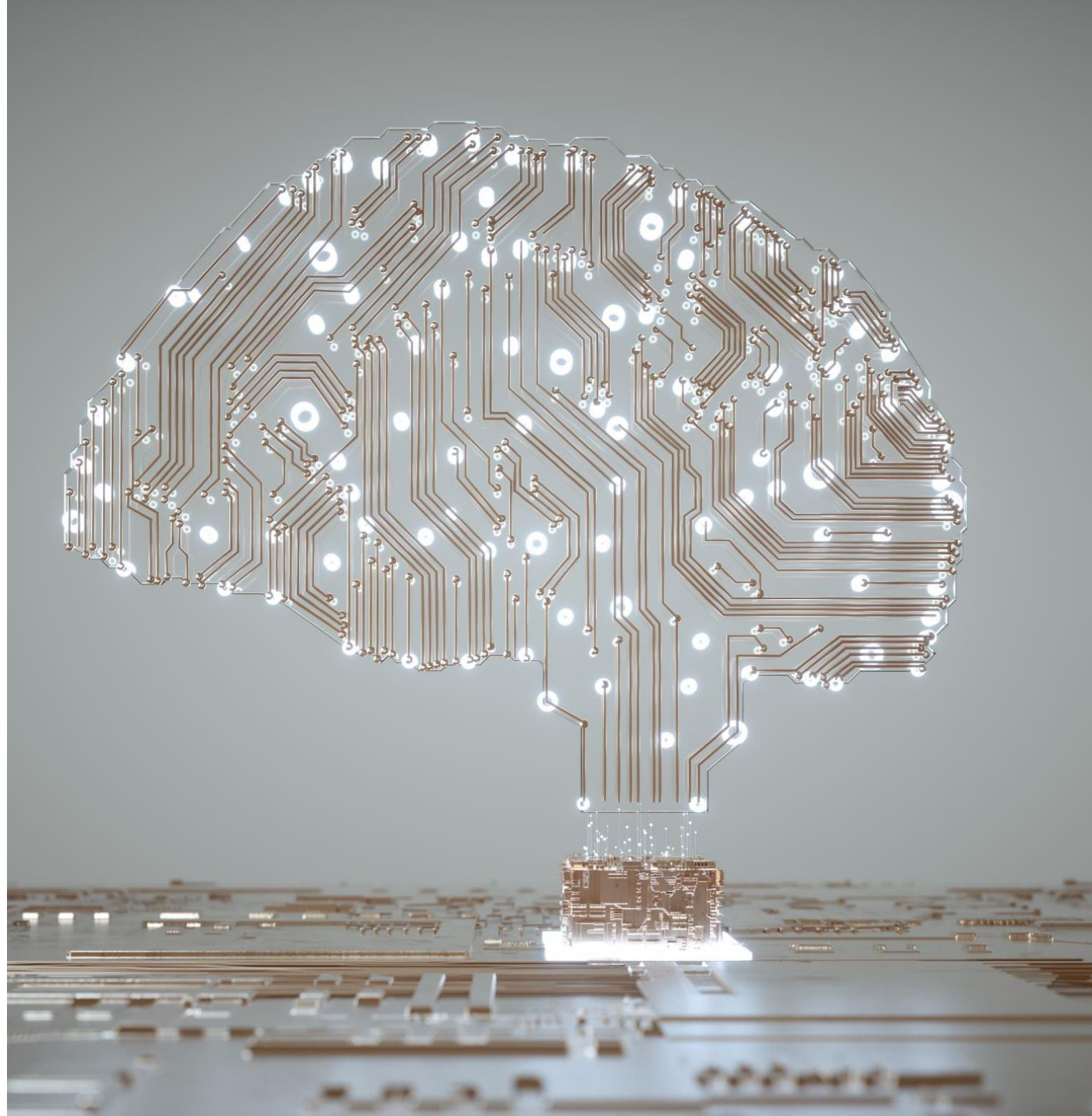# ADVANCING AI LITERACY WITHIN YOUR INSTITUTION

