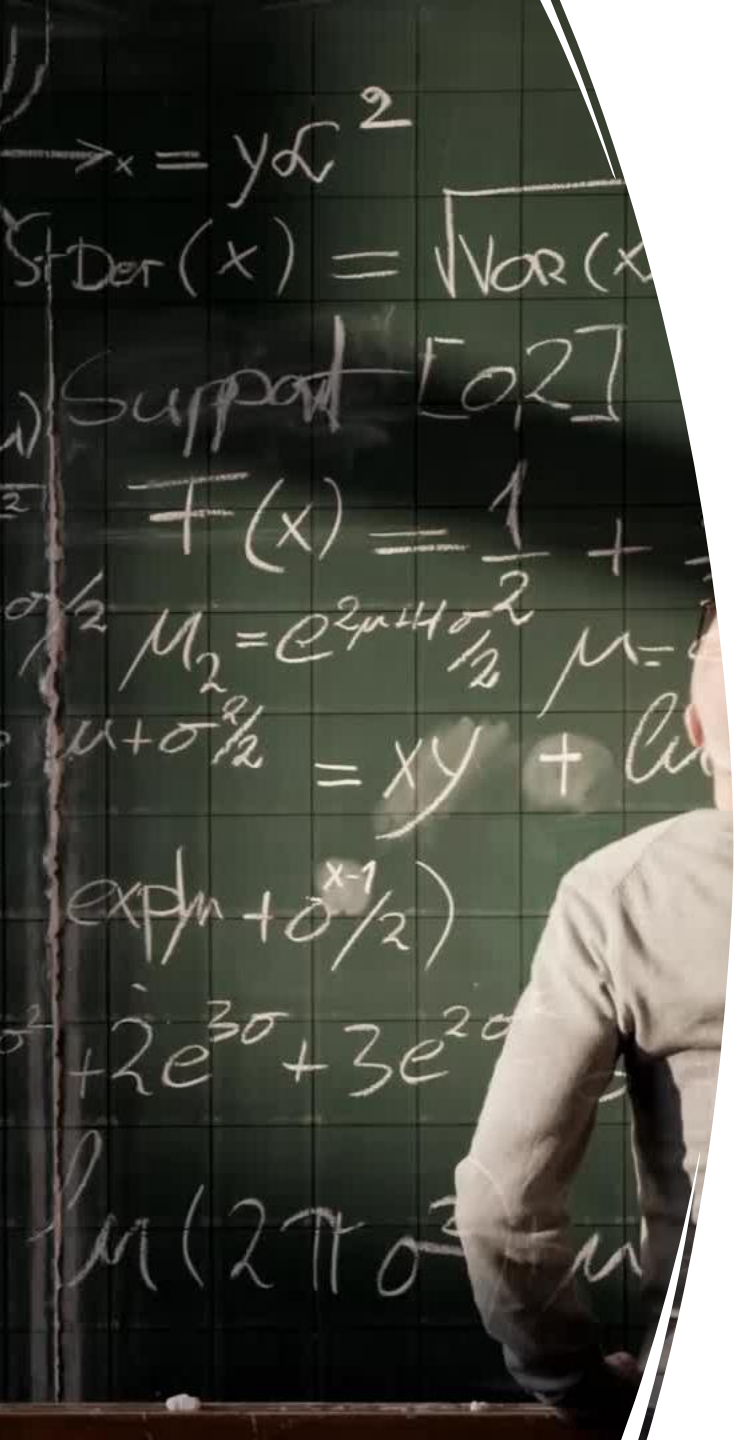

AI in the Classroom: Concrete Strategies for Faculty

Keynote for Illinois State University

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Today's Roadmap

1. Reframing this moment
2. Concrete classroom strategies
3. Practical concerns
4. Ethics & next steps

Part 1: Reframing this Moment

Where We Are Right Now

- AI is already reshaping higher ed
- Students are using AI
  - increase from **79%** to **84%** between Jan and May of 2025 (College Board, Oct 2025)
  - increase from **66% to 92%** in the space of a year (Programs, Dec 2025)
- Faculty are adapting
  - Changing assignments (oral assignments, in-class work, drafting & feedback)
  - Adding policy (Giugliano, Oct 2025; Mowreader, Nov 2015)
  - Shifting how AI is used to prep for class (curriculum building, automating tasks) (dmulford, Mar 2025)

