

# The AI Literacy Imperative: Empowering Instructors & Students



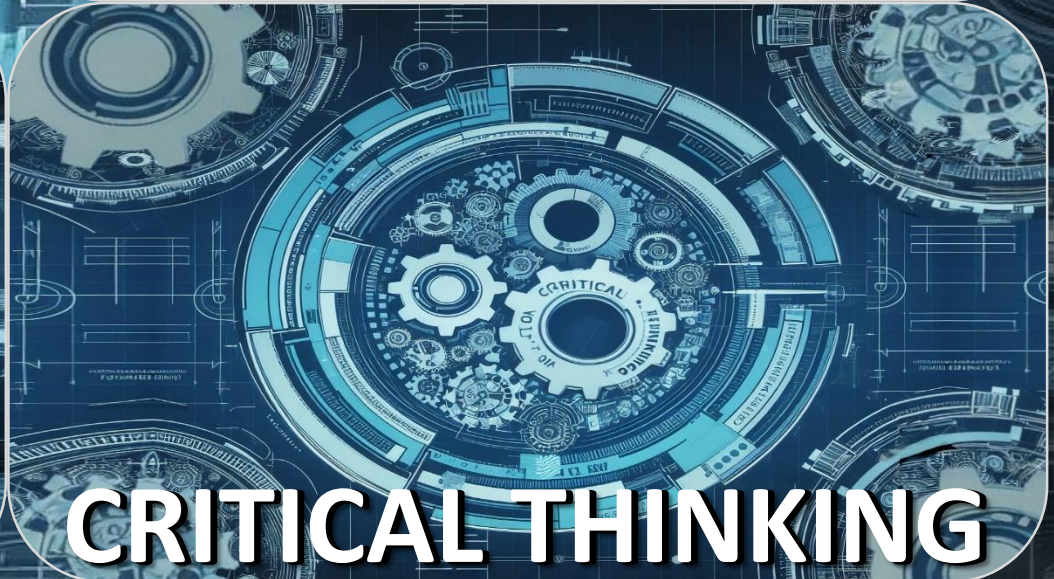
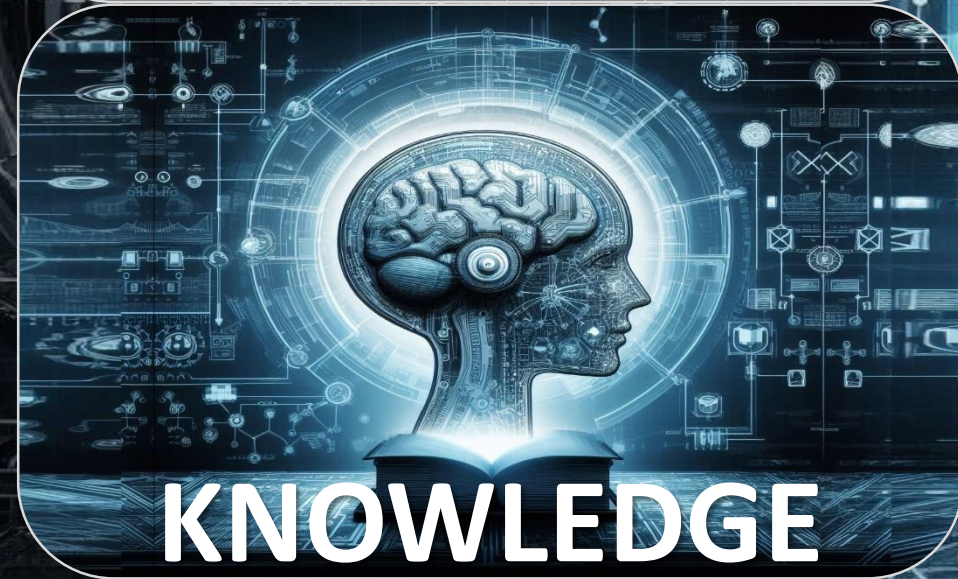
By Brent A. Anders, PhD.  
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[www.youtube.com/@sovorel-EDU](https://www.youtube.com/@sovorel-EDU)

