subject:

Training Methodology for Trainers of Mentors in Dual Education, developed by Modern Education Foundation, Bulgaria and partners

EMCC Global Competence Framework for Mentoring

Professor David Clutterbuck leads a discussion on current trends in coaching and mentoring

Brief overview of the core mentoring skills in this article

How to embed coaching skills into your work as trainer? A comprehensive read, where you can focus on Chapters 2 “Coaching principles in Training” and 4 “Coaching skills for Trainers” and utilise various tools and exercises presented in Chapter 4 “Coaching in Training”

PRACTICE:

Exercise 1: Goal setting

There is a difference between just setting a goal and consciously setting a goal, backed up with the skills like self-reflection, being fully present, and active listening. Achieving a goal is a process of materializing one’s intention (S. Stoyanova, “From Goals to Tools”). The goals that move one forward and establish sustainable, positive change are the goals in line with and part of one's lifelong learning journey.

One of the popular models for setting goals is the SMART model. The acronym stands for Specific, Measurable, Achievable, Relevant, Time-bound goals.

Specific: What exactly do you look for, or want?

Measurable: How will you know this is accomplished?

Achievable: Do you have access to the resources needed? Is what you want to accomplish under your control fully or partially?

Relevant: Is this your goal and not someone else's? How does this goal help you improve and grow?

Time-bound: By when you want to achieve the result? When will you start working on the execution of the goal?

Try the SMART goal setting now with your intention about this WBL Mentoring Journey, empowered by the AI era you live and work in. The way you see it now. Reflect on your mind or even better, by taking notes about each element, answering the support questions.

Exercise 2: Create your own Self-Reflection Exercise for WBL Mentors

Step 1: "Go" to your preferred/available AI chat

(for example, https://gemini.google.com/ or https://chatgpt.com/, any other)

Step 2: Open the dialogue window

Step 3: Put the following prompt (feel free to edit and amend it):

"*Create a practical exercise for me, a work-based learning mentor, based on the provided handbook excerpt [copy and paste the Core concept part here]. This exercise should guide me in briefly self-assessing my skills (social, organizational, pedagogical, managerial, and attitude) aligned with the coach-mentor framework like the one by EMCC provided above. It should be interactive (self-assessment tool, role-playing) and provide actionable insights easy to implement on how I can better understand mentoring effectiveness, emphasizing individualized approaches, effective communication, and a supportive learning environment*."

Step 4: Adapt the provided exercise and plan time to do it. Reflect, take notes, enjoy.

Topic 3: Introduction to AI. Overview of the main AI capabilities and limitations

Developed by [CuratedAI (BE)]

What is Artificial Intelligence?

Artificial Intelligence (AI) refers to machines performing tasks that typically require human intelligence, such as learning from data, reasoning, and making decisions based on algorithms and models. AI is already a part of our everyday lives, whether we realise it or not. Email spam filters, online maps, search engines, or even reCAPTCHA, which identifies whether we're human or not on websites, all rely on AI. Generally, there are two main types of AI systems based on the tasks they can perform:

- **Narrow AI** - these are AI systems trained to perform specific tasks (e.g., voice assistants, recommendation systems, chatbots). All of the AI systems that currently exist are narrow AI.
- **General AI** - these are hypothetical AI systems capable of *any* intellectual task a human can perform. This AI doesn't exist yet, but achieving it is the end goal of many AI providers.

Traditional AI, also known as **machine learning**, has existed since the mid-20th century. It focuses on analytic tasks like classification and prediction. In contrast, **generative AI**, which gained popularity over the last couple of years, goes further by creating new content such as text, images, music, or even videos. Generative AI (e.g., DALL-E and ChatGPT) is now creating breakthroughs in a number of industries such as healthcare and education because of the advancements it drives in automation and personalization when applied to any field.

What are AI's main capabilities?

We hear about the latest AI innovations and applications in the news every day. But what exactly is AI good at and how can it help in our daily work?

- ✓ **Data analysis and pattern recognition** - AI excels at processing vast amounts of data, identifying patterns, and extracting actionable insights. This makes it invaluable for tracking and predicting trends. For mentors, this can mean tracking a learner's progress over time, identifying skill gaps, and tailoring development strategies based on data-driven insights.

- **Natural language processing (NLP)** - Tools such as chatbots and virtual assistants understand and generate human language, enabling efficient communication and support.
- **Automation of routine tasks** - AI automates administrative tasks such as scheduling, assessments, and feedback generation, allowing individuals to focus on strategic activities.
- **Personalization** - AI tailors experiences based on individual needs, strengths, and progress, ensuring customized solutions. For example, mentors can use AI tools to provide customized learning plans and targeted resources, making mentorship more effective.

What are AI's main limitations?

To understand how to use AI, we should know what it's not good at and where its limitations lie. Here are the main things we need to consider (we'll dive deeper into these issues and how to handle them in Module 2):

- **Dependence on data** - AI systems require large, high-quality datasets to function effectively. Poor data quality can lead to inaccurate or biased outcomes, a concept also known as "garbage in, garbage out" (GIGO).
- **Lack of contextual understanding** - AI struggles with nuanced decision-making, especially in areas requiring empathy or ethical judgments. In general, to receive good results we should provide the system with as much meaningful context as possible.
- **Ethical concerns** - Issues such as data privacy, algorithmic bias, and transparency remain significant challenges.
- **Overreliance risks** - Dependence on AI may lead to skill erosion. In WBL mentorship, overusing AI for decision-making, feedback generation, or communication can potentially reduce the mentor's role and weaken the mentor-mentee relationship.

Explore Further:

Generative AI in a Nutshell - how to survive and thrive in the age of AI (YouTube Video)

European Council, "*AI Explained: uses and impact*"

McKinsey & Company, *"What is AI (artificial intelligence)?"*

UNESCO, "*Guidance on Generative AI in Education and Research*"

European Parliament Research Services, *"Artificial intelligence: How does it work, why does it matter, and what can we do about it?"*

PRACTICE:

Exercise 1: Practical uses of AI

Reflect on how you currently use or might use AI tools in your work. What are the first three tasks that come to mind where AI could enhance your efficiency?

Exercise 2: AI for personalized learning

Identify a scenario where AI could help personalize learning for your mentees. How might AI insights complement your expertise in tailoring learning strategies to individual needs? Reflect on how this balance can improve outcomes in WBL.

Exercise 3: Balancing AI and human interaction

Role-play with a colleague where one person acts as a mentee and the other uses AI-generated responses (e.g., from ChatGPT). Discuss together the following questions:

1. Where does AI-supported communication feel natural?
2. Do you feel like anything is missing in the AI responses? If so, what?
3. In which scenarios do you believe human support is necessary, and in which not?

PROJECT REFERENCE № 2024-1-BG01-KA220-VET-000247196

Topic 4: AI in Action: Transforming work-based learning and vocational mentorship

Developed by CuratedAI (BE)

AI can transform vocational education and WBL mentorship by making learning more adaptive, automating repetitive tasks, and providing real-time insights. General-purpose AI models like ChatGPT, Microsoft Copilot, Google Gemini, Perplexity, and Claude can be used as powerful assistants for both mentors and apprentices, helping with information retrieval, personalized coaching, and administrative support.

There are many specialized AI-powered tools designed specifically for education and mentorship, such as Squirrel AI for adaptive learning, Vervoe for AI-driven competency assessments, or Qooper - an AI-driven mentorship and employee training platform. While these tools offer targeted solutions, they often require subscriptions, integrations, or industry-specific customization. In this module, we will focus on how widely available, general-purpose AI models can be used within WBL and vocational mentorship. In Module 3, we'll dive deeper into these models' differences and practical applications.

AI for Personalized Learning in Vocational Training

One of the best applications for AI-powered models is for learning personalization. Mentors can use ChatGPT or Gemini to adapt learning materials based on apprentices' skill levels. Instead of giving a single explanation to an entire group, a mentor can ask AI to generate basic, intermediate, and advanced versions of the same concept. For example, in digital marketing training, a mentor can ask AI to generate beginner-level explanations of SEO and advanced keyword strategy exercises for more experienced apprentices.

In addition, Microsoft Copilot can be used to track progress by automatically generating personalized learning plans in Excel. Instead of manually compiling learning materials, mentors can also prompt AI to create interactive quizzes or scenario-based exercises tailored to each mentee.

AI for Work-Based Mentorship

Mentors can use AI to augment their coaching strategies by quickly retrieving best practices, summarizing performance trends, and generating structured feedback. For example, after an apprentice submits a project report, a mentor can use AI to quickly summarize key points and suggest improvements, helping streamline the feedback process.

AI-powered chatbots can serve as on-demand virtual assistants for apprentices. Instead of waiting for mentor availability, apprentices can ask ChatGPT how to troubleshoot a machine error or get suggestions on how to improve their soft skills. While AI doesn't replace human mentorship, it ensures that learners always have access to reliable guidance when needed.

AI for Assessments and Certification

General-purpose AI models can help evaluate mentees' progress in both technical and soft skills. A mentor can use Copilot to analyze a portfolio of work and generate an initial assessment, highlighting strengths and areas for improvement. AI can also help standardize evaluations, ensuring each apprentice receives consistent and objective feedback.

For written assessments, ChatGPT can check grammar and clarity, but it can also analyze argument structure, logical reasoning, and industry-specific terminology. In verbal skills training, apprentices can practice role-playing scenarios with AI, simulating job interviews, client interactions, or safety briefings.

AI-Enhanced Workplace Training

AI can simulate real-world scenarios that help apprentices practice before working with real equipment or customers. Gemini can generate scripts for mock sales pitches or customer service dialogues, while ChatGPT can provide instant feedback on problem-solving exercises.