The question becomes about how to teach well in this reality

Two Ideas We Must Consider

Idea #1: AI is already in your classroom

- As we've seen, students are using it
- The cat is out of the bag

Idea #2: This is a pedagogical opportunity

- Forces us to clarify what we genuinely value
- Challenges us to design better assignments
- Invites us to teach critical thinking explicitly

Our job: Help students use AI responsibly, transparently, ethically, and purposefully

Part 2: Concrete Classroom Strategies

Strategy 1: Make AI Use Visible & Explicit

Share your own AI use with students

In your syllabus:

- **State** explicitly when/how AI can be used
- **Explain** WHY certain assignments prohibit AI
- **Connect** restrictions to learning goals

The **goal** is clarity!

The AI Assessment Scale
(Perkins, et al, 2024)

Level 1	Level 2	Level 3	Level 4	Level 5
No AI	AI for Planning	AI Collaboration	Full AI Use	AI Exploration

- **Level 1:** *No AI* – Core skills, timed exams, in-class work
- **Level 2:** *AI for Planning* – Brainstorming, outlining only
- **Level 3:** *AI Collaboration* – AI assists, student directs
- **Level 4:** *Full AI Use* – Student curates/critiques AI output
- **Level 5:** *AI Exploration* – Experiment with AI capabilities

Use This: Specify AI use for each assignment in your syllabus (Dumin, 2024)

Strategy 2: The "AI Transparency Assignment"

Week 1-2 Activity

Ask students to:

1. Use ChatGPT/Claude/etc. to write a paragraph on [course topic]
2. Critique the output's accuracy, depth, and gaps
    1. **Critical evaluation skills**
3. Revise it with their own knowledge
    1. **Students identify gaps**
4. Reflect on what AI can/cannot do
    1. **Students see limitations and problems with output**

Strategy 3: Process-Over-Product Assignments

Shift Focus to the Process:

- Require drafts, outlines, annotations (PDFs, bibliographies, etc.)
- Ask for research logs or reflection memos
- Use in-class writing or oral presentations

Writing-Specific Example:

- Submit topic proposal + 3 source annotations (PDFs preferred)
- Draft with peer review feedback incorporated
- Reflective memo or assignment on revision choices
- Final essay with works cited
- Final reflection on writing, revision, and AI use processes

Strategy 4: AI as a Research/ Writing Partner (thinking tool)

For Research:

- Generate search terms for databases (LLM)
- Summarize or podcast lengthy academic articles (Notebook LM)
- Identify gaps in literature review (LLM + Perplexity)

For Writing:

- Create reverse outlines of drafts (LLM)
- Generate counterarguments to test thesis (LLM)
- Suggest transitions between ideas (LLM)

Strategy 5: Discipline-Specific "Resistant* to AI" Tasks

- **Writing:** Analyze a text we read together in class; connect to personal experience
- **STEM:** Solve a novel problem with your work shown; explain reasoning orally
- **Social Sciences:** Interview a community member; analyze with course theories
- **Arts/Humanities:** Create original work; write artist statement explaining choices

The Pattern: Local knowledge + personal insight + process documentation

* **The caveat:** AI-resistant is only kind of a thing

Strategy 6: Collaborative Learning Structures

Design for Human Interaction:

- Small group problem-solving
- Peer review with specific feedback instructions
- Group discussions with assigned roles
- Project-based learning with group accountability

Why This Matters:

- Harder to use AI in synchronous collaboration
- Foregrounds learning through and with community

Part 3: Practical Concerns (details in “Further Ideas” at the end of the slide deck)

The Assessment Challenge

The Old Problem:

- "How do I know students didn't use AI?"

The Better Question:

- "What do I actually need to assess, and what's the best way to measure it?"