CONTACT NORTH  
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# AI Literacy



# AI Literacy



- AI is all around us
- AI is affecting society in many ways  
*(good & bad)*



**Search Engines/MS Office/Google Docs**



**Job Recruitment,**  
88% use AI, 10% for  
interviewing +

**HireVue**

**Dating Apps,**  
20 to 33% of all  
marriages

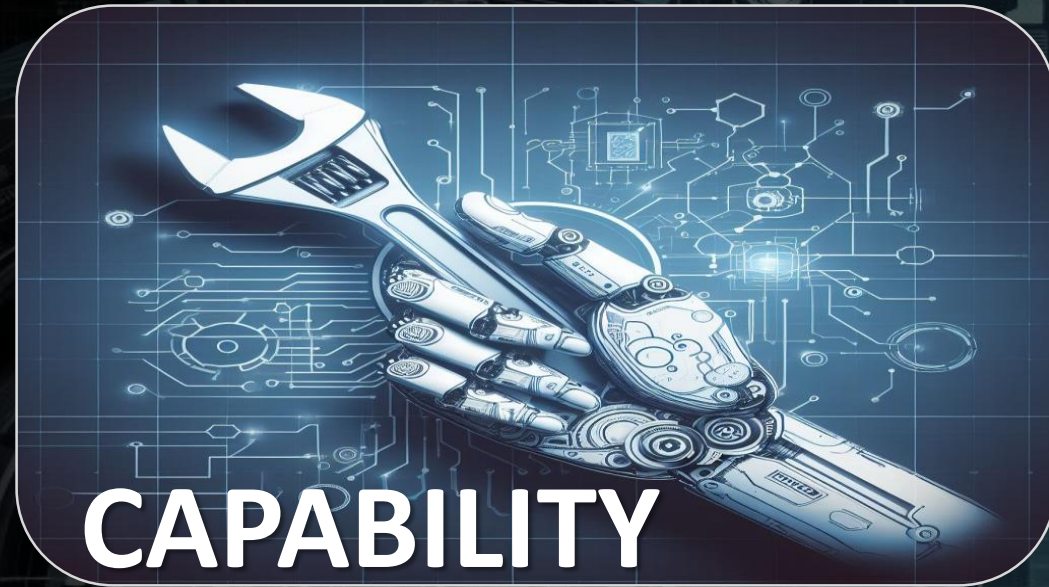


**Social Media: News source for 70%**



**Governments**

# AI Literacy



- Using the right AI
- Limitations of AI (*Hallucinations*)
- Understanding how to best prompt the AI:  
**“Prompt Engineering”**  
(*Simple Prompts vs. Advanced Prompts*)



# AI Literacy

## SIMPLE PROMPT

What is  
Transformative  
Learning?

## ADVANCED PROMPT

Please act as a university-level instructional designer. Explain the concept of transformational learning and how I can use it in my class. I am teaching a class on professional communication to university students and want them to really and deeply learn the content so that they can succeed in the class, future studies, and in the work force.

**TASK**

**INSTRUCTION**

**Context**

**REASONS**

**CLARIFICATION**

- Refine -

## SIMPLE PROMPT: Response

Transformative learning is a concept developed by Jack Mezirow in the 1970s and expanded upon by other scholars since then. It refers to the process by which individuals undergo a fundamental shift in their perspective, beliefs, and ways of thinking. This shift often occurs as a result of critical reflection on their own experiences, beliefs, and assumptions.

Key components of transformative learning include:

**Disorienting Dilemma:** This is a situation or experience that challenges an individual's existing beliefs or assumptions, causing them to question their worldview.

**Critical Reflection:** Individuals engage in deep reflection on their experiences and beliefs, examining them from multiple perspectives and considering alternative viewpoints.

**Exploration of Alternatives:** During this stage, individuals explore new ideas, perspectives, and ways of thinking that may challenge their existing beliefs.