Explore Further:

The Chartered Institute for IT - AI and the future of work
The Role of Artificial Intelligence in Enhancing Mentorship Programs

Jean Rhodes - The Uncanny Valley and the Future of AI in Mentoring Program

Rahul Bagai, Vaishali Mane - Designing an AI-Powered Mentorship Platform for Professional Development: Opportunities and Challenges

PRACTICE:

Exercise 1: AI for Personalized Learning

Use ChatGPT or Gemini to generate a beginner, intermediate, and advanced explanation of a concept relevant to your field (e.g., SEO strategy, supply chain management, or financial forecasting).

Example prompt:

"Explain [topic] in three different ways: (1) A beginner who has never encountered this before, (2) Someone with basic knowledge, and (3) An advanced learner who needs industry-level details. Format each as a short learning module (around 200 words each) and include examples for clarity."

Did AI capture the right level of complexity for each audience? What adjustments would you need to make to ensure accuracy and applicability?

Exercise 2: AI-Assisted Feedback

Take a recent apprentice report, email, or presentation and run it through Microsoft Copilot or another AI tool to generate feedback (make sure the material doesn't include confidential or private information).

Example prompt:

"Review the following text for clarity, structure, and professionalism. Provide constructive feedback on areas for improvement, and suggest specific ways to make the writing clearer and more effective. Also, identify any industry-specific terminology that could be better used."

(Paste the apprentice's text here.)

Compare AI's feedback to your own and refine it into actionable points. How does AI feedback compare to human evaluation?

Exercise 3: AI in Role-Playing Exercises

Use ChatGPT to simulate a difficult business interaction (e.g., a customer complaint, investor pitch, or supplier negotiation). Have apprentices respond to the AI, then analyze their approach.

Example prompt:

"Act as a [customer, client, manager, investor] in the following situation: [describe situation]. Start the conversation and respond dynamically based on how the apprentice replies. Provide realistic objections or challenges they may face."

Example:

"You are a dissatisfied customer at a hotel. You were promised a sea-view room, but upon arrival, you received a standard room. You are frustrated and want compensation. Engage in a conversation with the apprentice acting as the hotel receptionist and see how they handle the complaint."

What did AI get right or wrong in simulating the scenario? How do you think practicing with AI can impact the apprentice's confidence in handling real interactions?

MODULE 2: ETHICS AND PRACTICE RELATED TO WBL MENTORING

Introduction

AI can be used to reshape and improve the way mentors support apprentices, but the use of AI tools can also introduce certain ethical challenges. How do we ensure fairness, transparency, and privacy in AI-driven recommendations? When and how can we trust AI outputs?

This module explores these key questions, helping mentors navigate AI bias, security risks, and responsible tool selection. Through independent learning and hands-on activities, mentors will gain practical skills to use AI ethically, balancing its benefits with the human connection essential to effective mentorship.

Topic 1: Bias in AI systems and the importance of transparency

Developed by [CuratedAI (BE)]

Understanding AI Bias

AI systems rely on data to learn and make decisions, but if that data is flawed or unrepresentative, the AI can produce biased and unfair outcomes. Bias in AI can emerge in different ways:

- **Historical bias** occurs when AI models are trained on past data that reflects societal inequalities, causing the system to perpetuate these patterns.
- **Sampling bias** arises when AI is trained on data that does not adequately represent all groups, leading to inaccurate or skewed results.
- **Algorithmic bias** can also develop due to the way AI processes information, unintentionally favoring certain outcomes over others.

For WBL mentorship, AI bias can have serious consequences. AI-driven recruitment tools may favor certain demographics based on historical hiring data. Likewise, AI-powered feedback and learning recommendations might push mentees toward career paths that reflect past biases rather than their true potential. For instance, an AI trained on data from a male-dominated industry like engineering may suggest technical roles to male mentees while directing female mentees toward administrative positions, reinforcing stereotypes instead of individual strengths.

Transparency

To ensure AI supports mentorship fairly and ethically, transparency must be a priority. Transparency means understanding how AI makes decisions, what data it uses, and the limitations of its recommendations. This means that if an AI system suggests a learning path or evaluates performance, mentors should be able to review the reasoning behind those recommendations. Data awareness is also key - mentors and mentees should be informed about the data sources AI tools rely on and the potential limitations of that data.

Finally, human oversight remains essential. While AI can process large volumes of data quickly and identify patterns that might not be immediately visible, it should not replace human judgment. Mentors must critically evaluate AI-generated insights and consider the unique context of each apprentice before making decisions based on AI recommendations. AI should be a tool to support mentorship rather than an independent decision-maker.

Practical Advice for WBL Mentors

To use AI responsibly in WBL mentorship, mentors should:

- **Question AI outputs** – Validate AI-generated insights against personal expertise and mentee needs.
- **Balance AI with human judgment** – Use AI to support, not dictate, mentorship decisions.
- **Use trustworthy AI providers** – Choose AI tools that are tested for fairness, represent diverse perspectives, and ideally are transparent about the datasets they use (see Module 2, Topics 2 and 3).

Explore Further:

Algorithmic Bias and Fairness: Crash Course AI #18 (video)

Chris Lane, UCL - Bias in AI amplifies our own biases

OECD - Transparency and explainability (Principle 1.3)

High-Level Expert Group on AI - Ethics Guidelines for Trustworthy AI

Fairness in AI: What Can We Do About It? *(Harvard Business Review)*

MIT Technology Review: Can We Make AI Less Biased? *(Podcast episode – 20 min)*

PRACTICE:

Identifying and Addressing AI Bias in Mentorship

Exercise 1: Spotting AI Bias in Career Guidance

1. Imagine an AI-powered career guidance tool provides different recommendations for two mentees with similar skills but different backgrounds (e.g., gender, ethnicity, education level).
2. Use an AI tool (e.g., ChatGPT) to generate career suggestions for two **hypothetical mentees** with only one differing characteristic (e.g., "A 25-year-old with a degree in computer science" vs. "A 25-year-old self-taught programmer").
3. **Reflection:**

- Do the recommendations differ? If so, why?
- How can mentors **challenge biased AI outputs** and ensure fairer guidance?

Exercise 2: Rewriting Biased AI Advice for Fairness

1. **Scenario:** AI suggests that a mentee "lacks leadership qualities" based on past performance data.
2. **Task:** Rewrite this AI-generated feedback to:

- **Focus on potential and improvement areas** instead of making fixed judgments.

- Ensure the language is **neutral and constructive**.
- Align feedback with **growth-based mentorship**.

3. Discussion:

- How can mentors reframe AI outputs to be **more inclusive and supportive**?
- When should mentors **override AI recommendations**?

Exercise 3: The Transparency Test – Explaining AI's Decision-Making

1. Choose an AI tool you or your organization use (or select a well-known one, like LinkedIn's AI job matching or an AI resume screener).
2. Investigate how it makes decisions—what data does it rely on? Can users **see or adjust** how recommendations are generated?
3. **Reflection:**

- Does the tool **explain its reasoning clearly**?
- How can mentors help mentees **understand and question** AI-driven career recommendations?

Topic 2: Choosing the right tools: privacy and confidentiality considerations

Developed by CuratedAI (BE)

Why GenAI Tools Pose Privacy and Confidentiality Risks

AI tools, especially generative AI systems, process large amounts of data, which raises important privacy and compliance concerns. Many services aren't clear about what happens to your information—where it's stored, who can access it, or how long it's kept—making it hard to fully understand the risks. To use these tools safely, it's crucial to know how they handle your data. Most privacy risks come from two main factors: how providers use the information you input and where that data is stored.

- **Use of your data**

Many providers of large language models (LLMs) use the information you enter to make their tools better. This means anything you type or upload—like text or documents—could be stored, analyzed, and used to train future versions of the model. Without clear safeguards, sensitive or confidential information could accidentally be exposed. For example, details you provide might unexpectedly show up in the AI's responses to other users down the line.

- **Data storage and access**

Some AI tools store and process data in countries with different privacy laws. If a service is hosted in a place with weaker data protection - or where government authorities can request access to user data - it increases the risk of unintended exposure. For example, tools developed or hosted in certain countries (e.g., DeepSeek in China) might be subject to local regulations that require companies to share data with authorities.

How to choose privacy-focused AI tools

When choosing AI tools, prioritize those that are transparent about how they handle your data. Look for tools that offer clear privacy policies, specify data storage locations, and provide options to disable data collection or model training from user inputs. Open-source models or tools that can be hosted locally are ideal, as they give you full control over data processing (e.g., Llama, Mistral). Check whether the tool complies with privacy regulations, such as the GDPR, and ensure it has strong security measures like encryption and access controls. Whenever possible, select vendors that prioritize privacy by design (e.g., Brave Leo AI, Duck.ai) and/or offer enterprise versions with enhanced data protection.

How to safely use AI tools

When using general-purpose commercial AI tools like ChatGPT, Gemini, or Claude, it's essential to proceed with caution. These tools can be helpful for non-sensitive tasks, such as drafting generic emails or brainstorming ideas. However, you should never share confidential information, personal data, or business secrets in your prompts or uploaded documents. As a rule of thumb, use enterprise versions where possible, as they often offer stronger privacy guarantees. If this is not an option, you can check whether the settings allow you to limit data use. For example, in ChatGPT, go to **Settings > Data Controls > Improve the model for everyone** and turn it off to stop the tool from using your input for training.

Explore Further:

[World Economic Forum, Generative AI: This is how you can use ChatGPT safely]

[Privacy International, Large Language Models and Data Protection]

[Future of Privacy Forum: "AI and Privacy – Policy Considerations"]

[Mozilla Foundation: "Privacy and AI – What You Need to Know"]

PRACTICE:

Safeguarding Privacy While Using AI Tools

Exercise 1: Scenario-Based Decision-Making: Choosing a Privacy-Conscious AI Tool

1. You work at a school that wants to integrate AI tools but has strict data protection policies. You must recommend an AI tool that balances **usability and privacy**.
2. Research and compare **two AI tools** (e.g., ChatGPT, Brave Leo AI, Mistral). Assess:
- Does it store user data?
- Can data collection be disabled?
- Does it comply with GDPR or similar regulations?
3. **Decision Time:** Based on your findings, which tool would you recommend, and why?

