



AI in Higher Education: From College Admissions to Career Readiness

2025 OpInform



What are we talking about?

Artificial Intelligence: Broad term for a computer system that can perform tasks typically requiring learning, reasoning, and problem solving. In college admissions, AI is used by students and professionals.

Machine Learning: Use and development of computer systems that can learn and adapt without specific instructions, by using algorithms and statistical models to analyze and draw inferences from the pattern in the data.

Generative AI: Subfield of AI that is designed to create new and original content, such as images, text, music, video, code, and by learning patterns from the vast amount of data.

AI Assistant: Conversational interface using large language models to support tasks and decision making across multiple domains.



What are we talking about?

Artificial General Intelligence (AGI): AI system that possesses a wide range of cognitive abilities, much like humans, enabling them to learn, reason, adapt to new situations, and devise creative solutions across various tasks and domains, rather than being limited to specific tasks as narrow AI systems.

Large Language Models (LLM): A type of deep learning model trained on a large dataset to perform a natural language understanding and generation tasks.

Hallucination: An AI system, especially one dealing with natural language processing, generates outputs that may be irrelevant, nonsensical, or incorrect based on the input provided.



What are we talking about?

Automation: Using technology to perform human tasks with minimal intervention.

Deep Learning: Using data to allow a multi-layered neural network to analyze and learn from large amount of data.

Neural Networks: Simple version of the human brain.

Algorithm: Step by step instructions that tells a computer how to solve a problem.

Chatbot: Computer program that is often powered by programing, that can talk through text or voice like a digital assistant. Canned responses, not specific.

Agent: Computer program that is often powered by AI, that can talk through text or voice like a digital assistant.



Technology Examples How good is it?

- ChatGPT
- Gemini (Google)
- Canva
- Prezi
- Notebook LMN
- Microsoft Copilot
- Otter AI



ChatGPT Example

Prompt 1: What terms do I need to know about AI?

Prompt 2: Do you want me to make you a one-page “AI Vocabulary Cheat Sheet” (with clean formatting and simple definitions) that you can print or share with others?

what are some words I need to know about AI?

Here's a starter glossary of **important AI terms** you'll want to know. I've grouped them into categories to make it easier to follow:

Core Concepts

- **Artificial Intelligence (AI):** Computer systems that perform tasks that normally require human intelligence (like problem solving, learning, or recognizing patterns).
- **Machine Learning (ML):** A type of AI where computers “learn” from data and improve without being explicitly programmed.
- **Deep Learning:** A branch of ML that uses multi-layered neural networks to process complex data (like images, audio, or language).
- **Neural Network:** A computer model inspired by the human brain, built from layers of nodes (“neurons”) that process information.
- **Generative AI:** AI that creates new content (text, images, music, etc.) based on patterns it learned from training data.

Data & Training

- **Dataset:** A collection of information used to train an AI system.
- **Training:** The process of teaching an AI model by feeding it lots of examples.
- **Overfitting:** When a model memorizes training data too closely and struggles with new, unseen data.
- **Bias:** Skewed or unfair patterns in AI output, often caused by biased data.



I want you to also make a visual infographic version (with icons and color highlights) for presentations or handouts.

AI Vocabulary Cheat Sheet

Core Concepts

Artificial Intelligence (AI): Computer systems that perform tasks that normally require human intelligence.

Machine Learning (ML): AI that learns from data and improves without being explicitly programmed.

Deep Learning: A type of ML using layered neural networks for complex tasks like images or speech.

Neural Network: A computer model inspired by the brain, made of layers of nodes ('neurons').

Generative AI: AI that creates new content like text, images, or music.

Data & Training

Dataset: A collection of information used to train an AI system.

Training: Teaching an AI model by feeding it examples.

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Bias: Skewed or unfair patterns in AI output, often from biased data.

How AI Works

Algorithm: A set of rules or steps for solving a problem.

Model: The trained system that makes predictions or generates answers.

Parameters: Internal settings AI adjusts during training.