**Integration of New Perspective:** Through this process, individuals integrate the new insights gained from critical reflection and exploration into their worldview, resulting in a transformation of their beliefs and behaviors.

## ADVANCED PROMPT: Response

Transformational learning is a process through which learners critically reflect on their assumptions, beliefs, and perspectives, leading to a profound shift in their understanding of themselves and the world around them. This approach to learning goes beyond simply acquiring knowledge and skills; it aims to foster personal growth, self-awareness, and the development of a broader worldview.

In the context of your professional communication class, here are some ways you can incorporate transformational learning:

**Encourage Critical Reflection:** Provide opportunities for students to critically reflect on their own communication styles, biases, and assumptions. This could be through journaling, group discussions, or reflective writing assignments. Encourage students to think deeply about how their communication habits and beliefs impact their interactions with others.

**Challenge Assumptions:** Design activities that challenge students' assumptions about communication norms and practices. For example, you could present case studies or scenarios that require students to consider perspectives different from their own. Encourage them to explore why certain communication strategies may be effective in some

## ADVANCED PROMPT: Response

**Definition:** Transformational learning, originally developed by Jack Mezirow, is a theory that emphasizes personal growth and change through learning. It posits that learners construct meaning from their experiences, leading to shifts in behavior, mindset, and beliefs.

### **Key Principles:**

- 1. Change to Meaning Structures:** Transformational learning involves altering existing meaning structures (perspectives and schemes). These structures are shaped by cultural assumptions and determine our expectations.
- 2. Reflection:** Learners engage in critical reflection about content, process, or premises. Reflection allows them to question assumptions acquired during childhood and assess their functionality as adults.
- 3. Types of Learning:**
  - Refining/Elaborating Meaning Schemes: Deepening understanding within existing frameworks.
  - Learning New Schemes: Acquiring entirely new ways of interpreting information.
  - Transforming Schemes: Revising existing meaning structures.
  - Transforming Perspectives: Fundamental shifts in worldview or belief systems.

### **Applying Transformational Learning in Your Professional Communication Class**

- 1. Create a Reflective Environment:**
  - Encourage students to reflect on their assumptions, beliefs, and prior experiences related to professional communication.
  - Use activities like journaling, group discussions, or self-assessment to promote introspection.
- 2. Challenge Existing Perspectives:**
  - Present real-world scenarios or case studies that provoke critical thinking.
  - Ask questions that prompt students to reconsider their assumptions about effective communication.
- 3. Problem-Based Learning:**
  - Design authentic tasks that require students to apply communication skills in practical contexts.

## ADVANCED PROMPT: Response

### 4. Premise Reflection:

- Consider both content and process reflection together.
- **Challenge Assumptions:** Ask students to question underlying assumptions about communication. Are these assumptions still valid? How might they need to adapt in professional contexts?

### 5. Application:

- **Design Authentic Tasks:** Assign real-world communication tasks (e.g., writing reports, delivering presentations, participating in mock interviews).
- **Feedback and Iteration:** Provide constructive feedback and encourage students to revise their work based on reflection.

### 6. Facilitate Dialogue:

- Create a safe space for students to share their reflections and engage in meaningful discussions.
- Encourage peer feedback and collaborative learning.

Remember, transformational learning isn't just about acquiring information; it's about personal growth, mindset shifts, and lasting change. By integrating reflective practices and fostering critical thinking, you'll empower your students to succeed not only in your class but also in their future studies and professional careers. ✨

