Co-funded by the European Union

# EDU-AI analysis and framework for the toolkit development

**Developed by Edushakers & ART+INN**

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

# Contents

# 1.Analysis results

## Profile and Background

The questionnaire included a total of 163 participants, with 81.4% from Belgium, 14.9% from Lithuania, 4.3% from Italy, and 0.6% from other European countries. Participants' roles were primarily teachers (77.5%), with others being administration staff (10%), program managers/directors (3.1%), experts (2.5%), students (0.6%), and other roles (8.1%). Most were aged 35–50 (52.8%), followed by those above 50 (31%) and up to 35 (17.4%). Females constituted 66.9% and males 33.1%. Vocational expertise spanned general secondary education, technical fields, agriculture, creative professions, health and social care, and vocational institution administration, reflecting diverse educational and professional backgrounds.

## Knowledge and Familiarity with AI

***How would you rate your understanding of artificial intelligence (AI) in general?***

1) Total

- Limited: 42.9%
- Fair: 39.9%
- Good: 15.3%
- Excellent: 1.8%

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): The majority (78.9%) rate their understanding as limited.
- Neutral (B): Ratings are spread, with 44.7% fair and 21.1% limited.
- Open (C): 71.4% rate their understanding as fair, the highest proportion among this group.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): 55.3% fair, 35.1% limited, and 20.6% good, reflecting slightly higher confidence in AI understanding.
- Neutral (B): Fair understanding dominates (34.2%), followed by 53.6% limited understanding.

- I Ask (C): Limited understanding is most common (42.9%), but 31.7% report fair and 21.4% good understanding.

4) Open to Technical Innovations - Hesitant with Tech

- Very Open (A): 63.4% rate their understanding as fair, with 24% limited.
- Neutral (B): Limited dominates (71.4%).
- Hesitant (C): A balanced split between limited (41%), fair (31.7%), and good (20.4%).

5) Gender

- Male: 53.7% rate their understanding as fair, with 24.1% limited and 20.4% good.
- Female: Most (52.3%) rate their understanding as limited, while 33% rate it fair.

6) Position

- Teachers: 44.4% limited, 40.3% fair, and 13.7% good.
- Administration: 31.3% limited, 31.3% fair, and 25% good.
- Program Managers/Directors: 20% limited, 60% fair, and 20% good.
- Experts: Even split between fair (25%) and good (25%).
- Other Roles: 61.5% limited, with 38.5% fair.

The questionnaire results show that most participants rate their understanding of AI as limited (42.9%) or fair (39.9%), with only a small percentage rating it as good (15.3%) or excellent (1.8%). Participants open to innovation and frequently sought for advice report higher confidence in their AI knowledge compared to sceptical or hesitant individuals. Similarly, males, younger participants (under 35), and those in leadership positions (program managers, experts) demonstrate better self-assessed understanding of AI. Conversely, females, older participants (50+), and individuals in non-specialized roles report more limited knowledge. The findings suggest that openness to technology, professional responsibilities, and age are key factors influencing self-perceived AI expertise. Efforts to improve AI literacy should target sceptical individuals, older participants, and females in less technical or specialized roles.

***How would you rate your understanding of the possible use of artificial intelligence (AI) in education?***

1) Total

- Limited: 49.1%
- Fair: 31.9%
- Good: 16.6%
- Excellent: 2.5%

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): 78.9% have limited understanding.
- Neutral (B): 21.1% report fair understanding, with no responses for good or excellent.
- Open (C): The majority (81%) rate their understanding as limited, with a small percentage (14.3%) reporting fair.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): 60.5% have limited understanding, while 36.1% report fair understanding.
- Neutral (B): 71.4% have limited understanding.
- I Ask (C): 60.7% report limited understanding, but 36.1% report fair.

4) Open to Technical Innovations - Hesitant with Tech

- Very Open (A): 29.6% limited, 44.4% fair, 24.1% good, and 1.9% excellent.
- Neutral (B): 71.4% limited, with minimal fair understanding (24.4%).
- Hesitant (C): 68.3% limited understanding, but 7.3% report good understanding.

5) Gender

- Male: 29.6% limited, 44.4% fair, and 24.1% good.
- Female: 58.7% limited, 25.7% fair, and 12.8% good.

6) Position

- Teachers: 52.4% limited, 30.6% fair, and 13.7% good.
- Administration: 40% limited and 40% fair, with no good or excellent responses.
- Program Managers/Directors: 75% good understanding, the highest among all groups.
- Experts: 25% good, 40% fair.
- Other Roles: 46.2% limited, with a mix of fair and good understanding.