Dr. María Parés-Toral

Associate Director of Faculty Development

CREATE Institute, MSOE

Session Objectives

- Explore strategies for developing AI literacy and encouraging AI adoption among faculty members at our institutions.
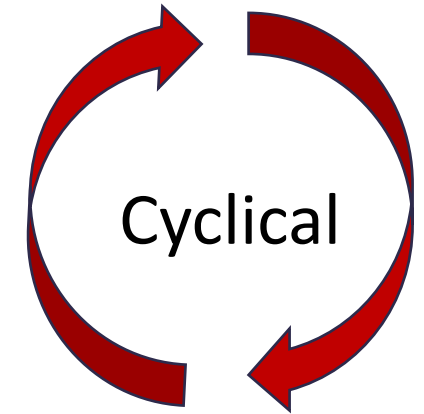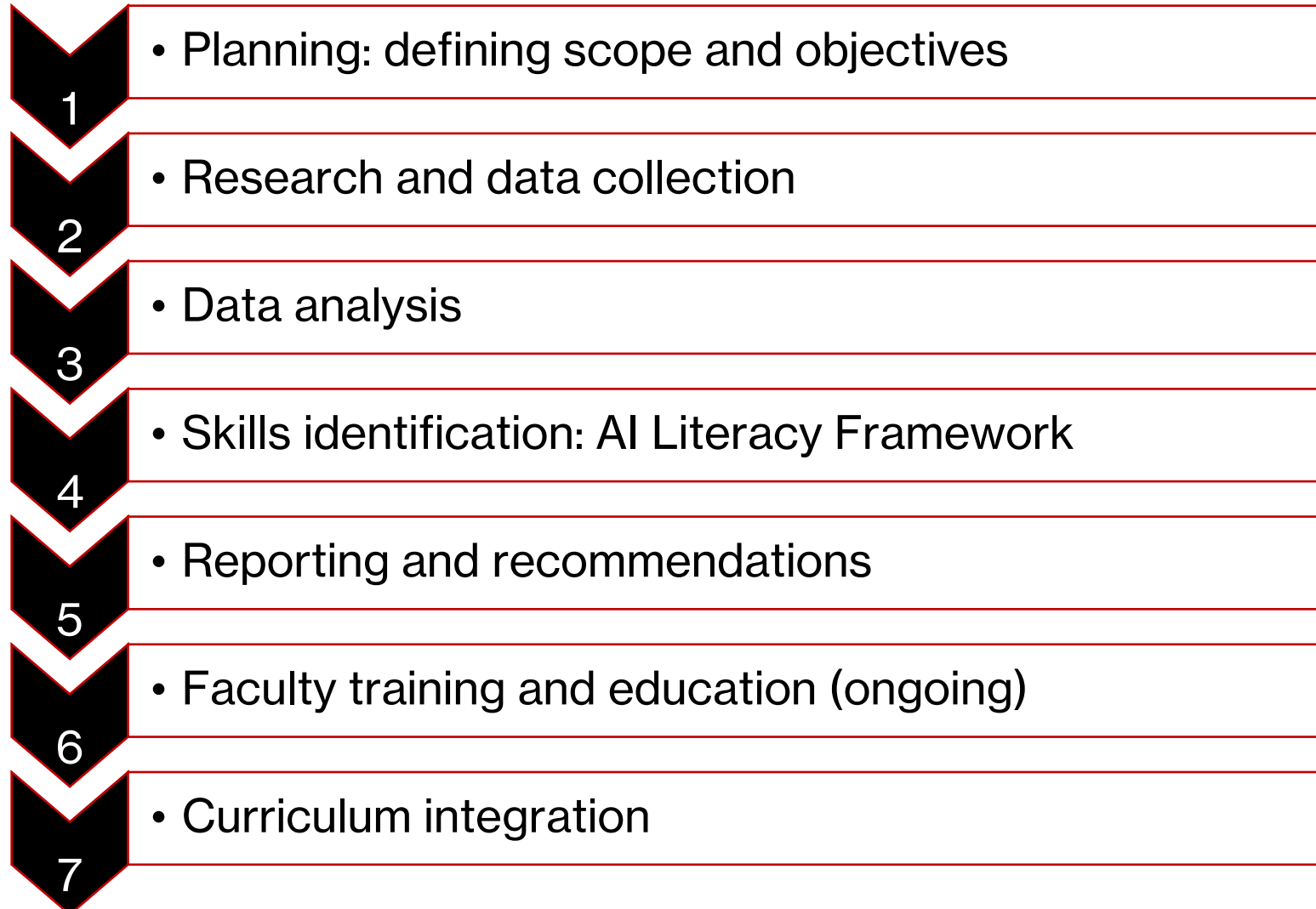
The Team