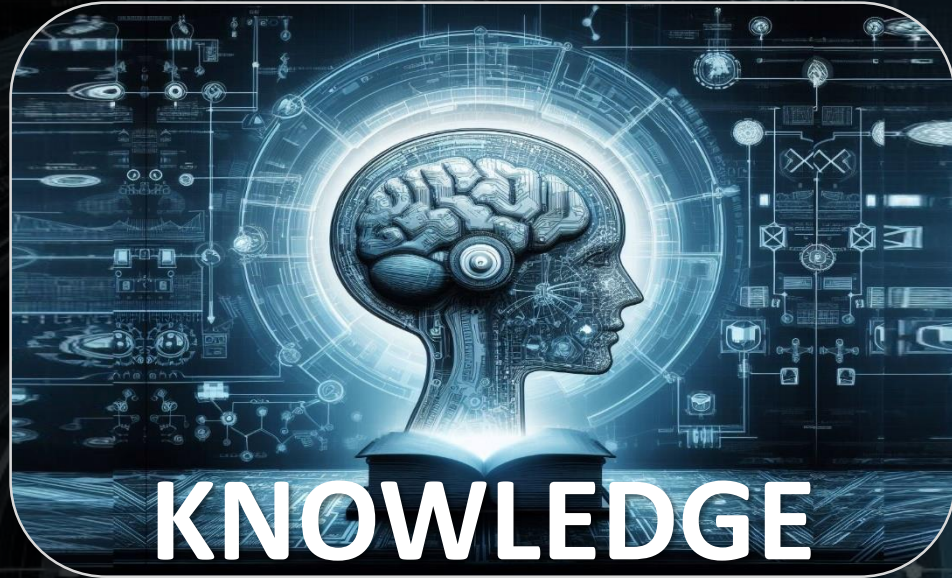
For further exploration, you might want to explore research studies related to this theory<sup>1,2</sup>. Best of luck with your class!

1. <https://www.instructionaldesign.org/theories/transformational-learning>

2. <https://elearningindustry.com/transformational-learning-theory-what-elearning-professionals-should-know>



# AI Literacy



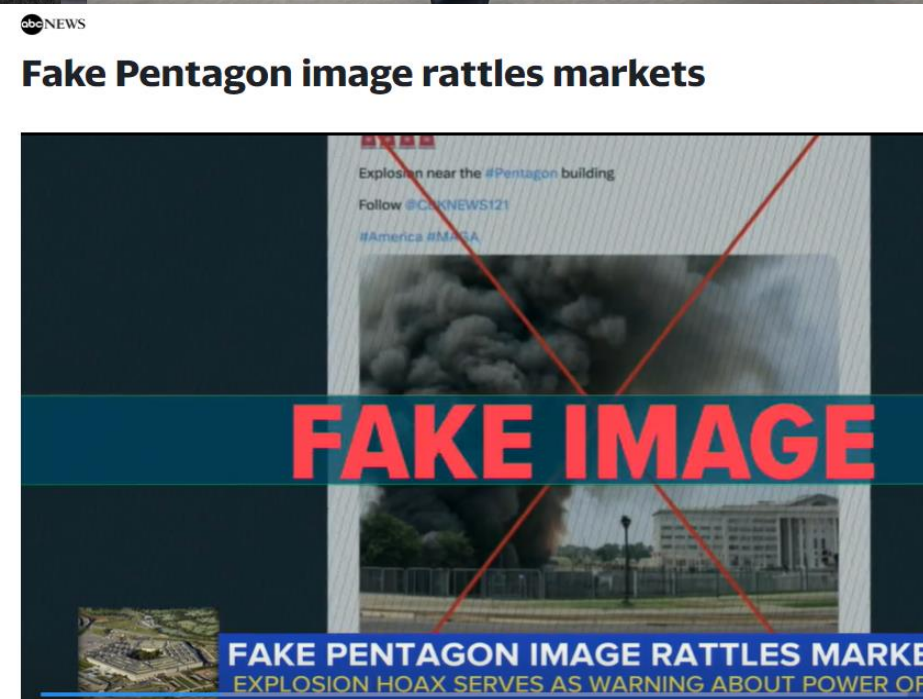
- Access/Personal Data
- AI Terms
- AI Created Content:  
*(scams/deepfakes)*