7) Age

- Up to 35: 28.6% limited, 42.9% fair, and 21.4% good.
- 35–50: 50.6% limited, 30.6% fair, and 16.5% good.
- Above 50: 58% limited, 26% fair, and 14% good.

The questionnaire reveals that 49.1% of participants rate their understanding of AI's possible use in education as limited, 31.9% as fair, 16.6% as good, and only 2.5% as excellent. Those most confident in their understanding include program managers (75% rated as good), males (44.4% fair, 24.1% good), younger participants under 35 (42.9% fair, 21.4% good), and individuals open to technical innovations (44.4% fair, 24.1% good). Conversely, limited understanding is most common among sceptical individuals (78.9%), females (58.7%), and participants aged 50+ (58%).

These results indicate significant knowledge gaps, particularly among females, older participants, and those hesitant toward innovations. To bridge these gaps, targeted training on AI in education should focus on these groups, leveraging the expertise and openness of program managers and younger participants to lead implementation efforts.

# Behaviour

***Have you received any training or professional development related to AI?***

1) Total

- Yes: 19.6%
- No: 80.4%

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): 15.8% have received training.
- Neutral (B): 16.0% have received training.
- Open (C): 19.0% have received training.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): 19.6% have received training.
- Neutral (B): 21.1% have received training.
- I Ask (C): 17.9% have received training.

4) I'm Very Open to Technical Innovations - Hesitant with Tech

- Very Open (A): 24.1% have received training, the highest among these groups.
- Neutral (B): 21.4% have received training.
- Hesitant (C): 17.9% have received training.

5) Gender

- Male: 24.1% have received training.
- Female: 17.4% have received training.

6) Position

- Teachers: 19.4% have received training.
- Administration: 18.8% have received training.
- Program Managers/Directors: 20.0% have received training.
- Experts: 0.0% have received training.
- Other Roles: 30.8% have received training.

7) Age

- Up to 35: 30.8% have received training.
- 35–50: 14.3% have received training.
- Above 50: 24.7% have received training.

The majority of participants (80.4%) have not received any training or professional development related to AI, with only 19.6% reporting some form of training. Males (24.1%), younger participants under 35 (30.8%), and those open to technical innovations (24.1%) are more likely to have received training, while females (17.4%) and individuals aged 35–50 (14.3%) are less likely. Teachers (19.4%) and administrative staff (18.8%) show similar levels of training, while experts surprisingly report no AI-related training.

These results highlight significant gaps in AI training, particularly among females, middle-aged participants, and those hesitant about innovations. Expanding AI-focused professional development opportunities for these groups is crucial to fostering broader understanding and implementation of AI in educational and professional settings.

***Have you used the following AI tools in your work?***

1) Total

- Most Used Tools:
- ChatGPT (57.7%)
- Kahoot! (49.7%)
- Google Classroom (3.1%)
- Grammarly (3.1%)
- Least Used Tools: Tools such as Dialogflow and ScribbleAI (0.6% each) and SMART Learning Suite (2.5%).
- None of These Tools: 20.9%.

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): 36.6% have used ChatGPT, while 36.8% reported using none of the listed tools.
- Neutral (B): 47.6% have used ChatGPT, with Kahoot! at 31.6%.
- Open (C): 65.7% use ChatGPT, and 42.9% use none of these tools.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): ChatGPT is used by 66.7%, followed by Kahoot! (53.6%).
- Neutral (B): ChatGPT (57.1%), Kahoot! (31.5%).
- I Ask (C): ChatGPT (47.4%), Kahoot! (46.4%).

4) I'm Very Open to Technical Innovations - Hesitant with Tech

- Very Open (A): ChatGPT is used by 66.7%, with Kahoot! at 53.7%.
- Neutral (B): ChatGPT is used by 57.1%.
- Hesitant (C): ChatGPT is used by 47.6%, with Kahoot! at 46.4%.

5) Gender

- Male: ChatGPT is used by 66.7%, followed by Kahoot! (53.7%).
- Female: ChatGPT is used by 52.3%, with Kahoot! at 46.8%.

6) Position

- Teachers: ChatGPT (57.3%) and Kahoot! (57.3%) are the most commonly used tools.
- Administration: ChatGPT (60.0%), Kahoot! (40%).
- Program Managers/Directors: Kahoot! (75.0%) and ChatGPT (60.0%).
- Experts: ChatGPT (100%), with minimal use of other tools.
- Other Roles: ChatGPT (46.2%), with lower use of all other tools.