Exercise 2: AI Privacy Role-Play: Handling a Data-Sensitive Request

1. **Scenario:** A colleague asks you to process sensitive work reports using an AI tool. You know this could pose risks.
2. **Task:** Draft a **professional response** explaining the privacy concerns and offering an alternative approach (e.g., anonymizing data, using a locally hosted AI).

Discussion:

- How do you ensure your message is clear but not discouraging?

- What policies should be in place to prevent similar risks?

Exercise 3: Balancing Personalization & Privacy

1. **Scenario: The AI-Assisted Mentor**

As a mentor, you want to use AI to support a mentee's skill development (e.g., leadership, communication, problem-solving). However, you need to balance effective AI use with privacy considerations—meaning you can't input personal details or confidential work scenarios.

2. **Task**:

- Choose a skill area where your apprentice could benefit from structured development (e.g., "giving constructive feedback" or "handling workplace conflict").
- Use an AI tool (e.g., ChatGPT, Gemini or any other of your preference) to generate a learning plan, exercises, or role-play scenario for developing this skill.
- Reframe AI's response to ensure it could apply to any mentee (removing assumptions, personal context, or sensitive details).

Reflection:

- How did AI's response compare to how you'd normally guide a mentee?
- Did you notice any privacy risks in how AI framed advice?
- What's the right balance between customized support and maintaining privacy when mentoring with AI?

Topic 3: When to use what – key features & security considerations of leading AI tools

Developed by [CuratedAI (BE)]

When selecting an AI tool for work-based learning mentorship, it's important to match the tool's strengths to your specific needs. For example, ChatGPT from OpenAI is excellent for everyday conversations and creative tasks. It can help you draft personalized feedback, brainstorm ideas, or develop engaging learning materials. Meanwhile, if you need current, fact-checked information, Perplexity is a better choice because it integrates live search results, ensuring you have access to the most up-to-date insights.

Understanding the Strengths of Popular AI Tools

- **ChatGPT** is versatile and well-suited for general dialogue and content creation in multiple languages. It can support a range of mentoring tasks from writing emails to developing lesson plans. You can upload and chat with different documents and materials, which makes it great for summarising information and brainstorming.
- **Perplexity** is ideal for research and fact-checking. If you need to prepare a report on the latest industry trends or verify statistics, Perplexity quickly pulls in current information and gives you citations to the website pages it is based on. This ensures your training sessions and presentations are based on reliable data.
- **Claude** is built with safety and ethical considerations in mind, which makes it best for handling sensitive or complex topics. Its balanced responses make it a good option for discussing sensitive issues or ethical dilemmas that might come up in mentorship sessions.
- **Microsoft's Co-Pilot** integrates smoothly into workflows, especially if your organization uses the Microsoft Suite. It can automate tasks like drafting emails or generating reports from existing Word or Excel files, making it a great fit for mentors who need to streamline administrative work.
- **Mistral**, the European LLM provider, supports on-premises deployment and is natively fluent in English, French, Spanish, German, and Italian. This makes it perfect for handling sensitive data, such as proprietary training materials or personal information from apprentices.
- **Llama** is an open-source large language model, which means, organizations can fine-tune it to their specific needs and deploy it locally. Llama is therefore a strong choice for those who want a customizable, transparent solution and have the technical capacity to manage and adapt the model for niche applications.

Security considerations

As highlighted in the previous topic, using AI tools in a work environment comes with certain privacy and security considerations. Cloud-based models such as ChatGPT, Perplexity, and Claude rely on remote servers, which means that while they're great for brainstorming and drafting, they pose some security and privacy risks if used with business-sensitive information. Usually, companies will have an acceptable AI use policy, which clarifies the use cases in which such tools can be used for work.

Many of the companies which already subscribe to Microsoft Suite opt to use Co-Pilot due to its level of integration and robust enterprise security protocols. Another popular option is Azure's OpenAI solution, which enhances security by providing dedicated infrastructure on which OpenAI's models are run without any third-party data sharing and model training. Finally, tools like Mistral and Llama, which offer on-premises or self-hosted deployment options, grant organizations the biggest control over sensitive data and reduce potential cloud-related risks. They're best suited for the most security-sensitive businesses and use cases.

Explore Further:

[On-Prem LLM Systems: How to Build Your Own Chatbot?]

[ICAW, Cyber security considerations for using generative AI]

PRACTICE:

Exercise 1: Matching the Right AI Tool to a Mentorship Task

1. Below are **three common mentorship tasks**. Choose the best AI tool (ChatGPT, Perplexity, Claude, Co-Pilot, Mistral, or Llama) for each task and explain why:
- **Task A:** Providing a mentee with the latest industry trends and fact-based career advice.
- **Task B:** Drafting an email with structured feedback for a mentee's project.
- **Task C:** Handling a discussion about an ethical workplace dilemma in a safe and balanced way.
2. **Reflection:**
- What risks or limitations should you be aware of when using AI in these tasks?

Exercise 2: Security Check – Choosing the Safest AI Tool

1. **Scenario:** You need to summarize a **confidential training document** for a mentee, but company policy restricts the use of cloud-based AI tools.
2. **Task:** Decide which AI tool from the list (Mistral, Llama, ChatGPT, Claude, etc.) would be **most secure** for this task.

3. **Discussion:**
- Why did you choose this tool?
- What alternative solutions could you use if AI was not an option?

Exercise 3: AI Use Policy – When to Say No to AI

1. **Scenario:** A mentee asks if they can upload their CV and personal details into an AI tool to get job search recommendations.
2. **Task:** Draft a **short response** explaining when it's safe (or not) to share personal data with AI tools and what precautions they should take.
3. **Reflection:**
- How can mentors guide mentees to **use AI responsibly** in their careers?

Topic 4: Basics of prompt engineering, considering bias and privacy

Developed by [CuratedAI (BE)]

What is prompt engineering?

Prompt engineering is the practice of formulating clear and effective **instructions** for AI tools so they can provide accurate and helpful responses. This crucial skill will help you improve how you use AI to support apprentices and manage your mentoring tasks more efficiently. It's important to remember that generative AI tools work differently from traditional search engines. While search engines pull information from existing web pages, generative AI creates new responses based on patterns it has learned. This means you need to be more specific and intentional when asking questions or giving instructions.

Clear prompts help avoid confusing or off-topic answers. They make the AI's response more useful and save you time. Crucially, good prompts also help reduce the risk of biased outputs and protect privacy.

How to avoid bias and privacy leaks when prompting?

As clarified in Topic 1 of this module, AI models learn from large datasets, which can include biases. To prevent reinforcing stereotypes, keep prompts neutral and avoid leading language. For example, instead of asking 'What roles are best suited for women in the workplace?' use, 'How can team members be matched to tasks based on their strengths?' Being mindful of potential bias reinforcement when prompting can help ensure AI results remain unbiased and focused on constructive solutions.

Furthermore, as we addressed in Topic 2, in a WBL context, protecting personal information is essential. When using general cloud-based AI tools, never include names or details that could identify someone. Use general terms like "the apprentice" or "the team member." Always provide enough context for the AI to understand the situation but avoid sharing unnecessary or sensitive details.

Practical tips for prompting

1. **Be clear and specific -** a clear and specific prompt reduces ambiguity and ensures the AI generates a response that meets your needs:

a) Use simple, direct language and state exactly what you want. Instead of vague requests like “Tell me about communication,” specify the purpose: “Explain three ways to improve communication between a mentor and an apprentice.”
b) Focus on a single request per prompt to prevent confusion and get more precise answers.
c) Use action verbs like "list," "describe," or "summarize" to guide the AI toward the desired output or goal.

2. **Provide appropriate context -** context helps the AI understand the situation and deliver relevant responses.

a) Assigning a role to the AI can guide it to respond in a way that fits your needs best. For example, you can say, “Act as a communication coach” or “You are a mentor at an HR firm.”
b) Provide essential background without unnecessary details. Instead of writing “Help with the apprentice,” specify: “You are a mentor. The apprentice is preparing for a customer service role and needs tips on handling difficult customers.” Focus on information like the apprentice's role, the specific challenge, or the desired outcome.
c) If you're unsure how much context to include, consider what a colleague unfamiliar with the situation would need to understand your request.

3. **Setting parameters and desired formats** - defining the format or scope of the response helps tailor the AI output to your needs.

a) If you require a brief summary, practical steps, or a list of key points, make that clear. For instance, you can ask, “Provide a short paragraph summarizing the key points,” or “List three strategies in bullet points.” This prevents overly long or unfocused replies and saves you time when reviewing the information.
b) Indicating a word limit or specifying the type of content (e.g., examples, explanations) further refines the response.

Explore Further

Achieve More with GenAI: Masterclass course (you need subscription this one)

Generative AI: Prompt Engineering Basics (free course)

Subscribe for superhuman AI & Tech Newsletter (daily)

Follow AI thought leaders, like Ethan Mollick (one of the speakers at the MasterClass series we recommended)

PRACTICE:

For excelling in prompt engendering, you need to just interact with the various AI tools available and do the work! Here is one example but ideally – open the tool of your preference and start (or keep) experimenting. The clear the language, the desired the outcome.

Exercise 1: Prompt Makeover Challenge

Access to ChatGPT, Gemini, or any other similar AI tool

1. Write down 3 vague questions you might ask about mentoring:

Example: "How do I help my apprentice?"

2. Transform each vague question using these prompt improvement techniques:
3. Add specific details about the situation
- Use clear action words (list, explain, describe)
- Specify exactly what you want (format, length, style)
- Remove any potentially biased language
- Keep it private (no real names or identifying details)
4. Test both versions with an AI tool and compare the results

Example transformation:

Before: „How do I help my apprentice? "

After: "List 3 specific strategies to help an apprentice who struggles with time management. For each strategy, provide one practical example I could implement next week."