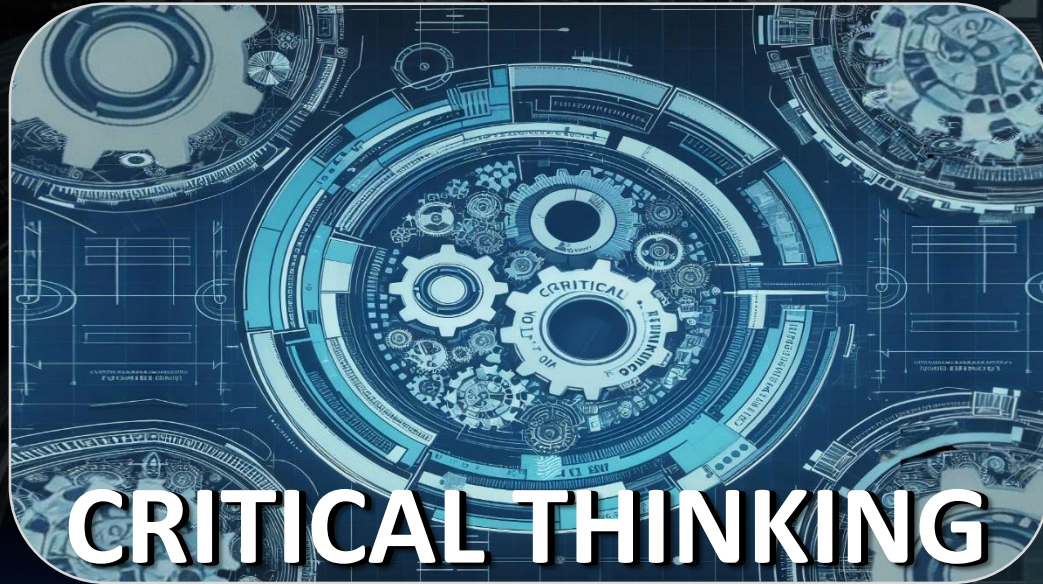
- How Safe is My Info?
- How will my Info be Used?



- Natural Language Processing (NLP)
- Neural Networks
- AGI (*Artificial General Intelligence*)
- Super AI