7) Age

- Up to 35: ChatGPT (75%), Kahoot! (67.9%).
- 35–50: ChatGPT (60%), Kahoot! (50.6%).
- Above 50: ChatGPT (44%), Kahoot! (42%).

The questionnaire reveals that ChatGPT (57.7%) and Kahoot! (49.7%) are the most commonly used AI tools in participants' work, while other tools like Grammarly, Google Classroom, and specialized tools (e.g., Dialogflow) are used minimally. Notably, 20.9% of participants reported not using any AI tools.

Participants open to technical innovations, males, younger individuals (under 35), and those in leadership roles (experts, program managers) are the most frequent users of AI tools, particularly ChatGPT. Conversely, sceptical or hesitant individuals, older participants (50+), and females show lower adoption rates and are more likely to report no AI tool usage.

These findings highlight the importance of promoting AI tool awareness and training, particularly targeting sceptical, hesitant, and older users, to foster broader adoption and integration of AI technologies across different roles and demographics.

***Which of these factors are the most inhibiting you to get to know more on AI use in education?***

1) Total

Top Factors:

- Lack of Time: 46.6%
- Don’t Know Where to Start: 44.2%
- My Own Knowledge: 40.5%
- Other Priorities: 38.0%
- Trust in AI: 30.3%

Less Common Factors:

- Financial Implications: 8.0%
- Lack of Support from Director/Boss: 6.1%
- Lack of Belief in AI’s Usefulness: 4.9%
- Influence of Other Colleagues: 3.1%

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): Lack of time (46.3%) and lack of trust in AI (38.2%) are key barriers.
- Neutral (B): "Don’t know where to start" (57.1%) and lack of time (42.9%) dominate.
- Open (C): Lack of time (65.9%) and "Don’t know where to start" (47.6%) are the top barriers.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): Lack of time (55.3%) and "Don't know where to start" (40.2%) dominate.
- Neutral (B): Similar barriers, with 47.4% citing "Don't know where to start."
- I Ask (C): Time constraints (53.6%) and lack of guidance (41.1%) are key factors.

4) I'm Very Open to Technical Innovations - Hesitant with Tech

- Very Open (A): Lack of time (51.9%) and lack of knowledge (43.3%) dominate.
- Neutral (B): Lack of time (42.9%) and lack of guidance (28.6%) are barriers.
- Hesitant (C): Time constraints (43.9%) and lack of knowledge (37%) are top factors.

5) Gender

- Male: Lack of time (51.9%) and "Don't know where to start" (31.5%) are dominant.
- Female: "Don't know where to start" (50.5%) and lack of knowledge (41.3%) are most common.

6) Position

- Teachers: Time constraints (48.4%) and lack of guidance (45.2%) dominate.
- Administration: Other priorities (46.2%) and time constraints (30.8%) are key.
- Program Managers/Directors: Other priorities (50.0%) and lack of knowledge (50.0%).
- Experts: Trust in AI (50%) is a major barrier.
- Other Roles: Lack of time (46.2%) and trust in AI (46.2%).

7) Age

- Up to 35: Lack of time (64.3%) and "Don't know where to start" (42.9%) are dominant.
- 35–50: Lack of time (49.4%) and other priorities (44.4%) are significant.
- Above 50: Lack of guidance (44%) and time constraints (32%).

The questionnaire reveals that the main barriers to learning more about AI in education are lack of time (46.6%), not knowing where to start (44.2%), and limited knowledge (40.5%), followed by other priorities (38%) and trust in AI (30.3%). Less significant factors include financial implications (8%) and lack of support from supervisors (6.1%).

Younger participants (under 35) and males report time constraints as their primary barrier, while females and older participants (50+) are more likely to cite lack of guidance and knowledge. Teachers focus on time and guidance, while experts highlight trust issues. Sceptical participants are more hindered by trust in AI, whereas those open to innovation report time as their biggest challenge.

To address these barriers, efforts should focus on time-efficient training resources, clear guidance for getting started, and building trust in AI, particularly targeting sceptical, hesitant, and less experienced individuals.