MODULE 3: AI IN MENTORING – SUPPORTING EACH PHASE WITH AI TOOLS

Introduction

This module focuses on how company mentors can use simple AI tools to support apprentices throughout their work-based learning journey. Instead of abstract theories or complex technologies, the content highlights practical ways AI can help with real tasks that mentors face every day: from planning the first meeting to giving feedback or tracking progress. The goal is to help mentors feel more confident using AI to save time, personalize support, and strengthen their role without needing advanced technical skills.

Each topic in the module follows a **phase of the mentoring process** and offers concrete examples of how AI can be useful at that stage. Whether it is preparing for the apprentice's arrival, supporting them on the job, or wrapping up with evaluation, mentors will find easy-to-apply suggestions, sample prompts, and reflection points. The exercises are designed to be simple and adaptable, so mentors from any sector or company size can try them in their own way. The emphasis throughout is on practical benefit, AI is presented not as a replacement for the mentor's role, but as a useful tool to make the job easier and more effective.

Phase 1: Preparation – setting the foundation

Developed by [Modern Education Foundation (BG)]

What mentors do

Gathering information about the apprentice is an essential first step in building an effective mentoring relationship. This involves reviewing the apprentice's background, skills, and expectations, often through CVs, training records, and introductory meetings. Understanding these elements allows mentors to identify learning styles, strengths, and potential challenges, ensuring a smoother transition into the workplace.

A well-prepared mentor also anticipates areas where additional support may be needed. Apprentices come with different levels of experience, pace of learning, and confidence. Some may require additional guidance on technical skills, while others may struggle with soft skills like communication and teamwork. By identifying these needs early, mentors can develop individualized mentoring strategies, combining both practical instruction and confidence-building support.

Another key aspect of preparation is setting expectations. Before the first meeting, mentors outline what will be expected from the apprentice in terms of work ethics, punctuality, and engagement. Having a clear structure in place helps the apprentice understand their role and responsibilities from the beginning. Preparation at this stage ensures that both the mentor and apprentice can start their collaboration on the right foot.

How AI can help

Artificial intelligence can assist in organizing information, and offering insights that help mentors make informed decisions. Instead of manually reviewing CVs and training records, AI tools like ChatGPT can extract key points, highlight relevant skills, and even suggest areas where additional support might be needed. This saves time and allows mentors to spend more time on personal and meaningful interactions.

AI tools can generate insightful questions for first/introductory meetings with the apprentice, helping mentors go beyond standard introductions and engage the learner from the very beginning. AI can also suggest good discussion prompts that encourage reflection and smooth goal setting of the future joint on the job training activities.

AI can help mentors notice when an apprentice might need extra support. For example, AI-powered assistants like ChatGPT or Google Gemini can analyze messages and responses to detect if someone sounds unsure or hesitant. If an apprentice frequently says things like "I think I understand, but I'm not completely sure," the AI can suggest to the mentor that the apprentice may need more guidance.

In addition, AI can create simple checklists for mentors, ensuring that all key steps in the training process are followed. Some workplace tools, like Microsoft Teams or Google Workspace AI, already have features that highlight when someone might be struggling, making it easier for mentors to step in at the right time.

By using AI in this way, mentors can offer timely support, making the learning experience smoother and more effective for apprentices.

Explore Further

Toolkit for Mentors in Dual Education, Modern Education Foundation, 2022

Methodology for Trainers of Mentors, Modern Education Foundation, 2022

Toolkit on digital skills in apprenticeships, European Alliance for Apprenticeships, 2024

PRACTICE:

Exercise 1: AI-generated apprentice profile summary

Objective: Quickly extract key insights from an apprentice's background using AI.

To begin, mentors copy and paste the apprentice's CV or training record into an AI tool such as ChatGPT or Gemini. When using AI tools, mentors should take precautions to protect the privacy of their apprentices. Personally identifiable information (PII) such as names, addresses, and ID numbers are often included in CVs. Mentors have a couple of options to protect this sensitive data. They can remove the PII section from the CVs before using an AI model or utilize a privacy-preserving AI model. Additionally, mentors should verify and adjust the settings on the AI chatbot to ensure that PII is not used for training purposes. They then use a simple prompt to request a structured summary, such as:

"Summarize this apprentice's CV, highlighting key skills, strengths, and areas for development. Provide a short and clear profile in bullet points."

After receiving the AI-generated summary, mentors review and adjust it based on their own observations or specific workplace context.

For example, an apprentice in woodworking and furniture production might have a profile like this:

- Name: Ivan Dimitrov
- Education: Vocational training in woodworking and furniture production
- Skills: Measuring and cutting wood, assembling furniture, reading technical drawings
- Strengths: Strong attention to detail, hands-on experience with power tools
- Areas for improvement: Needs confidence in finishing techniques (sanding, varnishing)
- Learning style: Prefers hands-on practice over reading manuals

To reflect on the process, mentors consider whether the AI summary helped them notice something new, how much time it saved compared to manual review, and what adjustments they made to make the summary more useful.

This exercise is simple, practical, and immediately applicable. It demonstrates how AI can save time while keeping decision-making in human hands, reinforcing the idea that AI is a useful support tool rather than a replacement for mentor expertise.

Exercise 2: AI-supported goal-setting for the first meeting

Objective: Use AI to generate personalized discussion prompts for a more engaging and structured first mentoring meeting.

After completing the first exercise, mentors use the AI-generated apprentice profile to develop effective opening questions. They can prompt AI with:

"Based on this apprentice profile, generate five personalized questions to help me understand their learning needs, motivation, and confidence level."

AI might suggest questions such as:

- What woodworking techniques do you feel most confident in?
- Can you share a time when you completed a furniture project independently?
- What challenges do you anticipate in this apprenticeship?
- How do you prefer to receive feedback - immediate corrections or a review at the end of the task?
- What specific skills would you like to improve during this apprenticeship?

Mentors then select the most relevant questions for their first meeting, ensuring that they initiate a meaningful conversation that helps them understand the apprentice’s strengths and challenges early on.

After the meeting, they reflect on whether the AI-generated questions helped create a more productive discussion, whether they identified important insights sooner than they normally would, and how comfortable they feel using AI to structure mentoring conversations.

This exercise keeps the first meeting well-structured while allowing room for natural interaction. It reinforces how AI can support, rather than replace, human conversations, helping mentors focus on what truly matters - understanding and guiding their apprentices.

Phase 2: Induction – welcoming the apprentice and introducing the workplace

Developed by [Modern Education Foundation (BG)]

What mentors do

The first day on the job can be an overwhelming experience for the apprentice. Everything is unfamiliar - tasks, environment, people, expectations. A mentor’s role during this phase is to support the transition from the school to the workplace. A good start can set the tone for the entire period of apprenticeship, helping the apprentice feel welcomed and prepared.

One of the first things mentors do is provide a short outline about the company to the apprentice. This includes an overview of what the organisation, its values, and how different teams work together. A tour of the workplace follows, giving the apprentice a sense of where everything is and highlighting important areas like workstations, break rooms, and emergency exits.

Beyond the practical aspects, the induction phase plays a crucial role in building trust and confidence between the mentor and apprentice. By clearly explaining workplace policies - ranging from safety regulations to reporting structures - mentors help apprentices understand how things function and what is expected of them. Setting clear expectations about learning goals, progress measurement, and available support reassures the apprentice and provides a sense of direction.

Equally important is the personal connection that develops during this phase. When mentors take the time to ask about the apprentice’s background, interests, and any concerns they may have, they demonstrate genuine care and commitment. This creates a sense of trust and psychological safety, encouraging the apprentice to ask questions, express uncertainties, and engage fully in the learning process. By balancing formal guidance with informal, friendly conversations, mentors create an environment where apprentices feel valued and included, making it easier for them to settle in and focus on their development.

How AI can help

AI can support mentors in making the induction phase smoother and more engaging while reducing some of the administrative workload. One way AI can assist is by generating a structured and easy-to-understand company overview. Instead of preparing introductions manually, mentors can use AI tools like ChatGPT to create a short, tailored summary of the company’s mission, values, and structure. This ensures that every apprentice receives a clear and consistent introduction to the organization.

AI-powered chat assistants, available in workplace tools like Microsoft Teams or Google Workspace AI, can also help answer common apprentice questions about company policies, schedules, or procedures. Instead of mentors having to repeat the same information multiple times, apprentices can quickly access accurate and consistent responses through AI-driven FAQs. This reduces the mentor's workload while ensuring that apprentices feel supported and informed as they settle into their new environment.

Another way AI can enhance the induction phase is by assisting with conversation prompts that help mentors build trust with apprentices. AI can suggest relevant icebreaker questions based on the apprentice's background, making early discussions more engaging and meaningful. This can be particularly useful for mentors who want to go beyond standard introductions and create a stronger personal connection from the start.

AI can also support mentors in tracking important details about their apprentices. By summarizing key points from initial conversations, such as learning preferences, areas of concern, or specific goals, AI can help mentors remember and follow up on personal details more effectively. This makes the mentoring process feel more attentive and personalized, reinforcing trust and making apprentices feel valued from the very beginning.

Explore Further

How to Build Your Own AI Chatbot With ChatGPT API: A Step-by-Step Tutorial

Build Simple No-Code Chatbots For Beginners (Botpress)

Landbot Drag-and-Drop Chatbot Builder (Official Beginner Guide)

PRACTICE:

Exercise 1: AI-assisted induction meeting plan

Objective: Use AI to create a plan for an apprentice's first-day induction, ensuring a balanced and engaging schedule.