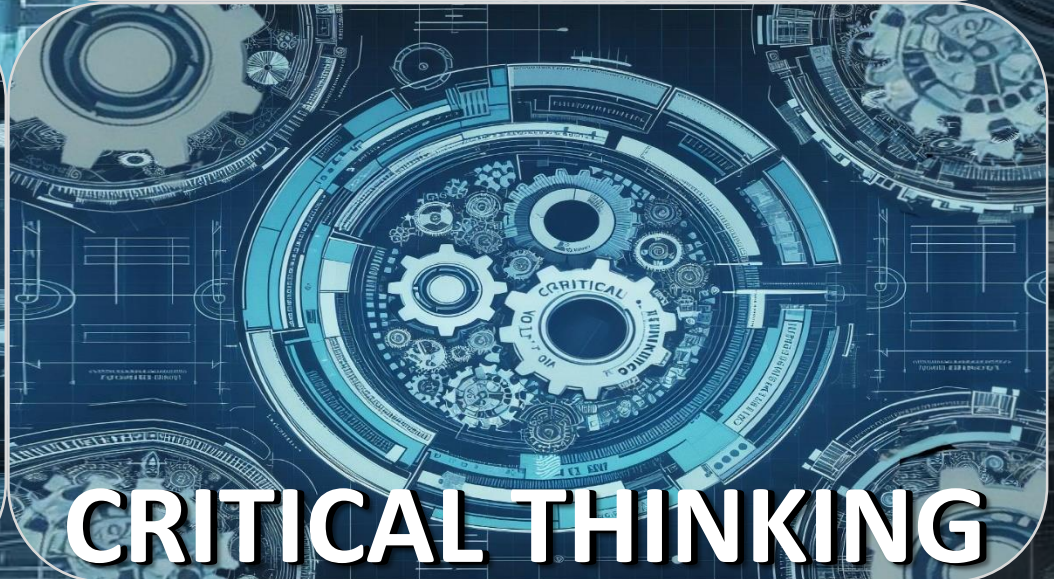
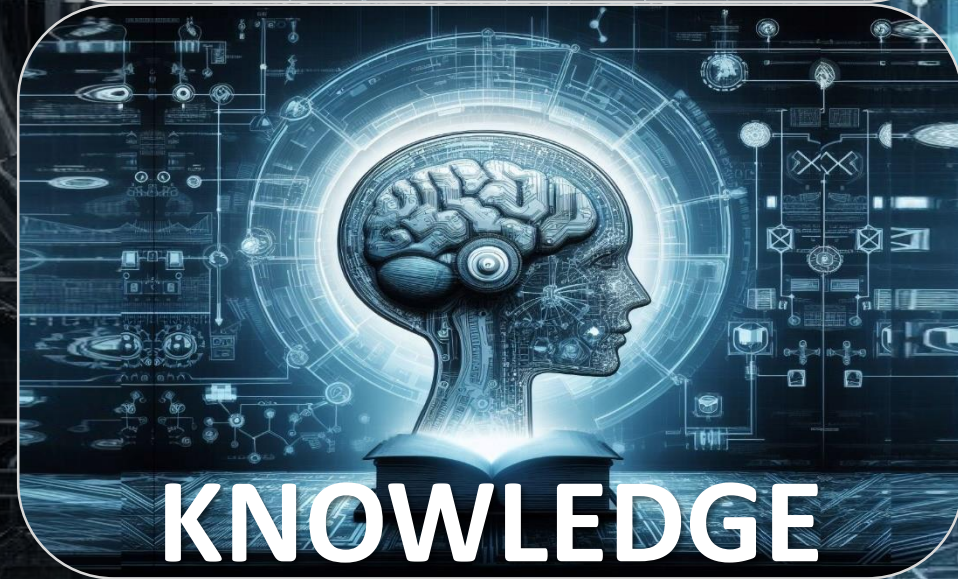
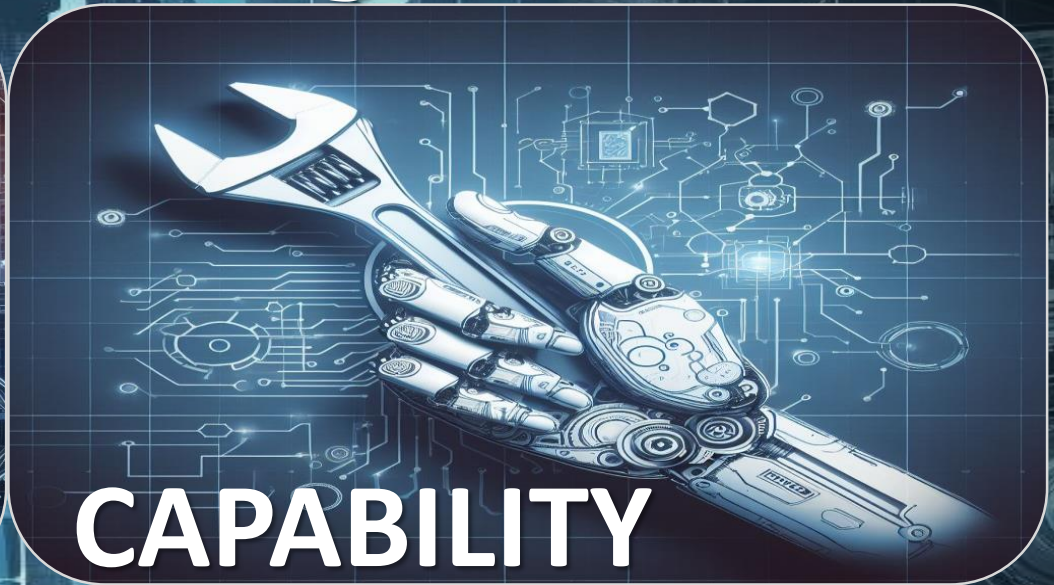
# AI Literacy



- Review/Verify ALL Responses (*accountability*)
- Methods & Data Sources
- Guardrails
- Bias / Ethics
- Avoidance of Overreliance



# AI Literacy



*(Source: Brent A. Anders, 2023, "The AI Literacy Imperative: Empowering Instructors & Students")*