- **Dr. Olga Imas**, Director of AI and Professor, Biomedical Engineering

- **Dr. James Lembke**, Assistant Professor, Computer Science

- **Dr. María Parés-Toral**, Associate Director of Faculty Development

- **Dr. Derek Riley**, Professor, Computer Science

- **Dr. Nadya Shalamova**, Professor and Program Director, User Experience

- **Dr. Charles Tritt**, Associate Professor, Biomedical Engineering

rAIder Strategy: Faculty Development
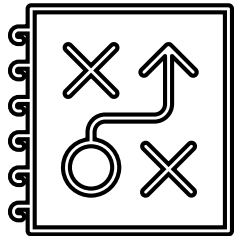
Our Vision

By fostering a culture of innovation and **collaboration**, we aim to **empower faculty** to leverage AI's transformative capabilities, creating impactful learning experiences that **elevate teaching, research, and academic excellence**. Together, we will drive progress and inspire the future of AI in education.
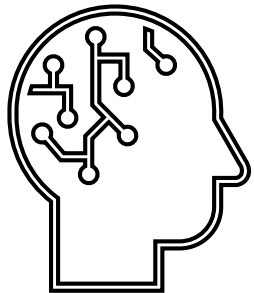
Planning and Implementation

1 • Planning: defining scope and objectives

2 • Research and data collection

3 • Data analysis

4 • Skills identification: AI Literacy Framework

5 • Reporting and recommendations

6 • Faculty training and education (ongoing)

7 • Curriculum integration

Cyclical

• Monitoring and evaluation
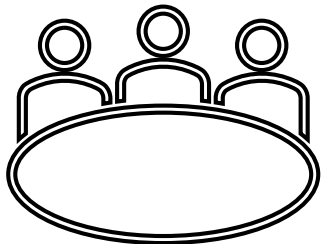
rAIder Strategy

Do Now: Planning & Initial Deployment

- Gather data about current AI usage and literacy among faculty and students.
- Identify competencies and proficiency levels for faculty and students based on their disciplines.

Do Soon: Integration & Expansion

- Develop and deploy a comprehensive AI training program for faculty.
- Select and procure AI tools necessary to support faculty and student needs and institutional AI literacy goals.
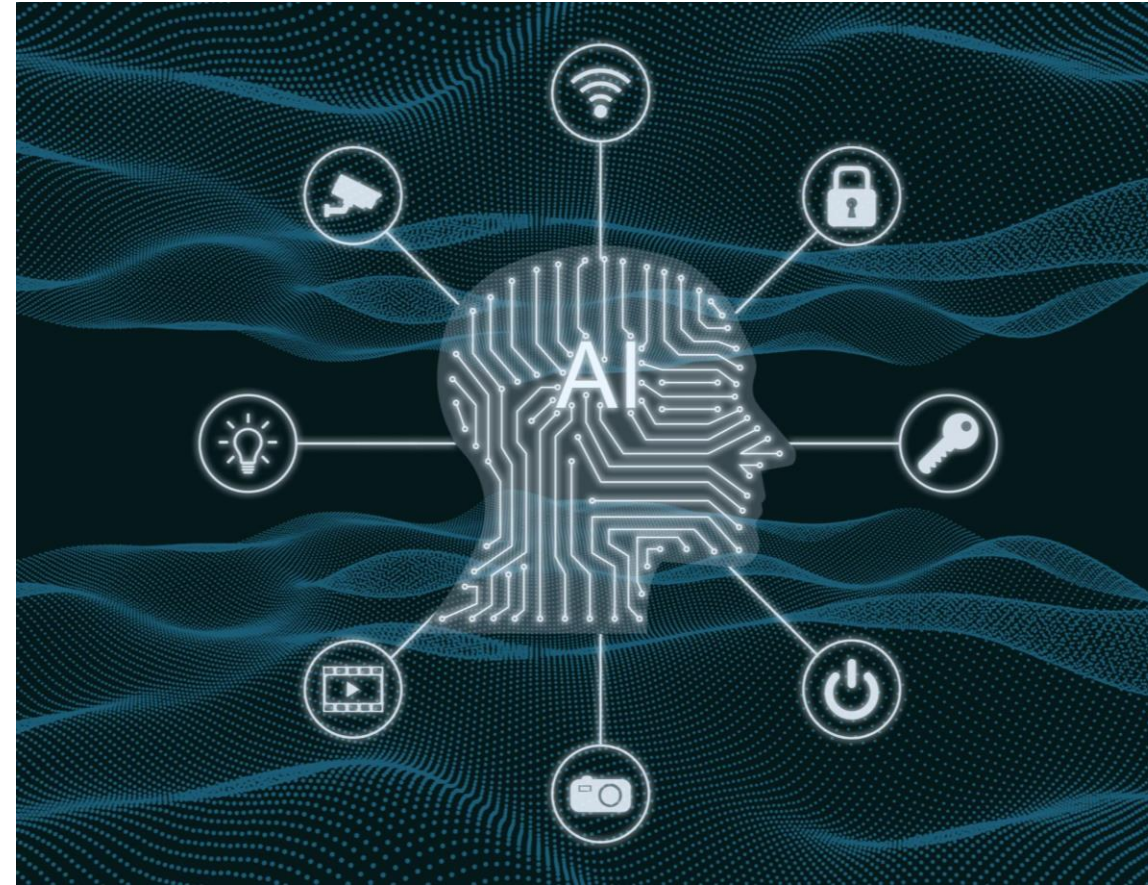
Work Toward: Advancement & Continuous Improvement

