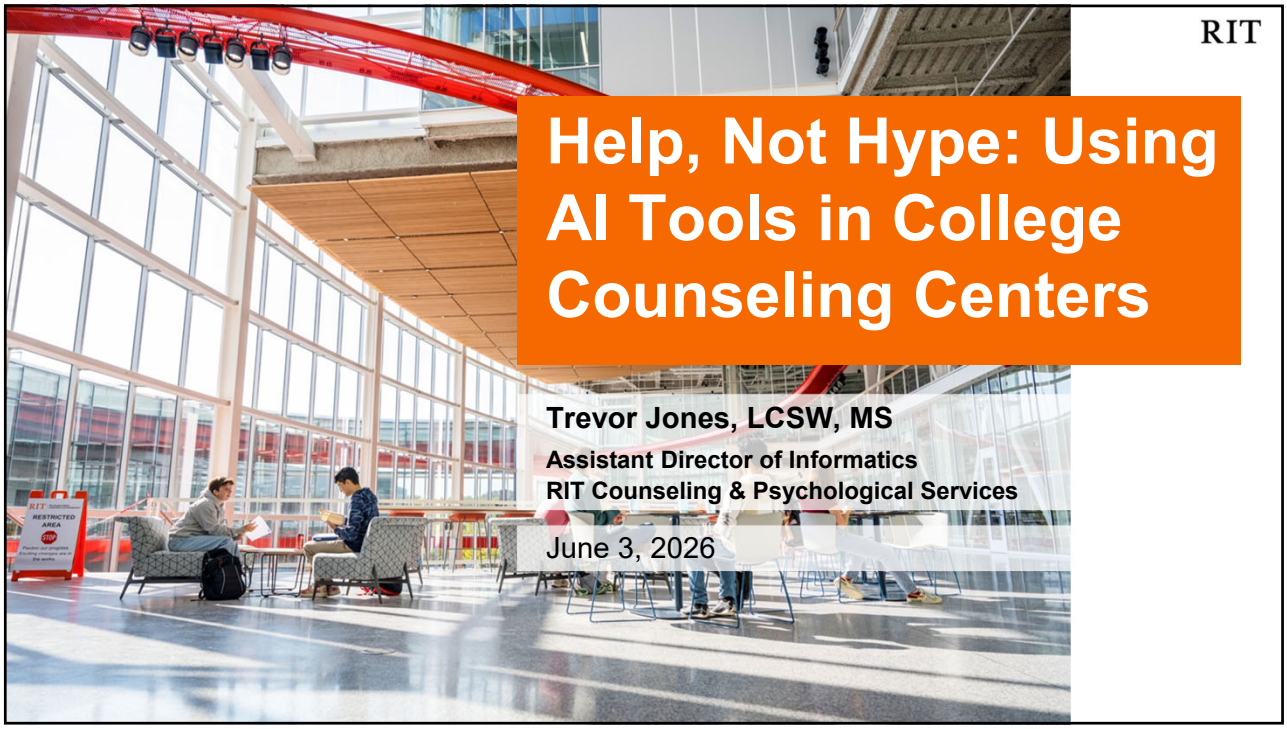

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Disclosures

Conflict of Interest

This presenter has no financial relationships, sponsorships, or conflicts of interest to disclose related to this presentation.

Use of AI

The AI tools referenced in this presentation were used to source information which has been reviewed and edited by presenter.

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Introductions

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Learning Objectives

1. Identify 3 specific AI tools that can benefit college counseling practice and program evaluation.
2. Describe ethical considerations and identify data privacy standards for utilizing AI tools.
3. Demonstrate a practical application for using AI to analyze counseling center data.

4

Ground Rules

Human-Centric Approach

AI is a tool, not a replacement for the expertise and empathy of trained clinicians.

Limited ChatBot Scope

We will avoid in-depth exploration of client-facing conversational AI agents.

Focus on Operations

Our primary goal is to leverage AI for administrative tasks and workflow efficiency.