# Generative AI Utilization/Value



**ChatGPT: 180.5 million users**



**MS Copilot: 45 million users**



**Google Bard: 50 million users**



**Meta AI** (WhatsApp, FB Messenger, & Instagram): *Data Not Available (est. 2 to 3 billion users)*



**Current global Market Value of AI: \$137 Billion**

**Expected to grow by at least 120% year-over-year**

# The AI Literacy Imperative



European Union

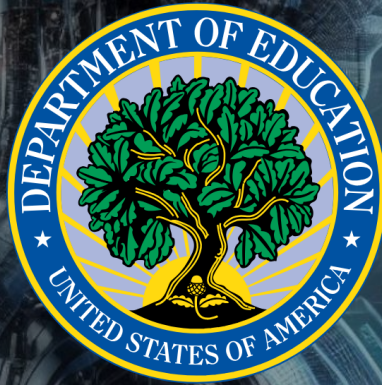


unesco



“...engage in AI education, awareness and literacy, in order to ensure that AI technologies reflect our common values, democratic processes and institutions.”

“In this crucial moment, when AI is poised to transform every aspect of our personal and professional lives, universal AI literacy is imperative.”



“AI literacy is not only important to protect educators and students from possible dangers but also valuable to support teachers to harness the good and do so in innovative ways.”



Microsoft

82% of leaders say employees need new skills to be prepared for the growth of AI



Resume Builder

92% of business leaders say having AI chatbot experience is a plus

# The AI Literacy Imperative:

Steps that We MUST Take – *A Call to Action!*

1. Governmental/Organizational Guidelines & Protections (without over regulation)



2. Hands-on Training for Faculty/Trainers, Students/Employees (*upskilling*)



3. Policies/Guidance for Processes & Ethics



4. AI Literacy Curriculum Integration



- *New Normal*

# The AI Literacy Imperative



**Enhanced Capability by  
Effectively/Ethically Working with AI**



# The AI Literacy Imperative: Empowering Instructors & Students



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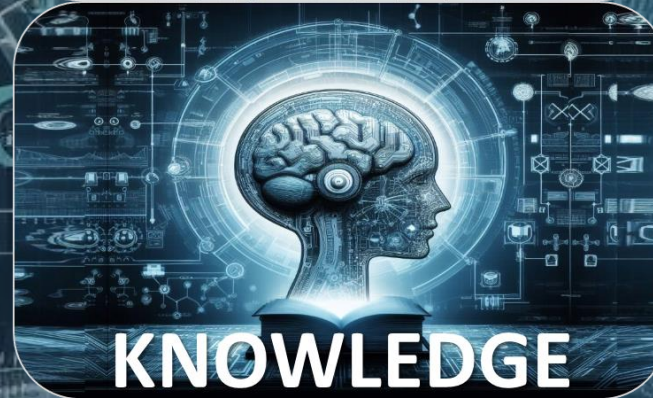
## AI Literacy