- Develop and deploy a comprehensive AI training program for faculty.
- Select and procure AI tools necessary to support faculty and student needs and institutional AI literacy goals.
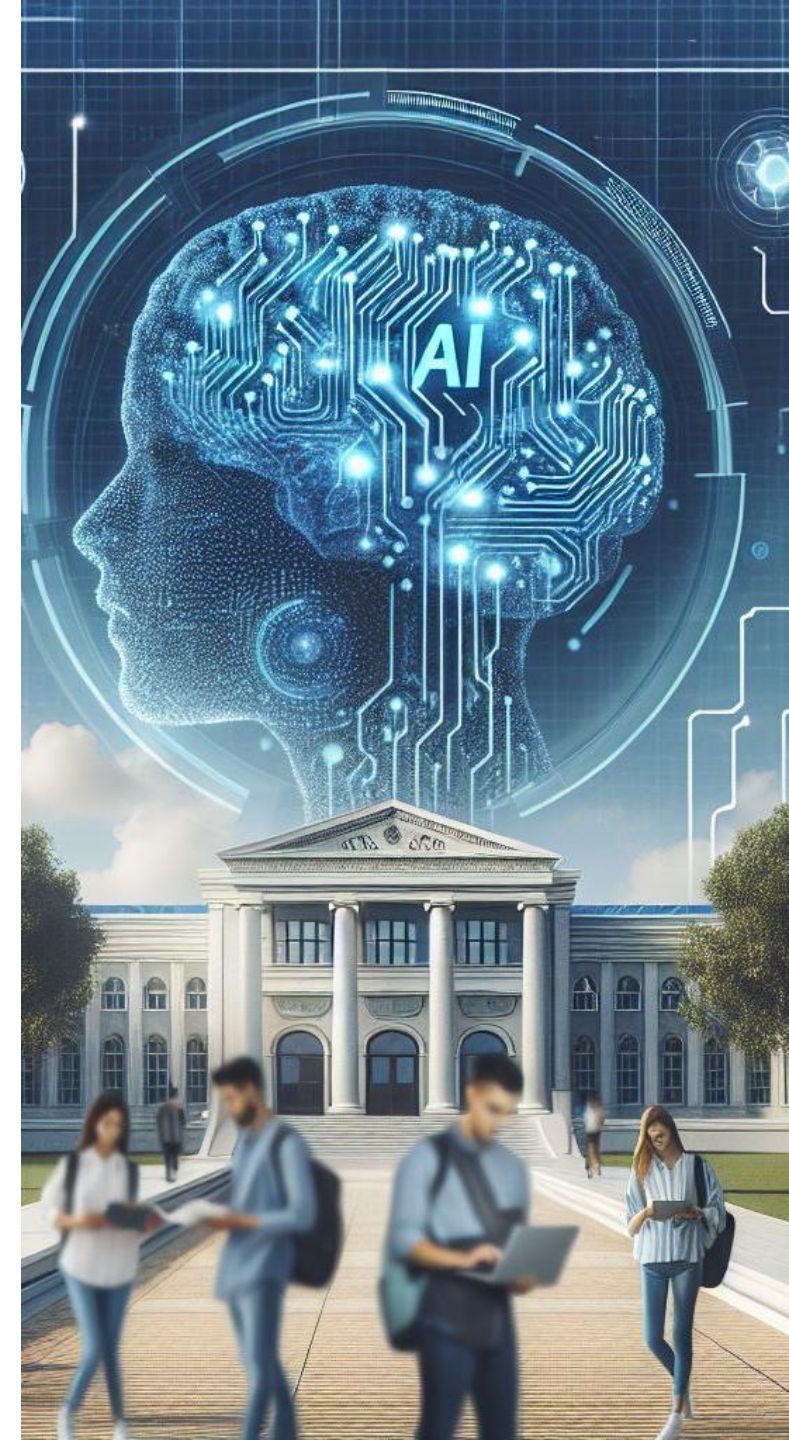
DO NOW: Planning and Initial Deployment