# Attitude

***To what extent do you agree or not to these statements?***

1) Total

- Improving vocational training: 72.4% agree (54% rather agree, 18.4% totally agree).
- Comfort with AI tools: 57.7% agree they feel comfortable (29.4% rather agree, 8.6% totally agree).
- Interest in AI: 78.5% agree they are interested (29.4% rather agree, 29.4% totally agree).
- Reading AI books/articles: 33.2% agree (28.8% somewhat disagree).
- Using more AI if knowledgeable: 77.9% agree they would (51.7% rather agree, 22.6% totally agree).
- Trust in AI: 61.3% do not trust AI, with only 8.6% totally agreeing that they trust it.
- AI is future for education: 67.5% agree (29.4% rather agree, 28.8% totally agree).
- AI will make teachers obsolete: 61.3% disagree (totally or somewhat).
- AI should be used more in education: 57.1% agree (14.7% totally agree).
- AI as a tool for teachers: 66.9% agree it's a good help (33.3% rather agree, 26.3% totally agree).

2) Open to Innovation - Sceptical for Innovations

- Open participants are more optimistic about AI, with 66.7% totally agreeing it's the future of education and 61.5% reading more about AI.
- Sceptical participants are more distrustful, with 38.1% rather agreeing they do not trust AI.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Those frequently asked for advice report higher comfort using AI (57.1% rather agree) and are more likely to believe AI will improve vocational training.
- Those seeking advice (41.1% rather agree) report lower comfort levels with AI tools.

4) I'm Very Open to Technical Innovations - Hesitant with Tech

- Very open participants agree more strongly that AI is the future of education (35.7% totally agree).
- Hesitant participants are less trusting of AI, with 21.3% somewhat disagreeing with its usefulness.

5) Gender

- Males are more comfortable with AI tools (57.1% rather agree) and view AI as helpful for teachers (33.3% totally agree).
- Females are slightly more cautious, with 38.5% somewhat agreeing they don't trust AI.

6) Position

- Experts and Program Managers strongly agree AI improves vocational training (75% totally agree) and view AI as the future of education.
- Teachers are less comfortable with AI tools (31.5% totally disagree).

7) Age

- Under 35: 64.3% agree AI is a good help for teachers, and 75% say they'd use more AI if they knew more about it.
- 35–50: 67.5% see AI as the future of education.
- 50+: 61.3% disagree with the statement that AI will make teachers obsolete.

The results show strong optimism about AI's potential in education, with 72.4% agreeing it could significantly improve vocational training and 67.5% viewing AI as the future of education. Additionally, 77.9% would use AI more if they knew more about it, and 66.9% see AI as a valuable tool for teachers. However, trust in AI remains a challenge, with 61.3% not fully trusting AI and mixed comfort levels using AI tools in the classroom (57.7% feel comfortable).

Participants open to innovation and younger individuals (under 35) are more optimistic and likely to adopt AI, while sceptical and hesitant participants, along with older individuals, express lower trust and comfort. Experts and program managers show the strongest support for AI's potential, while teachers report less comfort using AI tools.

Conclusions suggest that while AI is broadly viewed as beneficial, efforts should focus on improving trust, increasing knowledge, and providing targeted support for educators and sceptical groups to maximize AI's impact in education.

***Which of these topics would interest you to explore more when it comes to AI?***

1) Total

Top Interests:

- Practical examples: 70.6%
- Basic concepts of AI: 47.2%
- Potential areas of application: 38.0%
- Ethical aspects and critical questions: 33.1%

Lesser Interests:

- Data management: 17.8%
- Programming: 11.0%
- Machine learning: 11.0%
- No interest: 8.6%.

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): Practical examples (78.9%) and ethical aspects (47.4%) dominate.
- Neutral (B): Practical examples (66.7%) and basic concepts (52.6%) are most popular.
- Open (C): Practical examples (75.6%) and basic concepts (48.1%) lead, with lower interest in ethical aspects (28.6%).

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): Practical examples (69.1%) and basic concepts (35.1%) are the top topics.
- Neutral (B): Ethical aspects (57.1%) rank higher among this group.
- I Ask (C): Practical examples (73.7%) and basic concepts (42.9%) dominate.

4) I’m Very Open to Technical Innovations - Hesitant with Tech

- Very Open (A): Practical examples (71.4%) and basic concepts (48.1%) dominate, followed by potential applications (42.9%).
- Neutral (B): Practical examples (75.6%) and ethical aspects (57.1%) rank highest.
- Hesitant (C): Practical examples (68.5%) and basic concepts (40.7%) are most popular.