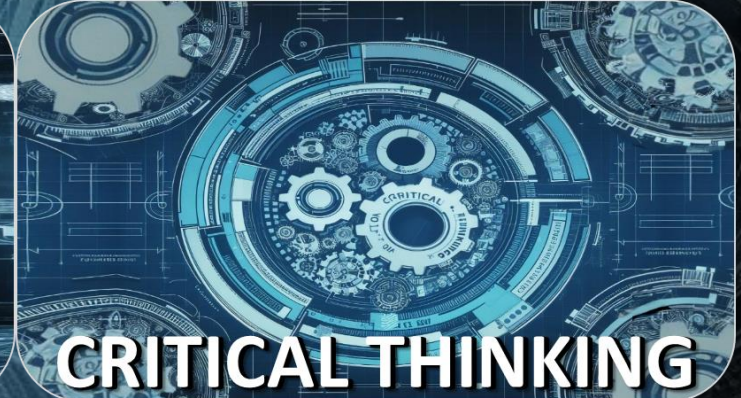
**AWARENESS**



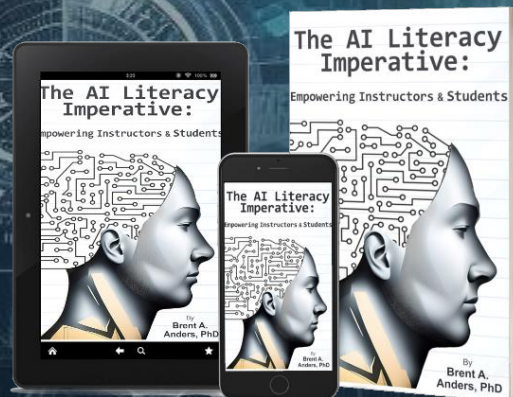
**CAPABILITY**



**KNOWLEDGE**



**CRITICAL THINKING**



“The AI Literacy Imperative:  
Empowering Instructors & Students”

available at  
**amazon**

# References

- Anders, B. (2023). *The AI literacy imperative: Empowering instructors & students*. Sovorel Publishing. <https://www.amazon.com/dp/B0C56Z2PQR>
- Anders, B. (2023). *ChatGPT AI in Education: What it is and How to Use it in the Classroom*. Sovorel Publishing. <https://www.amazon.com/ChatGPT-AI-Education-What-Classroom/dp/B0BRWXPVB7>
- Canada. (2022). *Learning together for responsible artificial intelligence*. Government of Canada. <https://ised-isde.canada.ca/site/advisory-council-artificial-intelligence/en/public-awareness-working-group/learning-together-responsible-artificial-intelligence>
- DOE. (2023). *Artificial intelligence and the future of teaching and learning*. Office of Educational Technology. <https://www2.ed.gov/documents/ai-report/ai-report.pdf>
- DOD. (2023). *Data, analytics, and artificial intelligence adoption strategy*. Department of Defense. [https://media.defense.gov/2023/Nov/02/2003333300/-1/-1/1/DOD\\_DATA\\_ANALYTICS\\_AI\\_ADOPTION\\_STRATEGY.PDF](https://media.defense.gov/2023/Nov/02/2003333300/-1/-1/1/DOD_DATA_ANALYTICS_AI_ADOPTION_STRATEGY.PDF)
- Howarth, J. (2023, November 2). *57+ Amazing artificial intelligence statistics*. Exploding Topics. <https://explodingtopics.com/blog/ai-statistics>
- Microsoft. (2023). *Work trend index annual report*. Microsoft Corporation. [www.microsoft.com/en-us/worklab/work-trend-index/will-ai-fix-work](http://www.microsoft.com/en-us/worklab/work-trend-index/will-ai-fix-work)
- RB. (2023). *1 in 4 companies have already replaced workers with ChatGPT*. Resume Builder. <https://www.resumebuilder.com/1-in-4-companies-have-already-replaced-workers-with-chatgpt>
- Szaniawska-Schiavo, G. (2024). *Love in the age of AI dating apps*. TIDIO LLC. AI Customer Services. <https://www.tidio.com/blog/ai-dating-apps>
- UN. (2023). *Digital literacy: The great divide. Global Digital Compact*. United Nations. [https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/GDC-submission\\_Digital-National-Alliance-Bulgaria.pdf](https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/GDC-submission_Digital-National-Alliance-Bulgaria.pdf)
- UNESCO. (2019). *Beijing consensus on artificial intelligence and education*. International Conference on Artificial Intelligence and Education, Planning Education in the AI Era: Lead the Leap. <https://unesdoc.unesco.org/ark:/48223/pf0000368303>
- Vergun, D. (2021). *DOD leaders share their intelligence threat assessments*. U.S. Department of Defense. <https://www.defense.gov/News/News-Stories/Article/Article/2655574/dod-leaders-share-their-intelligence-threat-assessments>
- WEF. (2022). *Without universal AI literacy, AI will fail us*. World Economic Forum. <https://www.weforum.org/agenda/2022/03/without-universal-ai-literacy-ai-will-fail-us>