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Agenda

- AI foundations
- Tool demonstrations
- Application and discussion
- Resources and closing thoughts

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RIT

AI Foundations

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AI Foundations

Artificial Intelligence

psychology

predict and **generate language**

account_tree

summarize and **organize information**

8

AI Foundations

- **Artificial intelligence is not…**

a licensed therapist

sentient

a key decision maker

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AI Terminology: Broad Concepts

- **Artificial Intelligence (AI):** The simulation of human intelligence in machines that are programmed to think and learn.
- **Machine Learning (ML):** A subset of AI where machines learn from data to improve performance over time without being explicitly programmed.
- **Neural Network:** A computational model inspired by the human brain, consisting of layers of nodes (neurons) that process data.
- **Agentic AI:** Proactive AI systems that do not wait for human input to execute tasks.

Source: Microsoft Copilot

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AI Terminology: Data and Training

- **Training Data:** The dataset used to teach an AI model how to perform a task.
- **Labeling:** Assigning meaningful tags to data (e.g., identifying objects in images) to help train supervised models.
- **Supervised Learning:** ML where the model learns from labeled data.
- **Unsupervised Learning:** ML where the model finds patterns in unlabeled data.

Source: Microsoft Copilot

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AI Terminology: Modeling and Performance

- **Model:** The mathematical representation of a process learned by an AI system.
- **Inference:** The process of using a trained model to make predictions or decisions.
- **Accuracy:** A measure of how often the model's predictions are correct.
- **Bias:** Systematic errors in predictions due to flawed data or assumptions.
- **Overfitting:** When a model learns the training data too well, including noise, and performs poorly on new data.

Source: Microsoft Copilot

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AI Terminology: Natural Language Processing

- **Tokenization:** Breaking text into smaller units (words, phrases, or characters).
- **Prompt:** The input given to an AI model to generate a response.
- **Chatbot:** An AI system designed to simulate conversation with users.
- **GPT:** Generative Pre-trained Transformer. A chatbot powered by a language model so you can converse with it.
- **LLM (Large Language Model):** A type of AI trained on vast amounts of text to understand and generate human-like language (e.g., GPT-4).

Source: Microsoft Copilot

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AI Terminology: Usage

- **API (Application Programming Interface):** A way for software to interact with AI models programmatically.
- **Fine-tuning:** Customizing a pre-trained model with additional data for a specific task.
- **Prompt Engineering:** Crafting effective inputs to get desired outputs from AI models.

Source: Microsoft Copilot

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AI Terminology: Ethics and Safety

- **Explainability:** How well the workings of an AI model can be understood by humans.
- **Fairness:** Ensuring AI systems do not discriminate or produce biased outcomes.
- **Privacy:** Protecting user data used in AI systems.
- **Transparency:** Making AI systems and decisions understandable and open.

Source: Microsoft Copilot

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ChatBots

AI system designed to **simulate conversation**

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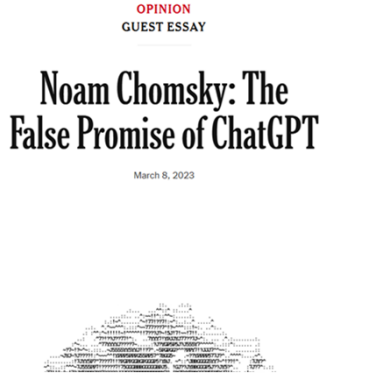
ChatBots



Source: NY Times

Practical Uses

- **Admin efficiency:** meeting notes, scheduling support
- **Data handling:** report summaries, survey analysis
- **Communication:** outreach campaigns, policy drafting
- **Staff development:** training materials, article summaries
- **Experimentation:** developing tools meet unique needs

Ethical Guardrails

- **FERPA/HIPAA considerations**
- **NEVER EVER upload sensitive student data**
- **NEVER EVER upload sensitive staff data**
- **Build internal guidelines for safe use**
  - Know your institution's guidelines and security standards

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AI Adoption is Faster than the Internet and Cellphones