Mentors use an AI tool such as ChatGPT to generate a detailed plan for the induction session. They can prompt AI with:

"Create a detailed plan for an induction session for an [apprentice role]. The session should include:

- *A welcome and introductions.*
- *A company overview.*
- *A workplace tour.*
- *An overview of safety procedures.*
- *An introduction to daily tasks.*
- *A time for questions."*

AI might generate a structured plan such as:

"1. Welcome and introductions (10 minutes)
2. Company mission and values (15 minutes)
3. Workplace tour (20 minutes)
4. Safety briefing (15 minutes)
5. Job role and expectations overview (20 minutes)
6. Q&A and closing remarks (10 minutes)"

Mentors review the AI-generated schedule and adjust it based on the specific needs of the apprentice and workplace.

After conducting the induction meeting, mentors reflect on whether AI helped save time in planning, whether the structure helped create a smooth and organized session, and whether they would use AI for similar scheduling tasks in the future.

This exercise helps mentors see the value of AI in organizing workplace processes, allowing them to focus more on personal engagement rather than spending excessive time on preparation.

Exercise 2: AI-assisted apprentice preference and concern assessment

Objective: Use AI to generate a simple survey to understand an apprentice's learning style, expectations, and potential concerns.

Mentors use AI to create a short, open-ended survey that helps identify how an apprentice prefers to learn and any areas where they feel uncertain. They can prompt AI with:

"Generate five questions to learn about an apprentice's learning style, expectations, and potential concerns. The questions should be simple and open-ended."

AI might generate questions such as:

- How do you like to receive instructions? (Visual, verbal, hands-on)
- What part of this apprenticeship are you most excited about?
- Are there any tasks or skills you feel nervous about?
- Have you worked with [industry tools] before? If so, which ones?

- What's the best way for you to receive feedback? (Immediate, end-of-task review, written notes)

Mentors then provide the survey to the apprentice, either in person or through a simple online form. Once the apprentice completes it, mentors can use AI to analyze responses by prompting:

"Analyze the following apprentice responses and identify any signs of uncertainty, hesitation, or learning preferences."

AI might generate an insight such as:

"The apprentice seems unsure about using power tools independently and has concerns about asking for help. Recommend supervised practice sessions and reassurance on open communication."

Mentors review the AI-generated insights and decide how best to address any concerns in their mentoring approach.

After completing the exercise, mentors reflect on whether the AI-generated survey helped them identify learning needs faster, whether the AI insights matched their observations, and whether they would use AI to support similar assessments in the future.

This exercise demonstrates AI's ability to personalize mentoring approaches, helping mentors provide better support from day one.

Exercise 3: Setting up an AI assistant with company-specific materials

Objective: Create a simple, personalized AI assistant that can help answer apprentices' common questions based on real company information.

Before conducting practical exercises 3 and 4, mentors set up a basic AI assistant trained on non-confidential company materials. This allows the AI to provide context-specific answers to apprentices' questions about their workplace.

Mentors gather documents such as materials such as a basic company presentation (e.g. from an onboarding PowerPoint), a simplified handbook, workplace policies, or internal safety posters and workflows. If available, mentors may also refer to the company website or shared internal folders for apprentice-relevant information policies, safety instructions, team structure, and basic operating procedures. These materials should not include confidential or personal data.

Mentors choose a simple-to-use tool that allows uploading documents. Suggested tools include:

- ChatGPT Custom GPTs

- Gemini
- Microsoft Teams AI
- Perplexity Projects
- Claude.ai Workspaces

They follow the platform's instructions to upload the selected materials.

1. Define the assistant's purpose: Mentors provide a short description of what the AI assistant should do. They can prompt AI with: "You are an onboarding assistant for new apprentices at [Company Name]. You answer questions about the workplace using the uploaded materials."
2. Test the assistant: Mentors ask the AI a few typical apprentice questions (e.g., "Where do I find safety equipment?" or "What is the dress code?") to ensure the assistant responds accurately.

After the setup: Mentors reflect on whether this process was manageable, how relevant the answers were, and how useful this tool could be to support apprentices independently.

Setting up the assistant at this stage ensures mentors are ready for the next activities. The same assistant will be used in the following exercises to help apprentices navigate their early days at work and get quick answers to common questions.

Exercise 4: AI-generated company overview for apprentices

Objective: Use AI to quickly create a structured introduction to the company, ensuring consistency and clarity in apprentice onboarding.

Mentors use an AI tool such as ChatGPT or Gemini to generate a concise and engaging company overview for apprentices. They can prompt AI with:

"Generate a short and engaging introduction to [Company Name] for a new apprentice. Include a brief overview of what the company does, its values, and how different teams work together. Keep it clear, structured, and easy to understand."

AI might generate a response like:

"Welcome to [Company Name]! We specialize in [industry/work area] and are committed to [core company values]. Our team is made up of different departments, including [key teams], all working together to achieve [company mission]. During your apprenticeship, you'll be working closely with [specific team] and learning about [key responsibilities]. We believe in collaboration, safety, and continuous learning, and we're excited to have you on board!"

Mentors review the AI-generated introduction, adjust it if necessary to better reflect the workplace culture, and use it as a starting point when welcoming apprentices.

After using the overview with an apprentice, mentors reflect on whether AI saved time in preparing the introduction, whether the generated text was clear and engaging, and how likely they are to use AI for similar tasks in the future.

This exercise provides an immediate, reusable benefit while demonstrating AI's ability to streamline communication without replacing the mentor's role in making apprentices feel welcome.

Exercise 5: AI-powered FAQ assistant for apprentice questions

Objective: Experience how AI chat assistants can reduce repetitive questions and provide quick, accurate answers to apprentices.

Mentors think of three common questions apprentices ask about the workplace, such as:

- *What time should I arrive?*
- *Where can I find safety equipment?*
- *How do I report an issue?*

They enter each question into an AI tool (ChatGPT, Gemini, or Microsoft Teams AI) and request a clear, concise answer. They can prompt AI with:

"Provide a short, clear answer for a new apprentice who asks: What is the dress code at [Company Name]?"

AI might generate a response like:

"At [Company Name], the dress code depends on your role. In the office, business casual is expected, while in the workshop, safety gear including closed-toe shoes and protective equipment is required. Your mentor will provide specific guidance based on your tasks."

Mentors review the AI-generated responses for accuracy and clarity. If their workplace uses digital tools like Microsoft Teams or Slack, they may explore whether an AI-powered FAQ bot can be integrated to assist apprentices in real-time.

After the exercise, mentors reflect on how accurate and useful the AI responses were, how much time AI could save in answering repetitive questions, and whether they see potential for using AI-driven FAQs in their workplace.

This exercise helps mentors see firsthand how AI can handle routine questions, freeing them up to focus on more meaningful interactions with apprentices.

Exercise 6: AI-assisted conversation prompts for trust-building

Objective: Use AI to generate personalized icebreaker questions to build rapport with apprentices.

Mentors consider what they already know about an apprentice (or use a sample apprentice profile if needed). They then prompt AI with:

"Suggest five icebreaker questions for a mentor to ask a new apprentice to build trust and understand their learning style. Make them engaging and personalized."

AI might generate questions such as:
- *What made you interested in this field of work?*
- *What are you most excited to learn during your apprenticeship?*
- *Do you prefer hands-on learning, or do you like to watch first and then try?*
- *Is there anything about starting this job that makes you nervous?*
- *What kind of support helps you feel most confident when learning something new?*

Mentors select the most relevant questions and incorporate them into their first conversation with an apprentice, observing how the questions help ease communication and build rapport.

After the conversation, they reflect on whether the AI-generated questions made the discussion more engaging, whether apprentices seemed more comfortable opening up, and how AI might help mentors personalize future interactions while keeping the exchange natural.

This exercise allows mentors to experience AI as a helpful tool for structuring meaningful conversations, reinforcing its role as a supportive assistant rather than a replacement for human connection.

Phase 3: Implementation – learning by doing

Developed by [Tribeka Training Lab (ES)]

What mentors do

The implementation phase is where apprentices move from theory to practice, actively engaging in real work environments. Unlike in school settings, learning here is dynamic, hands-on, and shaped by the specific demands of the workplace. Apprentices participate in real tasks—whether it's working on projects, contributing to team discussions, or taking on responsibilities independently. Through these experiences, they not only refine their technical skills but also develop essential soft skills like communication, teamwork, time management, and problem-solving.

Mentors play a central role in this phase by assigning meaningful tasks, demonstrating skills, providing real-time feedback, tracking progress, and guiding problem-solving. Their goal is to create an environment where apprentices can gain confidence, navigate workplace challenges, and take on increasing levels of responsibility. However, even the most dedicated mentors have limited time and resources, making it difficult to offer fully personalized guidance to each apprentice.

This is where AI can help, supporting mentors in tailoring instruction, streamlining administrative tasks, generating insights on apprentice progress, and offering structured coaching tools. AI ensures that learning-by-doing is engaging, structured, and adapted to the individual needs of each apprentice.

How AI can help

AI enhances the implementation phase by offering personalized learning pathways, improving efficiency, generating valuable insights, and supporting mentors who may not have formal teaching experience. It helps adapt training to each apprentice's learning style, confidence level, and technical abilities, ensuring that every apprentice receives the right level of support at the right time.

AI can provide practical support for mentors in the following ways:

- Assigning tasks and demonstrating skills – AI can suggest different ways to explain tasks based on the apprentice's learning style, generate real-life examples, or provide alternative approaches to problem-solving. It can also break down complex processes into step-by-step task guides, helping apprentices build their skills progressively and with confidence.

- Providing real-time feedback – AI can help structure and phrase feedback effectively, ensuring it remains constructive and solution-oriented. AI-driven tools can analyze an apprentice's performance patterns and suggest when feedback should be delivered for maximum impact.
- Tracking progress and identifying learning gaps – AI-powered progress dashboards can visualize achievements, highlight struggles, and track skill development over time. By analyzing task completion rates and accuracy, AI helps mentors intervene at the right moment with targeted support.
- Supporting problem-solving and reflection – AI can generate open-ended coaching questions that encourage apprentices to think critically about their work and explore multiple problem-solving approaches. Scenario-based learning tools can also provide adaptive challenges, helping apprentices refine their skills through practical application.
- Enhancing engagement with interactive learning – AI can suggest gamified challenges, quizzes, or simulation-based learning experiences that make the workplace learning journey more engaging. AI-powered augmented reality (AR) tools can even create safe environments for apprentices to practice technical skills before applying them in real-world situations.