Prompt: A user's input or instruction to an AI system.

Inference: When AI uses what it learned to make a prediction or answer.

Tools & Applications

Chatbot: AI designed to have conversations with people.

Natural Language Processing (NLP): AI's ability to understand and generate human language.

Computer Vision: AI that analyzes and interprets images or video.

Recommendation System: AI that suggests things like shows or products.

Ethics & Concerns

Transparency: How clearly AI explains its decisions.



Can you make a visual infographic version (with icons and color highlights) for presentations or handouts?

AI Vocabulary Cheat Sheet



Core Concepts

Machine Learning (ML)

A type of AI where computers "learn" from data and improve without being explicitly programmed.

Deep Learning

A branch of ML that uses multi-layered neural networks to process complex data.

Artificial intelligence (AI) Computer systems that perform tasks that normally require human intelligence (like problem solving, learning, or recognizing patterns).

Neural Network A computer model inspired by the human brain, built from layers of nodes ("neurons") that process information.

Generative AI AI that creates new content (text, images, music, etc.) based on patterns it learned from training data.



Data & Training

Training A collection of information used to train an AI system.

Teinogalani steponram

Dataset A collection of information used to train an AI system.

Overfitting When a model memorizes training data too closely and struggles with new, unseen data.

Bias Skewed or unfair patterns in AI output, often caused by biased data.



How AI Works

Algorithm A set of rules or steps for solving a problem or making decisions.

Parameters The internal settings AI adjusts during training to improve performance.

Algorithm A set of rules or steps for solving a problem or making decisions.

Model The trained system that can make predictions or generate output.

Recommendation System AI that suggests things like Netflix shows or Amazon products.



Ethics & Concerns

Hallucination: When AI confidently gives a false or made-up answer.

Transparency How clearly an AI system explains its decision-making process.

Explainability How well humans can understand AI decisions.



Will this be replacing all of us?

“The 'godfather of AI' says it will create 'massive' unemployment, make the rich richer, and rob people of their dignity,”-Thibault Spirlet

“The investor Vinod Khosla has gone further, predicting that AI will perform 80% of the work in 80% of jobs.”

<https://www.businessinsider.com/geoffrey-hinton-warns-ai-will-cause-mass-unemployment-and-inequality-2025-9>



Google Gemini Prompts

Can you tell me what AI is?

Google Gemini: Can you tell me what AI is? →

“Can you put together a presentation about AI for school counselors about how AI is used in college and college admissions? In the style of the State University of New York?”

- ✦ AI, or **Artificial Intelligence**, refers to the development of computer systems that can perform tasks normally requiring human intelligence. 🗣️ It's about creating machines that can "think" and learn, mimicking cognitive functions like problem-solving, understanding language, recognizing patterns, and making decisions.

How AI Works

At its core, AI often involves **algorithms**—sets of rules or instructions that a computer follows to solve a problem. These algorithms are fed vast amounts of **data**, from which the AI system learns to identify patterns, make predictions, or generate responses. This learning process can take various forms:

- **Machine Learning (ML):** A subset of AI where systems learn from data without explicit programming. Instead of being told exactly how to perform a task, they develop their own

🔒 What do you want to build?



Canvas x





ChatGPT Prompts

Can you put together a presentation about AI for school counselors about how AI is used in college and college admissions?



Presentation: AI in College & College Admissions

Audience: School Counselors

Goal: Help counselors understand how AI is shaping higher education and the admissions process, so they can better guide students.

Slide 1: Title Slide

AI in College & Admissions: What School Counselors Need to Know

- Your name, date, school/organization

Slide 2: Why This Matters

- AI is already part of higher education.
- Students will encounter it in college applications, in classrooms, and in campus life.
- Counselors should understand opportunities, risks, and ethical issues

Slide 3: What is AI (Quick Refresher)

- **Artificial Intelligence (AI):** Technology that mimics human problem-solving and learning.



ChatGPT Presentation

“Please make a ready-to-use slide deck of this presentation.”