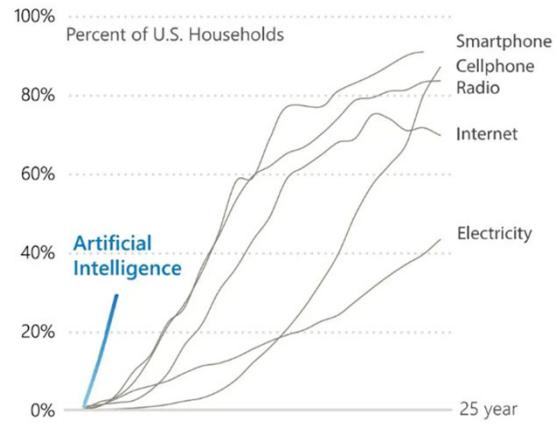

Image: Winbuzzer, Microsoft

Credit: Deb Liu

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Gen AI Launched With A Bang, and Consumers Felt It

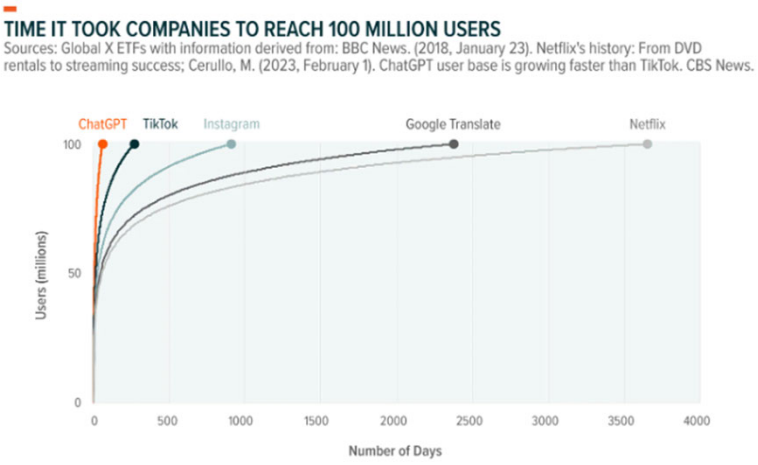

Image: https://www.globalxetfs.com/articles/generative-ai-explained

Credit: Deb Liu

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Tool Demonstrations

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Getting into it

An approach for evaluating and using AI tools…

S - See the tool

P - Practice responsibly

A - Accuracy (check for)

R - Reinvent Workflow

K - Know how the tools work

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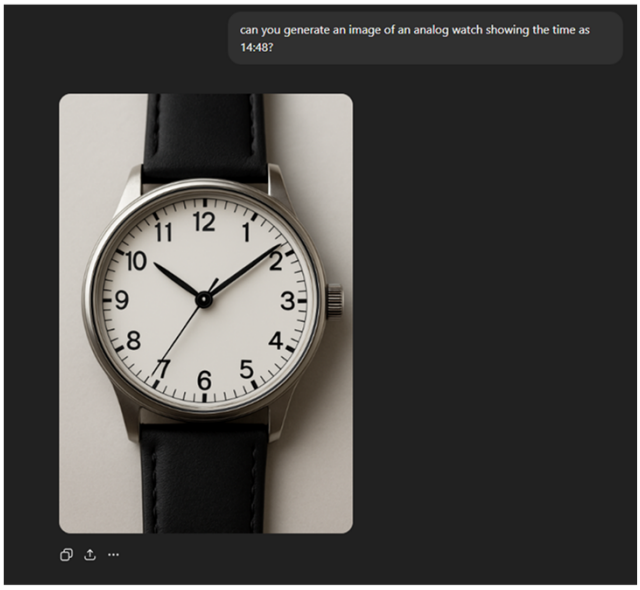
About that accuracy…

"Trust, but verify"



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Mindful Use - Response Length is Key

1. **SET SMART - max_tokens**
   a. Define maximum output length to present excessive generation “max_tokens=150”
2. **PROMPT FOR BREVITY**
   a. Add explicit instructions: “Be concise” or “Answer in 3 sentences”
3. **USE EARLY STOPPING**
   a. Stop generation once you have the information you need

