

Higher Education in the Age of AI

Navigating Opportunities, Integrity & the Future of Teaching

Frank Owarish, Ph.D.

Former Director of Training, UNITAR

Anup Sharma, M.S.I.T.

Doctoral Candidate (D.I.T.), Capella University
Founder, Training & Application Solutions

MEET YOUR PRESENTER

Frank Owarish, Ph.D.

Former Director of Training

United Nations Institute for Training and Research (UNITAR)

Academic Career

Faculty at John Jay College of Criminal Justice, CUNY

Expertise

Technology adoption in education, organizational training & development

Research Focus

Bridging theory and practice in technology-enabled learning environments

Today's Presentation

AI is not a future concern — it is already reshaping every corner of higher education, right now.

This session explores:

- What AI is — and how it actually works
- How it affects faculty, students, and research
- Academic integrity in the AI era
- Policy, curriculum, and workforce readiness
- Concrete recommendations for institutions

WHAT WE'LL COVER TOGETHER

Dr. Owarish

01 Introduction & Personal Perspective

02 What is AI? AI vs. ML vs. Generative AI

03 AI Tools Landscape (2026)

04 Impact on Higher Education

Anup Sharma

05 Academic Integrity in the AI Era

06 Policy, Governance & Curriculum

07 Workforce & Future Readiness

08 Risks, Recommendations & Q&A

20-minute joint session — approximately 10 minutes each

A PERSONAL PERSPECTIVE



Decades ago, I was teaching IT professionals at John Jay College to bridge mainframe computing and the PC. Soon after, I was called upon to teach senior staff at The Fire Academy and Riker's Academy to use the PC to expedite data processing.

The analogy is clear: AI is of vital importance to those in the field itself — and soon enough, to those in every other academic discipline.

— Frank Owarish, Ph.D., Former Director of Training, UNITAR

WHAT IS AI?

AI

Artificial Intelligence

A broader field aimed at developing systems capable of performing tasks that require human-level intelligence — reasoning, learning, and problem-solving.

ML

Machine Learning

A method within AI where machines learn from data to make predictions and decisions — without being explicitly programmed for each task.

Gen AI

Generative AI

A subset of ML that can create new content — text, images, code — based on patterns learned from training data. ChatGPT, Claude, Gemini.

AI didn't evolve overnight — it followed rigid instructions → machine learning → today's Generative AI

AI TOOLS LANDSCAPE (2026)

ChatGPT

OpenAI

Best for: General tasks,
coding, creative writing

Claude

Anthropic

Best for: Long documents,
nuanced writing, safety

Gemini

Google

Best for: Search integration,
multimodal tasks

Copilot

Microsoft

Best for: Office 365
workflows, productivity

"Technology is neither good nor bad, nor is it neutral." — Kranzberg's First Law



Prompt Engineering

The art & science of communicating effectively with AI

Context + Task + Format + Constraints = Great Output

1

Be specific

Include role, context & desired outcome

2

Use examples

Show the model what good output looks like

3

Request format

Ask for bullets, tables, or step-by-step

4

Iterate

Refine prompts based on what you receive

5

Think critically

Always fact-check AI-generated output

6

Stay ethical

Apply academic integrity standards to AI use

IMPACT ON FACULTY

87%

*of administrators & faculty believe
students will use AI to cheat or complete
assignments*

— Doğan et al., 2024

Create AI-resistant assessments

Design work that AI cannot easily replicate — critical thinking, lived experience, synthesis.

Prompt engineering as core skill

Faculty must understand how AI tools work to leverage them meaningfully in pedagogy.

AI-generated insights for learning

Use AI output to design richer, personalized learning experiences.

Reduce administrative burden

Automate grading, scheduling, feedback — freeing time for student-centered support.

IMPACT ON STUDENTS

⚠ CHALLENGES

Academic integrity frameworks were designed for the pre-AI era — they are no longer sufficient

Students can complete assignments with minimal effort, undermining traditional learning assessment

Reduced critical thinking and independent reasoning when over-relying on AI

Limited empirical research on updated integrity frameworks for Generative AI

✓ OPPORTUNITIES

AI provides personalized, individual academic support at scale

Educators can collect detailed data to enable personalized learning pathways

Accessibility tools: transcription, translation, adaptive content for students with disabilities

Prompt engineering — a new literacy students must develop for the modern workforce

ACADEMIC INTEGRITY IN THE AI ERA

1

Plagiarism Detection

Evaluate content for AI-generated output using advanced detection tools alongside traditional plagiarism checks.

2

Proper Citation

Define and enforce standards for citing AI tools as sources — a new frontier in academic attribution.

3

Rigorous Fact-Checking

LLMs are probabilistic — not fact databases. Students must verify AI output through authoritative sources.

4

Ethical AI Use Policy

Move from banning AI to teaching critical, ethical use. Clear institutional guidelines protect everyone.

Move from “BAN AI” → “TEACH CRITICAL AI USE”

POLICY, GOVERNANCE & CURRICULUM

AI Policy at Institutional Level

- Some universities embrace AI guidelines; others ban it entirely
- Need for standardized policy covering ethics, infrastructure, accessibility
- Who controls the learning environment? Defining academic freedom in the AI era

Federal & State Policy

- Executive orders and proposed legislation shaping how institutions use AI
- Government catching up — policy landscape is evolving rapidly
- Compliance frameworks being developed across jurisdictions

Redesigning Curriculum & Syllabi

- Redesign learning objectives, assessments, and grading criteria for the AI era
- Integrate AI-specific skills to prepare graduates for the workplace
- Personalized learning, AI-powered grading, chatbot engagement tools

Curriculum & Pedagogy Redesign



Redesign Syllabi

Integrate AI-specific skills, revise learning objectives, update assessment design and grading criteria



Personalized Learning

AI analyzes performance data to tailor content, pacing, and support to each student's needs



AI Certification

Embed AI literacy certificates into four-year degrees to keep graduates competitive in the job market



Workforce Readiness

Employers now seek graduates who can apply AI tools ethically — curricula must reflect this shift



Admin Efficiency

Automate scheduling, grading, and feedback workflows so faculty focus on high-value instruction



Accessibility

AI-generated transcripts, captions, and adaptive tools provide inclusive support for all learners

WORKFORCE & FUTURE READINESS

Shift in Job Market

Employers increasingly seek graduates who can use AI tools ethically and effectively in day-to-day work.

AI Certification Programs

Higher education can embed AI certification into four-year degrees to remain relevant and competitive.

Cross-disciplinary AI Literacy

AI is not just for CS students — every discipline requires foundational AI knowledge and prompt engineering skills.

The Partnership Model

Faculty and students co-navigate AI — prompt engineering should illuminate the reasoning path, not replace it.

The Question
Is No Longer

**“Is AI
good or bad?”**

It Is:

**“In what context, and
how do we deploy it
ethically?”**

RISKS & RECOMMENDATIONS

⚠ RISKS

Equity gaps: underfunded institutions lack AI access

Privacy & data security concerns

Reduced human interaction & critical thinking

Ethical dilemmas in AI decision-making transparency

✓ RECOMMENDATIONS

Integrate AI into teaching with ethical guidelines

Move from ban → teach critical AI use

Faculty: experiment with AI for content & feedback

Institutions: shift to context-specific AI discussions

Maintain student-focused, personalized approaches

From Resistance to Readiness

- 1 Teach AI literacy as a cross-disciplinary core competency
- 2 Establish clear, context-specific institutional AI policies
- 3 Encourage ethical experimentation — faculty and students alike
- 4 Equity must be central: close the AI access gap