Reality:

- AI detection tools have high false positive and negative rates
  - Easy enough to humanize AI with other programs
- Detection tools produce inequitable results
- Focus on encouraging integrity, not catching cheaters

What Is Critical AI Literacy?: Beyond "How to Use ChatGPT"

Four Core Competencies:

1. **Recognition** – Identify when/where AI is being used
2. **Comprehension** – Understand how AI works and its limitations
3. **Critical Thinking** – Evaluate AI outputs for bias, accuracy, gaps
4. **Proficiency** – Use AI effectively and ethically

Goal: Students become informed critics and strategic users

Understanding AI Limitations: What Students Need to Know

AI Cannot:

- Truly understand context or nuance
- Always access current events
- Provide lived experience or local knowledge
- Replace critical thinking or original insight
- Always cite sources reliably

AI Can:

- Generate plausible-sounding (but not necessarily correct) text quickly
- Summarize and synthesize information (but may miss nuance)
- Suggest ideas and perspectives (while missing some perspectives)
- Assist with routine tasks

Teaching Moment: Show examples of AI failures in your discipline

The Ethics of Using AI

Environmental Costs (Jon Ippolito, 20205)

- Training large models requires significant energy
- Each query has a carbon footprint
- Discuss sustainability with students

Labor & Inequality (Stahl et al., 2024)

- Content moderators exposed to harmful material
- Training data often used without consent
- Access inequities

Privacy & Data (Nie et al., 2025)

- What happens to data entered into AI tools?
- “Make yourself a super-hero/Christmas picture/etc.”

Faculty Takeaways

- AI is already in your classroom — clarity beats prohibition
- Design for process, reflection, and local knowledge
- Be explicit about when and how AI is allowed
- Use AI to build critical thinking, not replace it
- Start small, iterate, and share with colleagues

Final Thoughts: Teaching the Students We Have

The students in front of us:

- Are growing up with AI as a normal technology
- Need our guidance, not only our prohibition
- Deserve transparent expectations
- Want to learn, not just complete tasks

Our opportunity:

- Clarify what we value and why
- Design meaningful learning experiences
- Build critical thinking skills
- Prepare students for an AI-integrated world

The pragmatic path: Meet students where they are, teach them to be thoughtful, ethical, and critical users of all tools—including AI.

Questions?

Specific discipline challenges?

- Implementation barriers
- What you're already trying
- What support you need

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Further ideas

How to use this section

Note that the slides in the keynote fit into this section and have been left where they naturally fit in the discussion. This is not a typo, but a way to help keep the information flow intact.

The ideas in this section give more detail to the highlights from the keynote.

Citations are included in the “notes” section under the slides.

Part 4: Rethinking Assessment

The Assessment Challenge

The Old Problem:

- "How do I know students didn't use AI?"

The Better Question:

- "What do I actually need to assess, and what's the best way to measure it?"

Reality:

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Alternative Assessment Formats: Move Beyond Take-Home Essays

Alternative Assessments:

- Oral exams or presentations
- In-class essays or problem sets
- Portfolios with reflective components
- Multimodal projects
- Client-based projects

Hybrid Approaches:

- Low-stakes formative assessments throughout
- Scaffolded assignments with multiple checkpoints
- Student choice in demonstration of learning

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Use This: Specify AI level for each assignment in your syllabus (Dumin, 2024)

Designing "AI-Aware" Assessments

- **Emphasize metacognition** – Ask students to explain their thinking
- **Require local/specific knowledge** – Class discussions, field observations
- **Include process artifacts** – Drafts, notes, revision memos
- **Add oral components** – Even 5-minute check-ins help
- **Use authentic contexts** – Real-world problems with constraints
- **Add reflection pieces** – Ask students to discuss if/where they used AI and if it was helpful

- **Remember:** If AI can do it perfectly, it's not assessing what matters

Assessment Example: The "AI Audit" Assignment

- Student generates AI response to a prompt
- Student evaluates the response:
  - What's accurate? What's missing?
  - What assumptions does AI make?
  - How would you improve it?
- Student creates their own superior response
- Reflection: What did this teach you about AI and about [topic]?