Credit: Madhura Anand

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Prompting (All GPTs)

- **Context - Why do you need it and who is involved?**
- **Goal - What responses do you want from the application?**
- **Source - Which information sources or samples should be used?**
- **Expectations - How should application respond to best meet your expectations?**
- **Prompt Engineering**
  - You can also ask it to pretend it is a prompt engineer to improve your prompts
- ***Not great at formatting, typically requires adjustments**

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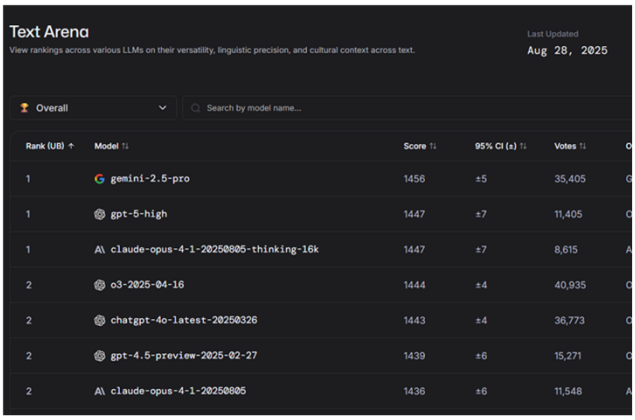
Demonstrations of AI tools

https://lmarena.ai/leaderboard



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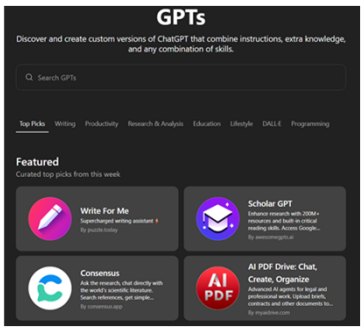
ChatGPT

ChatGPT Capabilities & Strengths

- Provides clear explanations and answers across academic, professional, and everyday topics.
- Supports writing, editing, and communication tasks with adaptability to audience and tone.
- Assists with planning, organization, and idea generation for projects and presentations.
- Analyzes data, performs calculations, and offers technical and coding support.
- Combines efficiency, breadth of knowledge, and creativity to deliver structured, practical outputs.



Source: ChatGPT

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Prompt Engineering Example

Input: "I want you to act as a prompt engineer to help me with making better prompts. You will ask me for the prompt and then give guidance around how a prompt engineer would modify the prompt for better results."

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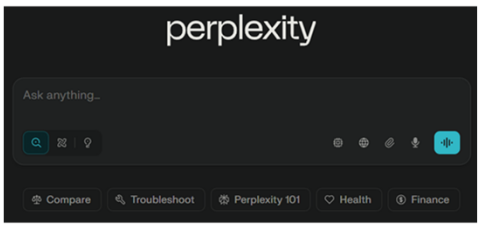
Perplexity.ai

AI Assistant: Capabilities & Strengths

- Rapid, accurate information retrieval & analysis
- Clear, adaptive communication across topics
- Problem solving & structured decision support
- Automates tasks; streamlines workflows
- Learns from each interaction; improves over time
- Organizes responses using concise, logical markdown
- Cites trusted, up-to-date sources in every answer



Source: Perplexity.ai

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Google Gemini

- **What I Do: Core Capabilities** 🧠
- Advanced Reasoning & Problem-Solving: I can analyze complex logical, mathematical, and real-world problems to provide step-by-step solutions and insights.
- Information Synthesis: I can process and distill vast amounts of information from diverse sources into concise, easy-to-understand summaries and reports.
- Content & Idea Generation: I excel as a creative partner, helping to brainstorm ideas, write original content (e.g., articles, marketing copy, emails), and generate creative text formats.
- Code Generation & Comprehension: I can write, debug, and explain code in a wide variety of programming languages, accelerating development workflows.
- Multilingual Translation & Communication: I fluently translate and communicate in numerous languages, breaking down communication barriers.

