## **Student Roles in AI-Enhanced Adult Education**

### Participant Handout

## The Human-Centered Learning Model: Why You Matter More Than Ever

#### Your Irreplaceable Role as the Human Instructor

#### What AI Can Do:

- Process large amounts of information quickly
- Generate practice materials and examples
- Provide 24/7 availability for student questions
- Organize and summarize content
- Offer consistent feedback on routine tasks

#### What Only YOU Can Do:

- Build relationships and trust with students
- Understand individual student needs and backgrounds
- Adapt teaching in real-time based on student responses
- Provide emotional support and encouragement
- Help students connect learning to their personal goals
- Model critical thinking and curiosity
- Celebrate student achievements meaningfully
- Navigate complex ethical and cultural considerations

#### Enhanced Collaborative Model

Role	Primary Functions	Why This Role is Essential
You (Instructor)	Human guide, motivator, relationship builder, meaning facilitator	Students need someone who cares about their success and can adapt to their unique needs

Role	Primary Functions	Why This Role is Essential
Student	Active learner who brings lived experience, personal goals, emotions	Learning is personal and contextual—Al cannot understand individual human experience
AI	Practice partner, information organizer, tireless assistant	Available when humans aren't, but cannot replace human insight and connection

## **Neuroscience Principles for AI Integration**

## **1. Cognitive Load Theory**

Principle: Human brains have limited processing capacityAl Application: Use AI to reduce extraneous cognitive load, not learning loadExample: AI organizes research so students can focus on analysis, not information hunting

# 2. Spacing Effect

Principle: Learning is more effective when distributed over timeAl Application: Al can help schedule and customize spaced practiceExample: Al-generated review schedules based on individual forgetting curves

## 3. Active Retrieval

Principle: Students must actively reconstruct knowledge to learnAl Application: Al generates practice opportunities; students do the thinkingExample: Al creates personalized quiz questions; students answer without Al assistance

# Learning About AI Together: You Don't Need to Be the Expert

## The Shared Discovery Approach

## You Don't Need To:

- Become an AI technical expert
- Know more about AI than your students
- Have all the answers about AI capabilities
- Learn AI tools before introducing them to students

### You DO Need To:

- Model curiosity and critical thinking
- Ask good questions about AI outputs
- Help students evaluate information from any source
- Share your own learning process with students
- Create a safe space for exploring new tools together

#### AI as Practice Partner: Practical Examples

#### Language Skills:

- Al provides conversation practice when human partners aren't available
- Students practice grammar exercises with immediate feedback
- Al helps with pronunciation through repetition without judgment

#### Writing Development:

- Al offers feedback on draft organization before peer review
- Students practice different writing styles in low-pressure environment
- AI helps brainstorm ideas when students feel stuck

#### Math and Problem-Solving:

- Al generates unlimited practice problems at student's level
- Students can check their work step-by-step
- Al explains concepts in different ways until student understands

#### **Research and Analysis:**

- Al helps organize sources by theme or date
- Students practice summarizing techniques with AI feedback
- Al assists with citation formatting so students focus on content analysis

#### Test Preparation:

- AI creates personalized practice tests based on areas of difficulty
- Students review concepts through AI-generated flashcards

• Al provides explanations for wrong answers to reinforce learning

**Key Insight:** The practice partner is infinitely patient and available, but you provide the human encouragement, goal-setting, and meaning-making that transforms practice into learning.

## The CLEAR Framework for AI Integration

## Curate

AI helps gather and organize information (like a research assistant)

- Your Role: Help students evaluate source quality and determine what to ask AI
- *Example:* "Ask AI to organize these 20 articles by theme, then we'll analyze which themes matter most"

## Lead

You lead the learning design; students lead their thinking process

- Your Role: Design meaningful questions and authentic assessments
- *Example:* You create the assignment that requires students to use AI-organized research to form their own arguments

## Evaluate

You and students together evaluate AI outputs critically

- Your Role: Model critical thinking and teach evaluation strategies
- *Example:* "Let's look at this AI summary together—what questions should we ask about it?"