Explore Further

A Study on the Integration of AI in Education: Benefits and Challenges

AI in Mentorship: Enhancing Human Connections for Personal Growth

How AI Can Personalize Learning and Support Educators

Understanding Adaptive Learning: How AI Is Revolutionizing Personalized Education

PRACTICE:

Exercise 1: AI-Assisted Task Assignment

Objective: Use AI to create clear, structured task assignments for apprentices, ensuring they understand their responsibilities.

1. Define the Task

AI can help create a comprehensive task description with clear steps and safety guidelines.
Mentors can prompt AI with:
"Generate a step-by-step guide for an apprentice assembling a wooden chair. Include required tools and safety precautions."

AI might generate the following steps:

- Gather materials and tools.
- Measure and cut wood pieces accurately.
- Assemble the frame using screws and glue.
- Sand rough edges and apply finish.
- Perform a final check for stability.

2. Check for Understanding

AI can generate quick questions to confirm understanding before the apprentice starts.
Mentors can prompt AI with:
"Generate three questions to check an apprentice's understanding."

AI might generate the following questions:
Before starting the task:

- What are the key safety measures for this task?
- How will you ensure all parts align correctly?
- What will you do if a component doesn't fit?

Using AI for task assignment, mentors can ensure clarity, engage apprentices in self-assessment, and provide structured feedback.

Exercise 2: AI-assisted task adaptation for different learning styles

Objective: Use AI to design personalized task instructions based on different apprentice learning preferences.

Mentors select a common task they regularly assign to apprentices. They then use AI to generate three different versions of the task to suit different learning styles. They can prompt AI with:

"Create three variations of the following task ([task description]) to suit different learning styles:

1. *A visual learner who prefers diagrams and step-by-step visuals.*
2. *An auditory learner who benefits from spoken instructions.*
3. *A kinesthetic learner who learns best by hands-on practice."*

Example AI-generated responses:

- Visual learner – Use an AI tool like Microsoft Designer or Canva with AI image generation to create a visual diagram showing each step of the task. For example, type a prompt like:

  "Create a labeled diagram showing the steps for assembling a wooden chair."

The AI will generate a visual with images and labels, which you can customize by adding arrows, icons, or notes. Save and print the diagram or show it to the apprentice on a screen.

- Auditory learner – Use a tool like ElevenLabs or ChatGPT's voice feature to turn written instructions into a spoken version of the task. Go to elevenlabs.io, create a free account, and paste your instructions (e.g., 'To assemble the wooden chair, first measure and cut the pieces...'). Choose a voice and click 'Generate' to download the audio. You can then play the file for the apprentice or send it to them digitally.
- Kinesthetic learner – Demonstrate the task first, then allow the apprentice to practice under supervision.

Mentors compare the AI-generated versions and reflect on which method best suits their apprentices.

After implementing the adapted task, they reflect on whether the AI-generated variations helped make learning more effective, which approach resonated most with their apprentices, and whether they would use AI for instructional adaptation in the future.

This exercise demonstrates AI's ability to support personalized mentoring, ensuring that apprentices receive task instructions in a way that suits their learning preferences.

Exercise 3: Structuring feedback with AI assistance

Objective: Use AI-generated suggestions to create structured, constructive feedback for an apprentice.

Mentors think of a recent task an apprentice completed and enter their observations into an AI tool. They can prompt AI with:

"Provide structured and constructive feedback for an apprentice who completed [describe task]. Include:

1. *Positive reinforcement on what was done well.*
2. *A constructive suggestion for improvement.*
3. *An encouragement to keep progressing."*

Example AI-generated response:

"Great job on completing the assembly of the furniture piece! Your attention to detail, especially in aligning the parts correctly, was impressive. One area to improve is sanding technique—try

applying more even pressure to achieve a smoother finish. Keep up the good work, and next time, let's focus on refining this skill!"

Mentors compare the AI-generated feedback with their own approach, adjusting the phrasing or focus as needed to make it relevant and motivating for the apprentice.

After delivering the feedback, mentors reflect on whether AI helped structure feedback more effectively, whether the apprentice responded better to the revised phrasing, and whether AI could be useful for enhancing future feedback conversations.

This exercise shows how AI can help mentors phrase feedback in a way that is constructive, motivating, and easy for apprentices to understand.

Exercise 4: AI-assisted learning gap identification

Objective: Use AI to analyze apprentice performance data and identify areas where additional support is needed.

Mentors review a set of real or hypothetical apprentice performance data, such as task completion rates, quality of work, or time taken to complete assignments. They then prompt AI with:

"Analyze the following apprentice performance data and identify key learning gaps. Provide suggestions for targeted interventions."

Example AI-generated response:

"The apprentice completes simple tasks quickly but struggles with complex problem-solving assignments. Consider assigning more structured problem-solving tasks, breaking them down into smaller steps, and gradually increasing complexity over time."

Mentors review the AI-generated insights and use them to develop a targeted intervention plan that addresses the specific areas where their apprentice needs additional support.

After implementing the plan, mentors reflect on whether AI helped highlight learning gaps they may not have noticed, whether the suggested interventions were effective, and how they might use AI analytics in the future to track apprentice progress.

This exercise demonstrates AI's ability to provide data-driven insights that help mentors intervene at the right time with tailored support.

Phase 4: Evaluation – reviewing progress and wrapping up

Developed by [Bulgarian Industrial Association (BG)]

What mentors do

The evaluation phase in mentoring is crucial for assessing an apprentice's progress, providing structured feedback, and planning future development. During this stage, mentors review how well the apprentice has met learning objectives, identify strengths and areas for improvement, and report findings to relevant educational institutions or workplace supervisors. Beyond assessment, this phase also helps mentees reflect on their experiences, reinforcing their achievements while identifying next steps for continued growth.

A well-conducted evaluation provides clear, constructive feedback that supports learning and motivation. Effective mentors balance positive reinforcement with actionable suggestions, ensuring that apprentices leave with a strong understanding of their progress and a concrete plan for improvement. In many cases, this phase also involves career discussions, helping mentees explore their future paths based on their skills, interests, and workplace experiences.

How AI can help

AI can enhance the evaluation phase by structuring feedback, summarizing performance, supporting self-reflection, and assisting in career guidance. AI-driven tools can provide structured templates for feedback conversations, ensuring that feedback is clear, constructive, and actionable. Instead of starting from scratch, mentors can use AI to organize performance insights, making it easier to highlight key achievements and development areas.

AI can also assist in summarizing apprentice progress based on observation notes, recorded feedback, and progress indicators. By analyzing key points, AI tools generate concise summaries that help mentors communicate evaluation results more efficiently. Additionally, AI-generated self-assessment prompts encourage apprentices to reflect on their experiences, helping them recognize their own growth and areas for further improvement.

For mentors who may struggle with delivering constructive criticism, AI-powered language tools like ChatGPT or Grammarly can rephrase difficult feedback to maintain a positive, solution-oriented tone. This ensures that even challenging conversations remain encouraging and focused on development rather than criticism.

In addition to evaluating past progress, AI analytics can suggest career path recommendations based on the apprentice's demonstrated skills, learning preferences, and industry trends. By analyzing patterns in performance data, AI tools can propose suitable next steps, including additional training, potential career paths, or skill-building opportunities that align with the apprentice's strengths and interests.

Explore further

[How AI is Shaping Continuous Feedback and Performance Management Strategies]

[AI Tools for Effective Feedback and Assessment]

PRACTICE:

Exercise 1: AI-assisted performance review summary

Objective: Use AI to generate a structured summary of an apprentice's progress based on key evaluation points.

Mentors gather notes from previous observation records, apprentice feedback, and any relevant progress reports. They then use AI to help structure a summary by prompting:

"Summarize the following apprentice progress notes into a structured performance review. Highlight key achievements, areas for improvement, and suggested next steps."

AI might generate a structured summary like:

"Apprentice Name: Ivan Dimitrov

- Key achievements: Mastered basic woodworking techniques, demonstrated strong teamwork in production tasks.
- Areas for improvement: Needs confidence in independent project execution and precision cutting.
- Suggested next steps: More hands-on projects with mentor supervision, focus on accuracy in detailed craftsmanship."

Mentors review the AI-generated summary, adjust it based on their observations, and use it as a basis for the feedback discussion with the apprentice.

After conducting the review session, mentors reflect on whether AI helped structure feedback more clearly, whether it saved time in summarizing key insights, and how it could assist in future performance evaluations.

This exercise helps mentors experience how AI can organize and simplify evaluation processes, making it easier to communicate meaningful feedback.

Exercise 2: AI-assisted constructive feedback phrasing

Objective: Use AI to refine the phrasing of feedback to ensure it remains constructive and encouraging.

Mentors identify a piece of critical feedback they need to give an apprentice. They enter it into an AI tool with a prompt such as:

"Rephrase this feedback to make it constructive, supportive, and encouraging while maintaining clarity."

Example mentor input:
"You are not paying enough attention to safety procedures, and this is a serious issue."

Example AI-generated rephrased feedback:
"I've noticed that following safety procedures is still a challenge. Let's work together to ensure you feel fully confident in applying them correctly, as this is an essential part of workplace success."

Mentors compare the AI-generated phrasing with their original wording, considering whether the revised version makes the feedback feel more solution-focused and less discouraging. They then apply this technique in real feedback conversations with apprentices.

Afterward, mentors reflect on whether AI helped improve the way they deliver feedback, whether apprentices responded more positively, and whether they would use AI for similar tasks in the future.

This exercise helps mentors see how AI can refine communication, ensuring that feedback supports learning rather than discouragement.

Exercise 3: AI-assisted career path suggestions

Objective: Use AI to explore career recommendations based on an apprentice's skills and progress.