5) Gender

- Male: Practical examples (72.2%) and basic concepts (48.1%) lead, with higher interest in machine learning (24.1%).
- Female: Practical examples (69.7%) and basic concepts (46.8%) dominate, but less interest in programming (7.3%) and machine learning (4.6%).

6) Position

- Teachers: Practical examples (73.4%) and basic concepts (46.8%) dominate.
- Program Managers/Directors: Ethical aspects (75%) and potential applications (50%) are top interests.
- Experts: Basic concepts (75%) and practical examples (75%) are equally important.
- Other Roles: Practical examples (46.2%) are the most preferred topic.

7) Age

- Under 35: Practical examples (60.7%) and basic concepts (28.6%) are top interests.
- 35–50: Practical examples (72.9%) and basic concepts (54.1%) dominate.
- 50+: Practical examples (72.0%) and ethical aspects (44.0%) are of higher interest.

The results show that practical examples (70.6%) and basic concepts of AI (47.2%) are the most popular topics of interest across all participants, followed by potential areas of application (38%) and ethical aspects (33.1%). Lesser interest is shown in technical topics like programming (11%) and machine learning (11%), with 8.6% expressing no interest.

Participants open to innovation and males are more interested in technical topics, such as machine learning and programming, while sceptical individuals, older participants (50+), and program managers show stronger interest in ethical aspects. Teachers prioritize practical examples, while experts and program managers express interest in high-level and conceptual topics.

The findings highlight the importance of focusing AI education on practical applications and foundational concepts while incorporating ethical discussions for specific groups. Tailored content on technical topics should target more technically inclined participants, such as males and those in leadership roles.

***What areas of professional development related to AI in education do you feel would benefit you the most? Please select up to 5 options***

1) Total

Top Areas of Interest:

- Pedagogical strategies for integrating AI into teaching: 19.6%
- Adaptation of AI tools for diverse learning needs: 16.6%
- Assessment methods for evaluating student learning: 17.2%
- Creating inclusive learning environments with AI: 10.4%
- Technical training on AI tools and platforms: 12.3%

Least Chosen:

- Legal and policy frameworks: 6.1%
- Collaborative approaches to AI implementation: 3.7%

2) Open to Innovation - Sceptical for Innovations

- Sceptical (A): Pedagogical strategies (21.1%) and technical training (15.8%) rank highest.
- Neutral (B): Pedagogical strategies (33.3%) dominate, followed by assessment methods (14.3%).
- Open (C): Adaptation of AI tools (22%) and pedagogical strategies (19%) are the most popular.

3) Colleagues Ask Me a Lot for Advice - I Ask a Lot for Advice

- Colleagues Ask (A): Assessment methods (16.5%) and pedagogical strategies (15.5%) dominate.
- Neutral (B): Adaptation of AI tools (25%) is a top priority.
- I Ask (C): Adaptation of AI tools (25%) and creating inclusive environments (12.5%) rank higher.

4) I'm Very Open to Technical Innovations - Hesitant with Tech

- Very Open (A): Adaptation of AI tools (22%) and technical training (13.9%) dominate.
- Neutral (B): Pedagogical strategies (21.1%) and adaptation of tools (15.7%) are most popular.
- Hesitant (C): Pedagogical strategies (19.1%) and assessment methods (15.6%) lead.

5) Gender

- Male: Technical training (18.5%) and adaptation of AI tools (22%) lead, with higher interest in legal/policy frameworks (7.3%).
- Female: Pedagogical strategies (20.2%) and assessment methods (15.6%) are most popular, with lower interest in technical topics.

6) Position

- Teachers: Pedagogical strategies (20%) and assessment methods (20%) dominate.
- Program Managers/Directors: Assessment methods (25%) and creating inclusive environments (15.4%) are top priorities.
- Experts: Pedagogical strategies (25%) and adaptation of AI tools (25%) are equally important.

7) Age

- Under 35: Adaptation of AI tools (21.4%) and pedagogical strategies (10.7%) are key interests.
- 35–50: Pedagogical strategies (14.1%) and assessment methods (14.1%) dominate.
- 50+: Assessment methods (18%) and creating inclusive environments (16%) are most popular.

The results highlight that the most desired areas of professional development in AI education are pedagogical strategies for AI integration (19.6%), assessment methods for student learning (17.2%), and adaptation of AI tools for diverse learning needs (16.6%). Interest in technical training (12.3%) and creating inclusive learning environments (10.4%) is moderate, while legal frameworks (6.1%) and collaborative approaches (3.7%) receive less attention.