- Student, faculty, and program director surveys

- Community of Practice (CoP) on AI in Higher Education

- Partnership with MSOE's Center for Professional Education (CPE)

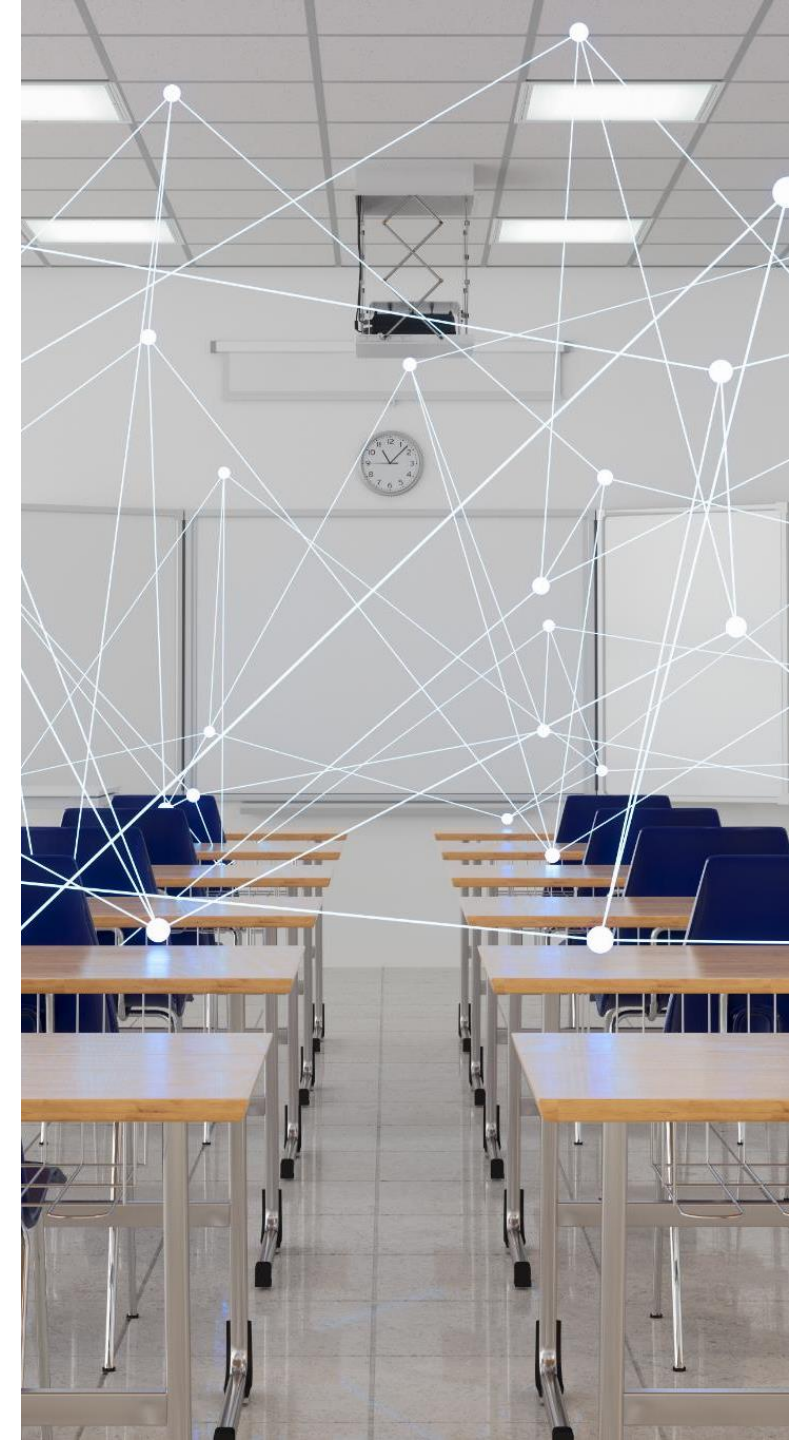- AI Literacy and Training Working Group

Surveys

- **Where are we now?**

  - Knowledge

  - Usage

  - Integration in the curriculum

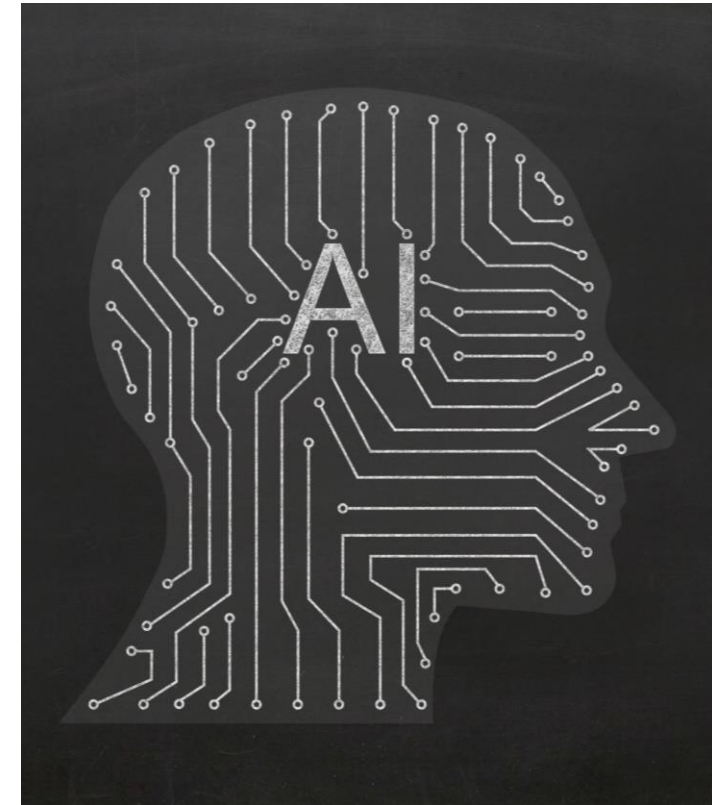 - Infrastructure

- **Where do we want to be?**

Community of Practice

- Recruitment

- Goals

- Structure

- Outcomes so far

AI Literacy & Training Working Group

- Recruitment

- Goals:
  - Develop a shared vocabulary of what AI literacy at MSOE
  - Tailor framework for the MSOE community
  - Use as guide for adoption and measurement of skills

AI Literacy Framework

Inspiration:

- EDUCAUSE AI Literacy Teaching and Learning (ALTL): A Durable Framework for Higher Education
- Bloom's Taxonomy
- [A Framework for AI Literacy (Hibbert, Altman, Shippen, & Wright, 2024)](#)

Discussion and Collaboration

1. Individually, complete the Needs Gap Analysis Worksheet to explore the current state of faculty development and AI at your institution.

2. In your groups, discuss your analysis and ideas for closing the gaps between your current and desired states.

3. Share 1-2 take-aways from your group's discussion.

Contact

- Dr. María Parés-Toral

- Email: pares-toral@msoe.edu

Additional Resources

- [MSOE Center for Professional Education AI / Machine Learning Certificate](#)

- [AI and MSOE](#)

- *Attainment with AI: Making a Real Difference in College Completion with Artificial Intelligence. A Compendium of Practical Applications for Generative AI in Higher Education*. Complete College America in partnership with T3 Advisory, November 2023

- [AI Literacy: A Framework to Understand, Evaluate, and Use Emerging Technology from Digital Promise](#)