A 2x3 grid of presentation slides. The first slide (top-left) is dark blue with white text. The other five slides are white with dark blue text. Each slide is numbered in the bottom-left corner.

1

AI in College & Admissions:
What School Counselors Need to Know

Prepared for School Counselors – August 2025

2

Why This Matters

- AI is already part of higher education.
- Students will encounter it in applications, classrooms, and campus life.
- Counselors should understand opportunities, risks, and ethical issues.

3

What is AI (Quick Refresher)

- Artificial Intelligence (AI): Technology that mimics human problem-solving and learning.
- Examples: ChatGPT, Grammarly, Siri, Spotify recommendations.

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AI in College Learning

- Tutoring & Writing Help: AI-powered writing centers, math tutors.
- Course Personalization: Adaptive learning platforms adjust difficulty.
- Accessibility: Transcription, language translation, text-to-speech tools.
- Career Prep: AI helps with résumé scanning and mock interviews.

8

How Students Use AI (Already!)

- Brainstorming essay topics.
- Proofreading and grammar checks.
- Studying with flashcards or summaries.
- Career exploration (AI-driven quizzes).

9

What Counselors Should Know

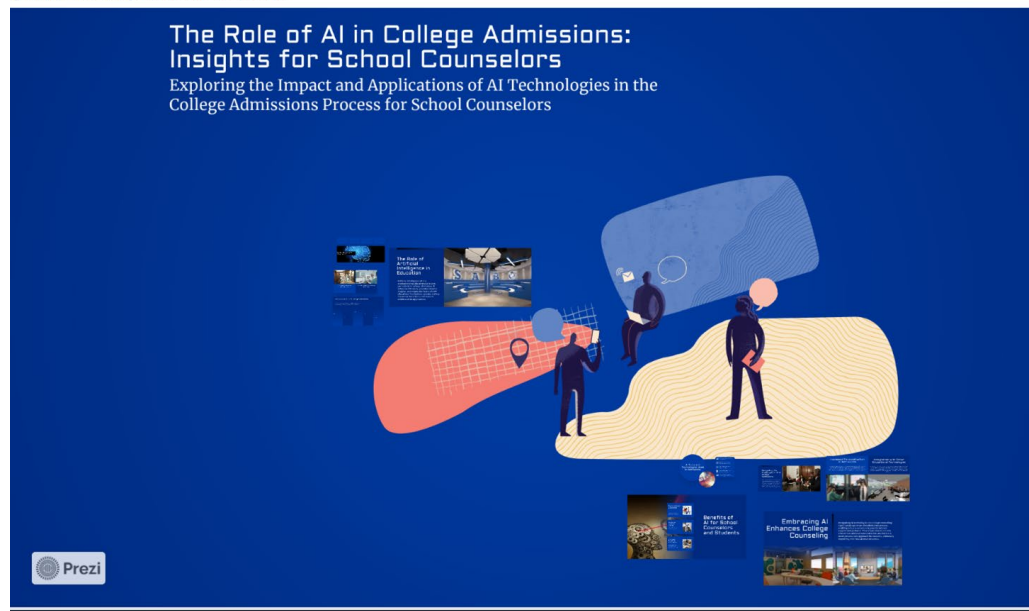
- Encourage students to use AI ethically (helper, not substitute).
- Remind them colleges value authentic voice in essays.
- Be aware of admissions policies on AI use.
- Use AI tools yourselves (scheduling, FAQs, research).



Prompt from Prezi

"Create a presentation called: The Role of AI in College Admissions: Insights for School Counselors."

College Admissions: Insights for School Counselors





Prompt from Canva

"Create a presentation called: The Role of AI in College Admissions: Insights for School Counselors"

← AI in College Admissions: A Guide for School Counselors

Select all

Slide 1: AI in College Admissions. A green slide with a white geometric pattern and a central image of a hand holding a glowing blue cube.

Slide 2: Welcome to AI in Colleges!. A green slide with a white geometric pattern and a central image of a person's head inside a circle.