Males and younger participants prefer technical training and tool adaptation, while females, teachers, and older participants prioritize pedagogical strategies and assessment methods. Program managers and hesitant individuals show greater interest in inclusivity and broader applications.

The findings suggest that professional development programs should emphasize practical integration of AI into teaching, effective assessment strategies, and inclusivity while offering targeted training on technical and legal aspects for specific groups. Tailored approaches can better meet the diverse needs of educators and stakeholders.

# 2. Guidelines for the EDU-AI toolkit development

## Profile of EDU-AI Toolkit User

The typical user of the EDU-AI Toolkit is a vocational educator or staff member interested in integrating AI into their teaching practices but facing challenges such as lack of time, limited knowledge, and uncertainty about where to start. They are likely to value practical examples, pedagogical strategies for AI integration, and assessment methods for evaluating student learning. While many are optimistic about AI's potential to improve vocational training and see it as the future of education, there is also a need to address trust in AI and provide resources for building comfort with AI tools. Users range from novices requiring foundational knowledge to more advanced educators seeking strategies for adapting AI to diverse learning needs and implementing inclusive practices.

## The Framework for EDU-AI Toolkit

The EDU-AI Toolkit should be designed to support vocational educators and staff in integrating artificial intelligence into their teaching practices and professional environments. It should provide a progressive structure with 3 levels of difficulty (40-50 word pages in total), catering to users with varying levels of experience and familiarity with AI. This framework outlines the structure and focus areas for the toolkit.

### Level 1: Understanding AI Basics

*Target Audience*

Educators and staff new to AI, seeking foundational knowledge to get started.

*Focus Areas*

1. Introduction to AI:
   - Provide clear explanations of what AI is, key concepts, and its potential in vocational education.
   - Outline ethical principles for AI use in education to build trust and address common concerns.

2. AI Tools and Applications:

    - Introduce a variety of AI tools with clear, beginner-friendly explanations of their applications (e.g., chatbots, content creation tools, and learning platforms).
    - Highlight practical, low-barrier use cases for educators, such as automating administrative tasks or creating simple teaching resources.
3. AI-Driven Content Creation:
    - Demonstrate how AI can assist in generating quizzes, lesson plans, and other teaching materials with minimal effort.

*Recommendations*

- Include interactive visuals, video tutorials, and a “Getting Started” checklist for users unfamiliar with AI.
- Share success stories and case studies that demonstrate the benefits of AI in vocational education.

**Level 2: Advancing AI Integration for Vocational Educators**

*Target Audience*

Educators with foundational knowledge who want to integrate AI more deeply into their teaching practices.

*Focus Areas*

1. Lesson Customization:
    - Provide strategies for using AI to tailor lessons to individual or group needs, incorporating examples relevant to vocational education.
2. Personalized Learning Paths:
    - Showcase how AI can support differentiated instruction by creating personalized learning paths for students.
3. Collaborative and Interactive Learning:
    - Highlight how AI can facilitate group projects, simulations, and other interactive learning experiences.
4. AI for Career Guidance
    - Offer guidance on using AI to align students' skills and learning with industry needs and career opportunities.
5. Ethical Considerations:

- Address challenges such as fairness, data privacy, and bias in AI systems, with specific examples relevant to vocational contexts.

*Recommendations*

- Include ready-to-use lesson templates, activity plans, and tools for tracking student progress using AI analytics.
- Offer resources to help educators explain AI concepts to students and encourage their engagement with AI-driven tools.

**Level 3: Preparing for the Future with AI**

*Target Audience*

Advanced users seeking to lead AI integration and apply it within specific vocational fields.

*Focus Areas*

1. Industry-Specific AI Applications:
   - Explore advanced AI tools and their applications in vocational fields such as healthcare, manufacturing, logistics, and more.
2. Trends in AI:
   - Provide insights into emerging trends shaping vocational industries, including generative AI and automation.
3. Life-Long Learning with AI:
   - Equip educators with strategies to foster adaptability and lifelong learning skills in students to prepare them for AI-driven workplaces.
4. Leadership in AI Education:
   - Offer guidance for educators to take on leadership roles in integrating AI into their institutions and mentoring peers.

*Recommendations*

- Include toolkits for implementing AI in specific vocational fields.
- Provide leadership resources to help educators advocate for AI adoption and train colleagues.
- Incorporate guidance on building partnerships with industry stakeholders to align AI education with workforce demands.