# Apply

Students apply learning in authentic contexts (the essential human work)

- Your Role: Design applications that require human insight and experience
- *Example:* Students use AI research support to solve real problems in their workplace

## Reflect

You facilitate reflection on both content and learning process

- Your Role: Guide students to think about what they learned and how they learned it
- *Example:* "How did using AI change your research process? What did you have to think about differently?"

#### Learning Together: Questions for Shared Exploration

#### When You and Students Encounter AI Tools, Ask:

- What did AI do well in this response?
- What seems missing or unclear?
- How does this compare to what we already know?
- What questions does this raise for us?
- How might we verify this information?

#### Helping Students Reflect on AI Use:

- How did using AI change your approach to this task?
- What did you still have to figure out on your own?
- When did you feel most confident about the AI's help?
- What made you question or double-check the AI's suggestions?

#### **Creating Learning Moments:**

- Share your own AI experiments with students
- Discuss together when AI responses seem "off"
- Celebrate discoveries about what works and what doesn't
- Model saying "I don't know" and finding out together

#### Starting Points: Simple Ways to Explore AI Together

#### Low-Risk First Experiments

- 1. Ask AI to explain a concept you're teaching in simpler terms
  - Compare AI explanation with your own

o Discuss with students which explanation works better and why

## 2. Use AI to generate practice questions

- Have students evaluate which questions are most useful
- Let students suggest improvements to AI questions

## 3. Ask AI to organize a list of topics or readings

- Students analyze whether AI's organization makes sense
- o Discuss what AI might have missed about the content

## 4. Have AI create a study guide template

- Students fill in the template with their own understanding
- Compare different approaches to organizing the same material

## Questions to Ask Yourself Before Trying AI:

- 1. What is my core learning objective here?
- 2. What thinking must students do themselves?
- 3. Where might AI help reduce busy work so we can focus on meaningful learning?
- 4. How will I know if students really understand the material?
- 5. What will I learn alongside my students?

## Implementation Action Plan

## This Week, I Will:

[Space for participants to write their commitment]

# One Simple AI Experiment I Want to Try:

[Space for participants to note their interest]

# One Thing I'm Curious About Regarding AI and Learning:

[Space for participants to identify their question]

# One Way I Want to Strengthen the Human Connection in My Teaching:

[Space for participants to note their commitment]

## **Quick Reference: Red Flags**

### When Students May Be Over-Relying on AI:

- Cannot explain reasoning behind their work
- Work suddenly shows dramatic improvement without explanation
- Responses lack personal voice or connection to their experience
- Cannot answer follow-up questions about their submitted work
- Consistently avoiding tasks that require human judgment or creativity

#### When AI Integration Is Working Well:

- Students can articulate how they used AI and why
- Work shows evidence of critical thinking and evaluation
- Students ask better questions after AI interaction
- Learning conversations become richer and more complex
- Students demonstrate increased confidence in tackling challenging topics

## **Additional Resources**

#### For Continued Learning:

- Form peer learning groups to share AI integration experiments
- Start with low-stakes assignments for AI integration
- Document what works and what doesn't
- Regularly solicit student feedback on AI use

#### Remember: You Are Irreplaceable

#### What Makes You Essential in an Al World:

#### Your Human Insight:

• You understand your students as whole people with unique backgrounds, goals, and challenges

- You can read body language, tone, and emotional cues that indicate understanding or confusion
- You bring years of experience about how people learn and what approaches work best

## Your Adaptability:

- You can change course mid-lesson based on student needs
- You can provide personalized encouragement and support
- You can connect learning to students' real-world experiences and interests

## Your Care:

- You genuinely want your students to succeed
- You celebrate their progress and help them through difficulties
- You create a safe, supportive learning environment where people can take risks and make mistakes

## Your Expertise:

- You know your subject deeply and can make complex concepts accessible
- You can help students see connections between ideas and applications
- You understand learning progressions and can scaffold appropriately

## The Bottom Line:

Al is a powerful practice partner and organizational tool, but you are the teacher, mentor, and human connection that transforms information into meaningful learning. Your role isn't diminished by Al—it's highlighted as absolutely essential.