Slide 3: AI-Powered Admissions Tools Transforming College Admissions. A green slide with a white geometric pattern and a central image of a person holding a yellow folder.

Slide 4: Personalized Learning with AI. A green slide with a white geometric pattern and a central image of three people smiling.

Slide 5: Student Support Systems Overview. A green slide with a white geometric pattern and a central image of a person sitting at a desk.

Slide 6: We must ensure AI serves education ethically and responsibly. A green slide with a white geometric pattern and a central image of a person's head inside a circle.

Slide 7: Reach out for more information and support!. A green slide with a white geometric pattern and a central image of a person's head inside a circle.

A button with a plus sign and a dropdown arrow.

Refine your design

Select a design to make quick changes without leaving the conversation.

Add an illustration of AI-powered college admissions tools

Benefits of AI for School Counselors and Students

Personalized Guidance

AI can tailor advice and resources to individual students based on their unique needs and preferences, ensuring that each student receives relevant support throughout their college journey.



Enhanced Decision-Making

With AI's data analysis capabilities, school counselors can make informed decisions based on trends and patterns, improving their strategies for student support and college readiness.



Improved Access to Information

AI streamlines access to information by providing instant responses to student inquiries, ensuring that students have the resources they need without delays in service.





What can and should Artificial Intelligence do?

- Email
- Text bots
- Webcontent
- Publications
- Illustrations
- Presentation
- Personalization
- Studying
- ADA and Adaptability (real time transcription)
 - Language Translation
- Personalized Learning
- Companionship
- Research



AI for Students

- 85% of college students said they used AI for coursework in the past year ([From Student Voice Survey](#)- 2- and 4-year campuses)
 - 55% brainstorming
 - 50% tutoring
 - 46% studying
 - 46% checking work
 - 42% using as an advanced search engine
 - 38% generating summaries
 - 31% outlining papers
- Students are craving AI related policies surrounding academic integrity concerns - starting to require AI statement on syllabuses.
- However, only 14% feel very positive about faculty use.



Notebook LMN- [Google](#) 1 Podcast vs [2](#) Debate

Prompt: College Counseling for Admissions Professionals: Improving Access and Retention.

Uploaded entire transcript: **College Counseling for Admissions Professionals: Access and Retention**

1 source

This academic publication, "**College Counseling for Admissions Professionals: Improving Access and Retention**," authored by Nathan J. Daun-Barnett, Carl Behrend, and Cory M. Bezek, explores the multifaceted landscape of **college access and student success** in the United States. Published by Routledge in 2014, the book scrutinizes the **historical evolution of the P-16 education system** and the changing roles of various professionals, including **admissions counselors, school counselors, pre-college outreach providers, and independent consultants**. A central theme is the **disparities in information and support** faced by low-income, first-generation, and underrepresented minority students, particularly concerning **academic preparation, college affordability, and navigating the complex admissions process**. The text also examines the **impact of technology and financial aid programs**, such as the GI Bill and various merit- and need-based scholarships, on students' ability to access and succeed in higher education. Ultimately, the source advocates for enhanced **collaboration and transparency** among all stakeholders to better serve prospective college students.



AI for Colleges

- Communication
- Images to Data
- Transcription and transmission
- Translation
- Review for Fraud
 - California Community Colleges
- Measuring Interaction/Warnings
- Interpret Data
- Student Advising
- Question Routing
- AI Recruiter?



Top Trainings Desired (Statewide, 2024)

1. Digital Skills
2. Security
3. Excel
4. Administrative
5. Artificial Intelligence
6. CDL
7. Health Care
8. Information Technology
9. Construction
10. Accounting
11. Project Management
12. Cybersecurity
13. Medical Billing and Coding
14. Microsoft Office
15. Management
16. Nursing
17. Coding
18. Electrical
19. Home Health Aide
20. Data Analysis
21. OSHA
22. Culinary
23. English
24. Human Resources

Source: AI impact on Workforce, SUNY



Discussion