Source: Google Gemini

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Google NotebookLM

Key Capabilities 🧠

- Ask Questions: Get instant, cited answers drawn directly from your source materials.
- Generate Content: Create automatic summaries, outlines, FAQs, and drafts based on the information in your documents.
- Synthesize Information: Discover connections and key themes across multiple sources simultaneously.
- Save & Organize: Pin valuable AI responses and add your own notes to create a structured project notebook.

Core Strengths 💪

- Source-Grounded: Drastically reduces AI "hallucinations" by relying only on the content you provide.
- Accelerated Workflow: Instantly find facts, analyze complex information, and overcome writer's block.
- Automatic Citations: Every AI-generated insight is automatically linked back to the specific passage in your source for easy verification.
- Personalized Expertise: Transforms the AI into a tailored expert on your specific topic, project, or data set.

Source: Google Gemini

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Survey Analysis

Let's listen to a generative analysis of survey results from other counseling center providers.

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Microsoft Copilot

Key strengths and capabilities:

- Natural Language Interface: Ask in plain English.
- Microsoft 365 Integration: Word, Excel, PowerPoint, Outlook, Teams.
- Developer Tools: GitHub Copilot, Power Platform, Copilot Studio.
- Enterprise Search: Finds info across org data.
- Security & Compliance: Built on Microsoft's trusted cloud.
- Strengths: Saves time, boosts productivity, customizable, scalable.

Source: Microsoft Copilot

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Zoom AI Companion

Key strengths:

Zoom AI Companion's strengths include automating meeting workflows by generating summaries, identifying action items, and transcribing content, enhancing collaboration through intelligent chat summarization and message composition, and boosting productivity with features like smart scheduling and personalized whiteboards. It also offers strong data security, does not use customer data to train external AI models, and integrates across the Zoom Workplace platform to manage tasks and documents.

Source: Google Gemini

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Discussion Points

- **Which tools seem most useful for your center?**
- **Where could you save 60 minutes in a week by implementing one of these tools?**
- **How accurate do you think these tools are?**
- **What is the tradeoff between using an AI tool and figuring things out yourself?**

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Implementation - moving forward

- **Starting Small**
- **Free vs Paid versions**
  - Enterprise level
  - Personal use
- **Think of one Use Case you might experiment with**

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Implementation - guardrails

- **Avoid any student data**
- **Only internal operations (at first)**
- **Train your staff on responsible use**
  - Seek out your superusers

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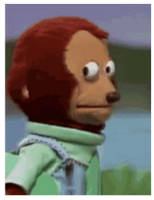
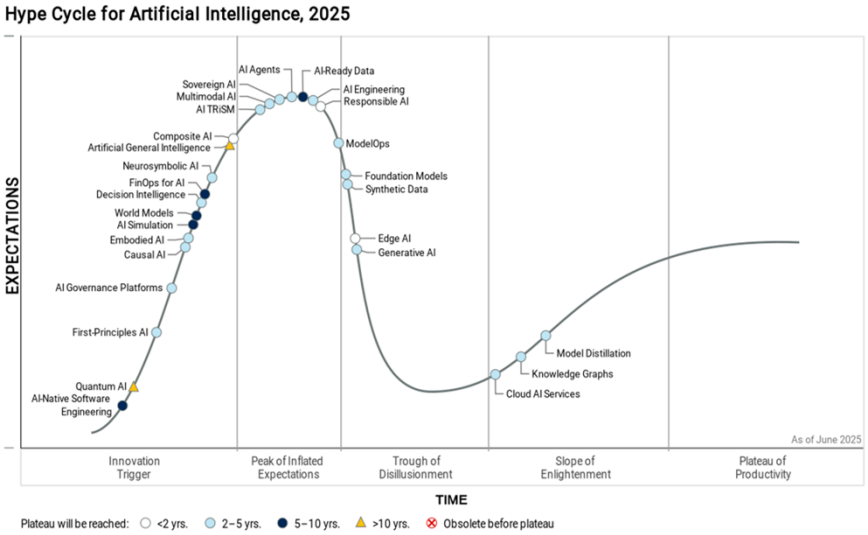
RIT

Looking forward





Gartner

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RIT

Thank you!

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