Mentors compile a list of the apprentice's demonstrated strengths, preferred tasks, and work habits. They then prompt AI with:

"Based on these skills and preferences, suggest three potential career paths or development opportunities for this apprentice."

Example input:
"Ivan enjoys hands-on woodworking, is detail-oriented, and prefers small-scale craftsmanship

over large furniture production. He struggles with working in fast-paced environments but excels in precision work."

Example AI-generated response:
"Possible career paths:

1. Custom furniture maker – Ideal for someone who values precision and craftsmanship over mass production.
2. Wood carving specialist – Focuses on intricate designs, aligning with Ivan's attention to detail.
3. High-end finishing expert – Works with high-quality furniture, applying finishing techniques that require patience and accuracy."

Mentors review the AI-generated recommendations and discuss them with the apprentice, helping them explore options for further development.

After the conversation, mentors reflect on whether AI helped generate useful career insights, whether it sparked new ideas for the apprentice's future, and how they might use AI in career mentoring discussions moving forward.

This exercise demonstrates AI's ability to support career guidance, making future planning more personalized and informed.

MODULE 4: DEVELOPING YOUR OWN MENTORING APPROACH WITH AI SUPPORT

Introduction

This module is about helping mentors take everything they have explored so far and apply it to their own way of working. After learning how AI can support different stages of the mentoring process, the focus here shifts to building a personal mentoring approach, one that makes sense in your workplace, fits your role, and reflects how you like to work with apprentices.

It is not about following a rigid method or turning into a tech expert. It is about staying grounded in what mentoring is really about: connection, guidance, and growth, while learning how to use AI tools in ways that save time, offer new insights, and support learning. The topics in this module help mentors reflect on their own practice, navigate common challenges, and build a simple, effective strategy for using AI to support their everyday mentoring.

Topic 1: From AI tools to personal mentoring strategy

Developed by **[New Mindset Coaching & Training (BE)]**

What Mentors Do

As apprentices progress, mentors tailor the experience to meet individual needs by being observant of their actions and preferences. Regular check-ins, such as unstructured conversations at the end of the week, can provide more valuable insights than AI-generated feedback. Mentors balance efficiency with empathy, following organizational procedures while teaching mentees to stay engaged and potentially craft their roles.

How AI Can Help

AI enhances a mentor's approach by processing information and providing insights that inform human decision-making. Mentors can use AI to test their strategies, asking for feedback and refining their methods. AI can provoke thought by simulating interviews or providing feedback on drafted strategies. However, mentors should use AI efficiently, focusing on key document features and avoiding excessive refinement.

AI and your personal strategy as WBL mentor

Human mentorship remains at the heart of guiding apprentices through their learning journey. As a WBL mentor, integrating AI into your personal strategy can significantly enhance your mentoring practice. Use AI to streamline administrative tasks and provide personalized insights, and do not forget what remains completely humane territory - building strong, empathetic relationships with your mentees, apprentices.

Explore Further:

A simple checklist or framework for mentors to evaluate when to rely on AI vs. human intuition?

TEDtalks

AI's Role In Mentoring: Enhancing, Not Replacing

Switch roles with AI, and watch video on AI as a Mentor: A Guide to Unlocking Your Potential

PRACTICE:

Exercise 1: AI-Assisted Mentoring Strategy Development

Objective: Use AI to draft a mentoring strategy tailored to an apprentice's learning style and goals.

Task:

1. Choose a mentorship scenario (e.g., an apprentice in technical training vs. an apprentice developing soft skills).
2. Use an AI tool (ChatGPT, Gemini, other) to generate a structured mentoring plan, using a prompt like:

   "Create a mentorship strategy for an apprentice in [field]. Include key learning milestones, feedback strategies, and common challenges."

3. Review and refine the AI-generated strategy to ensure it aligns with real-world mentorship needs.

Reflection Questions:

- What elements of the AI-generated plan were useful?
- What human expertise was needed to refine or adjust the strategy?
- How can AI and personal mentorship complement each other in strategy development?

Exercise 2: AI-Supported Feedback Personalization

Objective: Use AI to generate constructive feedback while ensuring it remains personalized and encouraging.

Task:

1. Take a generic AI-generated feedback statement (e.g., *"You need to improve your time management."*).
2. Use AI to rephrase it into a more constructive and actionable form, such as:
   "You've made great progress in task completion! A good next step could be experimenting with time-blocking to manage priorities more effectively"
3. Discuss how tone, specificity, and encouragement improve mentorship feedback.

Reflection Questions:

- Did the AI-generated feedback sound too robotic? How can mentors make it more relatable?
- How do different wording choices affect how mentees receive feedback?
- When should feedback come entirely from a mentor rather than AI?

Exercise 3: AI Mentor Superpowers

1. Instead of focusing on AI’s limitations, let’s flip the script!
2. Brainstorm & list three ways AI could make mentoring easier (e.g., tracking mentee progress, generating learning exercises).
3. Now, list three things AI can never replace in a great mentor (e.g., empathy, intuition, real-life experience).

Reflection:

- How can mentors combine AI’s superpowers with their own strengths?
- What’s one AI-enhanced mentoring practice you’d like to try?

Topic 2: Making AI work for you: handling mistakes and misunderstandings

Developed by [Tribeka Training Lab (ES)]

What mentors do

Identify common obstacles when embedding AI in mentoring, such as resistance from apprentices, over-reliance on AI-generated answers, impersonal feedback, or unclear AI outputs. Now it is time to discover all these difficulties and their potential solutions in a detailed way.

1) Resistance from apprentices

Apprentices, once they identify the use of AI tools in their interactions with mentors, may be skeptical of those, seeing them as impersonal or as a replacement for human guidance. Some may feel unsure or confused about the role of AI in their learning process. In these cases, engagement can drop if students don't trust or understand the role of AI in their learning process. Resistance may create a divide between traditional and technological approaches.

Potential solutions

The early involvement of students in the concept of AI can make a big difference. In this way, apprentices can conceive AI as a supportive tool, not a replacement. Furthermore, it is important to celebrate small successes where AI tools helped clarify a concept or saved time.

2) Over-reliance on AI-generated answers

Mentors may begin to accept AI-generated content without question. Along these lines, critical thinking may decrease if mentors are copying answers or responses too easily. Over-reliance can lead to superficiality and can limit a deeper understanding and real-world problem-solving skills. It may reduce opportunities for apprentices to learn from mistakes and creates obstacles to personalised feedbacks.

Potential solutions

The use of AI for brainstorming or guidance is important, however the answers require reflection or justification. It is crucial to talk about "AI literacy", that is to say, the importance of evaluating and questioning AI content. Mentors can create tasks that ask students to compare AI-generated answers with real mentor feedback.

3) Impersonal feedback

AI-generated feedback may sound generic or too formal, lacking the personal connection and empathy a mentor typically provides. Students may feel like the feedback doesn't "speak to them." Feedback is a key driver of growth—if it feels robotic or detached, it may not motivate apprentices who often value relational and hands-on mentoring over superficiality.

Potential solutions

The use of AI to draft feedback is beneficial, but review and personalize it. Mentors should include positive reinforcement, student's names, or concrete examples from recent experiences to humanize the response in a warm and supportive tone to encourage them.

4) Unclear AI outputs

AI may produce vague, confusing, or even incorrect information, especially if prompts are unclear or too broad, which can lead to possible misunderstandings about the task or incorrect advice following. Learning outcomes can be compromised if apprentices obey flawed guidance. It can damage trust in both the tool and the mentor who introduced it.

Potential solutions

Learning the prompt engineering basics can be a huge help—how to write clear, specific prompts to get better AI responses. The "double-check mindset" is to encourage: AI suggestions should be verified against training standards, manuals, or mentor input. Another possible solution is creating a feedback loop: if apprentices find an AI output confusing, they're encouraged to ask questions or request clarification.

In conclusion, while AI offers valuable opportunities to enrich mentoring in the VET sector, it's essential to recognize and address these common obstacles. By being proactive—acknowledging learner concerns, encouraging critical engagement, and maintaining a human-centered approach—mentors can create a balanced learning environment where AI supports rather than

How AI can help

Adjusting AI-generated content to fit real-world mentoring dynamics, structuring better AI prompts, avoiding bias, and balancing AI with human intuition. Using AI effectively requires careful adaptation, critical thinking and professional judgement. The goal isn't just to implement AI, but to do so thoughtfully, ensuring it aligns with the real-world, hands-on nature of vocational training.

1) Adjusting AI-generated content to fit real-world mentoring dynamics

AI tools can generate training plans, feedback, or practical tasks, but these often need customization to suit the interpersonal nature of mentoring. AI can create generic content which may not reflect industry standards, specific tools, or workplace realities. Apprentices need context-specific examples, not just textbook knowledge.

Mentors can use AI as a starting point for task creation or feedback, then edit to reflect local context, tools, or scenarios. This post-revise process helps to match the actual workplace setting. As mentioned before, asking AI for multiple versions of the same task to suit learners with different learning styles (visual, auditory or kinesthetic learners) or skill levels.

2) Structuring better AI prompts

The quality of AI output depends heavily on the clarity and detail of the prompts given to the system. It is important to point out that vague prompts lead to vague answers, while well-structured prompts help mentors receive customized, relevant, and specific content. Being specific when prompting is essential: the characteristics of the apprentice such as the level, the concrete task, learning goal and also the role of the mentor should be included in order to obtain useful and accurate results. Always with these role-based prompts, time can be saved by creating templates for common needs: feedback, checklist creation, reflection tasks, etc.

3) Avoiding bias in AI-generated content

In this context, bias refers to unfairness, imbalance, or distortion in the content generated by AI. It happens when the AI model produces outputs that reflect prejudiced views, stereotypes, cultural assumptions or limited perspectives, even if unintentionally. It happens due to the training which AI models like ChatGPT receive on huge amounts of text from the internet, books, articles, and more. If those sources contain imbalanced representations of people, cultures, genders, jobs, or experiences, the AI may learn and repeat those patterns.