Why: Builds critical thinking while making AI use transparent

Part 5: Building Critical AI Literacy

What Is Critical AI Literacy?: Beyond "How to Use ChatGPT"

Four Core Competencies:

1. **Recognition** – Identify when/where AI is being used
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Goal: Students become informed critics and strategic users

Teaching Students to Evaluate AI Outputs

The "5 Questions" Framework:

1. **Accuracy:** Is this information correct? How can I verify it?
2. **Bias:** What perspectives are included/excluded?
3. **Completeness:** What's missing from this response?
4. **Context:** Does AI understand the nuances of this situation?
5. **Ethics:** Is it appropriate to use AI for this task?

Activity: Have students run the same prompt through multiple AI tools and compare outputs

Understanding AI Limitations: What Students Need to Know

AI Cannot:

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- Access current events
- Provide lived experience or local knowledge
- Replace critical thinking or original insight
- Cite sources reliably

AI Can:

- Generate plausible-sounding text quickly
- Summarize and synthesize information
- Suggest ideas and perspectives
- Assist with routine tasks

Teaching Moment: Show examples of AI failures in your discipline

Practical Activities for Critical AI Literacy

1. The Hallucination Hunt
    - Students fact-check AI responses, identify false information

2. The Bias Detective
    - Compare AI responses to the same prompt with different framings

3. The Improvement Challenge
    - Students enhance AI output with research, nuance, examples

4. The Use Case Debate
    - When is AI helpful vs. harmful in your field?

5. The Prompt Engineering Workshop
    - Practice writing effective prompts; discuss what makes them work

Integration: Embed Literacy in Course Content; Don't Make It a Separate Unit

Instead:

- When teaching research methods → discuss AI research tools
- When teaching argumentation → analyze AI-generated arguments
- When teaching analysis → compare AI analysis to student analysis
- When teaching ethics → examine AI's ethical implications in your field

- **Normalize:** "Let's see what AI would say about this..." then critique it together

Part 6: Ethics & Next Steps

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- Content moderators exposed to harmful material
- Training data often used without consent
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Privacy & Data (Nie et al., 2025)
- What happens to data entered into AI tools?
- Proprietary vs. open-source considerations

Your Role: Help students become informed users

The Ethics IN Using AI

Academic Integrity:
- When does AI use become dishonest?
- How do we define "original work" now?
- Transparency as ethical practice

Equity of Access:
- Not all students can afford premium AI tools
- Some students lack reliable internet at home
- Design with equity in mind

Building Trust:
- Emphasize trust in students and belief they can succeed
- Reduce assessment anxiety with low-stakes checkpoints
- Create culture of integrity, not surveillance

What You Can Do This Week: Three Starting Points

Option 1: The Quick Win

- Add AI guidance to one assignment using TILT principles (Winklemes, 2016)
- *Time: 30 minutes*

Option 2: The Exploratory

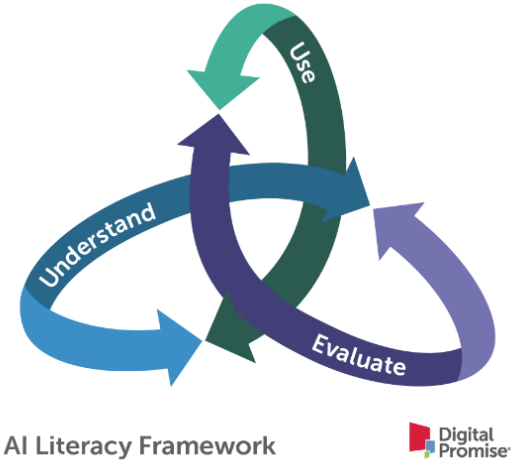
- Try an AI transparency activity in class
- *Time: 1 class period*

Option 3: The Deep Dive

- Redesign one assessment to be AI-aware
- *Time: 2-3 hours*

Remember: Start small, iterate, share with colleagues

Resources & Support



Frameworks & Guides:

- Digital Promise AI Literacy Framework (n.d.)
- EDUCAUSE AI Literacy in Teaching & Learning (Sabado, n.d.)
- AI Assessment Scale (Perkins et al., 2024)
- Your university's teaching center resources

Communities:

- Faculty learning communities *(Higher Ed discussions of AI writing & use)*
- Discipline-specific discussions
- Student feedback

Keep Learning:

- This is iterative. We're all figuring this out together.