# Demystifying AI in Education: Understanding How It Works So We Can Use It Wisely

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### Why This Matters

- Al is becoming ubiquitous in education
- Understanding reduces fear and anxiety
- Builds confidence for responsible implementation
- Prepares us to guide students in an Al-driven future

What's your biggest concern about AI in education?

#### The Al Process

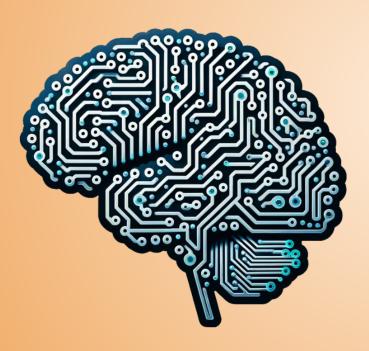
- Input (Your prompt)
- Processing (Pattern matching)
- Output (Generated content)

- Systems mimicking human intelligence
- Examples in daily use:
  - ChatGPT
  - Grammarly
  - o Siri
  - Google Translate





## Breaking the Magic Spell



- Al operates on pattern recognition
- No true "understanding" or consciousness
- Think "advanced pattern matching" like an algorithmic powerhouse
- Works like predictive text, but more sophisticated
- It only knows what is fed into it.

#### **Understanding Large Language Models**

- Trained on vast text datasets
- Pattern recognition in:
  - Grammar
  - Context
  - Language structure
  - Word prediction system
  - Images



#### **Understanding AI Hallucinations**

- Confabulations (Fills in the details with plausible options.)
  - False information generation
  - Pattern matching gone wrong
- Example scenarios in education
- Verification importance

Conversation starter: Share an experience with AI giving incorrect information

### **Temperature of AI**

- 0.0 1.0+
- Higher levels allow for more creativity/filling in the gaps and "out there" type responses.
  - Risk taking
  - May be less relevant
- Lower levels are more constrained to use only what information is available.
  - Great for task consistency & accuracy
- ChatGPT temperature is set around 0.7

#### **Best Practices for Schools**

- Local conversations
  - <u>Template document for discussions</u> (this example was for a HS ELA department)
- Verification protocols
- Appropriate use cases
- Ethical considerations
- Student guidance framework

Link: www.commonsensei.org/ai-guidelines

#### Next Steps & Resources

- Recommended reading:
  - "Teaching with AI" by Watson & Bowen
  - "Co-Intelligence" by Ethan Mollick
- Professional development opportunities
  - <u>ChatGPT Foundations for K-12 teachers</u> (FREE 1-hour course)
    - Prompting Resource document (CRE Framework)
  - GenAl Prompt Library
- Al tools for educators
- Possible Al
  - ChatGPT, Gemini, CoPilot, Claude, MagicSchool
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