Bias in content can lead to exclusion, confusion, or misrepresentation, particularly in diverse workplaces. The importance of this aspect is obvious considering that mentors often work with apprentices from multicultural and varied backgrounds. By reviewing and editing AI content with an equity and inclusion lens bias could be avoided. It is essential to always check for fairness and accuracy, especially when it comes to feedbacks. The use of prompts that emphasize diversity can reduce possible defects in AI generated outputs**.**

4) Balancing AI with human intuition and emotional intelligence

AI can support mentors, but it cannot replace human connection, empathy, or professional judgment—all critical in mentoring relationships. Human mentors should attend apprentices who often need emotional support, encouragement, and real-time guidance. Their emotional intelligence and intuition are crucial in real-life situations to understand and manage student's needs correctly.

The overuse of AI risks making mentoring feel impersonal or overly standardized. In order to strike the balance, AI can save time on administrative issues (e.g., drafting feedback, creating checklists), so mentors can spend more time on human interaction. The goal isn't to let AI take over mentoring, but to let it handle the repetitive or technical aspects, so mentors can focus on what they do best: guiding, supporting, and inspiring their apprentices.

PRACTICE:

Case studies – mentors analyze real-world AI mentoring challenges, find AI-supported solutions, and discuss when AI is helpful vs. when human judgment is key.

Exercise 1: Humanizing AI feedback

Objective: Help mentors practice using AI to generate structured feedback, then improve it by adding warmth, clarity, and personal insight.

Instructions:

1. Review a sample apprentice task

Scenario example: Apprentice Layla completed a food prep task in a hospitality kitchen. She followed hygiene protocols but forgot to label some stored ingredients.

2. Generate AI feedback

Prompt ChatGPT (or similar AI) using a basic structure:

> *"Provide performance feedback for an apprentice named Layla who completed a kitchen hygiene task. Use the WWW/EBI structure and include next steps."*

3. Evaluate the AI response

Mentors review what the AI generates and ask: Does this sound robotic or impersonal? Is it too vague or overly formal? Would this feedback motivate and connect with the student?

4. Humanize the feedback

Mentors then revise the AI response, adding a personal language, friendly tone, encouragement, real-world comparisons, and specific suggestions.

Example Comparison:

AI Original: "The task was performed correctly. Labeling was omitted. Please review food storage protocols."

Humanized Version: "Great work, Layla! You showed excellent attention to hygiene, very professional. Just be sure to label all ingredients before storage to avoid confusion or waste. This is a common slip-up, and we'll practice it more next week!"

Exercise 2: Verifying AI Technical Content

Objective: Help mentors develop the habit of verifying and refining AI-generated technical information to ensure industry accuracy and safety.

<u>Instructions:</u>

1. Choose a technical skill relevant to your field, e.g.: welding setup steps, electrical safety checks, aged care lifting procedures.
2. Ask AI for an explanation

Mentors input a prompt like:

> *"Explain the steps for setting up a MIG welding machine for a first-year apprentice. Keep it simple and include safety advice."*

3. Compare against industry standards

Mentors then compare AI output with training material, workplace SOPs, or their own expertise. They should highlight errors, missing steps, or outdated info.

4. Refine and Annotate

Mentors edit the AI content to add missing steps or correct inaccuracies. They can add notes like:

> *"Always wear insulated gloves before step 3" or "This varies depending on your machine model - check the manual".*

Topic 3: Designing your own AI-supported mentoring framework

Developed by [New Mindset Coaching & Training (BE)]

What Mentors Do

Mentors play a pivotal role in understanding the unique needs and goals of each apprentice and integrating AI tools to support personalized development plans. Mentors must balance the use of technology with human intuition, ensuring that AI enhances rather than replaces the empathetic aspects of mentorship. Key actions include:

- ✓ Identify areas where AI can streamline administrative tasks and provide data-driven insights;
- ✓ Adapting AI tools to fit the specific context and goals of the mentoring program;
- ✓ Fostering human connection while leveraging AI for support.

How AI Can Help

Structured Mentoring Plans: AI can help create personalized development plans by analyzing mentee data and suggesting relevant learning paths.

Continuous Engagement Ideas: AI tools can generate creative ways to keep mentees engaged, such as interactive challenges or real-time feedback mechanisms.

Growth Pattern Monitoring: AI can track mentee progress over time, identifying areas of improvement and suggesting adjustments to the mentoring strategy.

Explore Further

For more insights into designing AI-supported mentoring frameworks, consider these resources:

MentorAI, an article which explores the design and potential of AI-driven mentorship platforms, highlighting their transformative impact on professional growth

AI in Mentorship Programs with focus on feedback

Expertise

To develop a comprehensive AI-supported mentoring framework, consider the following expertise:

AI Specialists: collaborate with experts in your team who can integrate AI tools into mentoring programs effectively.

Mentorship Practitioners: Work with experienced mentors and L&D experts, who understand how to balance AI support with human empathy and intuition.

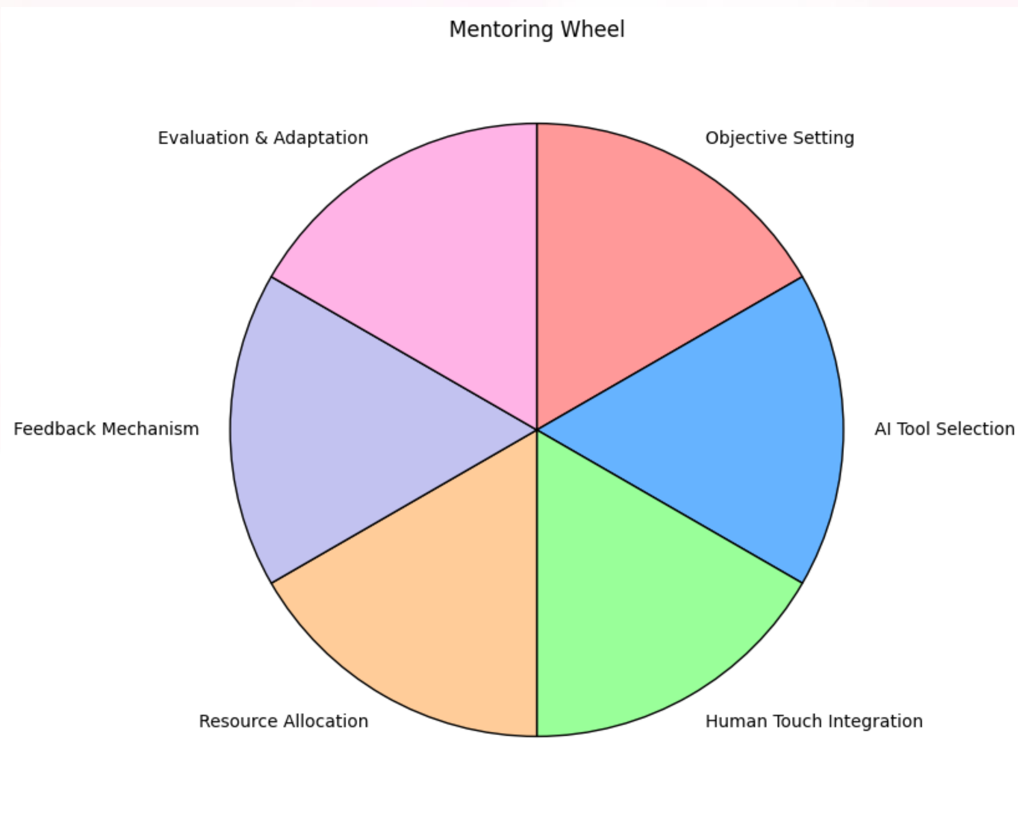
Organizational Development Specialists: identify colleagues from the HR department who can align AI-enhanced mentoring with broader organizational goals and strategies.

PRACTICE:

Drafting your Mentoring Wheel

Inspired by a popular coaching instrument, called The Wheel of Life*, we designed for you the Mentoring Wheel, to serve you both a s a checklist and as a check-in tool on what you have to have in mind to ensure smooth AI influenced mentoring process in WBL.

**Here you can explore the original tool called Wheel of Life:* http://wheeloflife.noomii.com/



Elements and Example Use of the WBL Mentoring Wheel:

- **Objective Setting:** Use this slice to define the program's mission and how AI can enhance it.
- **AI Tool Selection:** Choose tools that fit the objectives, such as AI-driven mentorship platforms.
- **Human Touch Integration:** Focus on building strong mentor-mentee relationships.
- **Resource Allocation:** Ensure access to AI tools and educational resources.
- **Feedback Mechanism:** Use AI to collect and analyze feedback.
- **Evaluation & Adaptation:** Regularly assess and refine the program based on feedback and AI trends.

How to use the wheel?

Option 1: Rate each segment on a scale from 1 (low) to 10 (high) based on your current advancement on this element.

Connect the ratings to visualize areas of what is successfully carried out and what needs more attention or work.

Option 2: Starting from "Objective setting", go clockwise and work on setting each element of the AI influenced mentoring process.

WAY FORWARD

These instructional materials, which we organized in 4 modules cover the two main domains we wanted to explore with the mentors in the AI in Mentoring project: ***AI Literacy*** and ***AI Mentoring***.

We invite you to use, adapt, and expand these resources—continuing the conversation and shaping the future of AI-enhanced mentoring together.

The future of WBL mentorship lies in the synergy between human insight and AI innovation. As you move forward, consider how the ideas and tools presented here can be adapted to your unique context, for new conversations, creative experimentation, and a commitment to lifelong learning, for yourself and those you mentor.

As Henry Ford once said, *"Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young."*

May you continue to learn, adapt, and inspire, shaping the next generation of skilled, thoughtful professionals in the AI era.

Contact us here: https://ai-mentoring.eu/

The AI in Mentoring Team