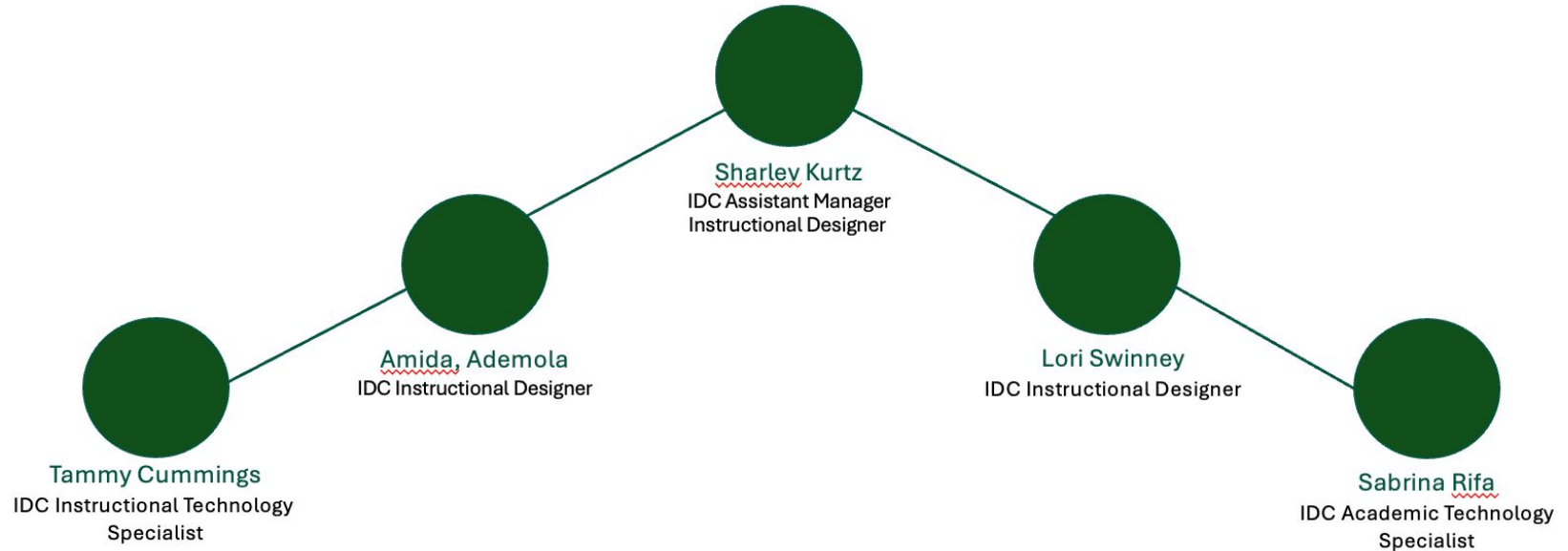# Human-Driven Generative AI and Authentic Assessment Design

Presenters:
Amida, Ademola, PhD
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Team Introductions

Sharley Kurtz
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Amida, Ademola
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IDC Instructional Technology
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Specialist

Today's Outcomes

- Explain what GenAI is and how it works.

- Explore prompting techniques to improve AI-generated content.

- Describe a strategy for creating authentic assessments using GenAI

Participants Survey

- Have you used any GenAI tools like ChatGPT in your course?

- Are you planning to use GenAI in your course?

- What areas are you thinking about using it?

Reactions on ChatGPT

VOA

Schools Ban ChatGPT Amid Fears of Artificial Intelligence–Assisted Cheating

FACING AI

Faculty Members Still Aren't Sure What to Make of ChatGPT

By Eva Surovell | March 16, 2023

MIT Technology Review   Featured   Topics

ChatGPT is going to change education, not destroy it

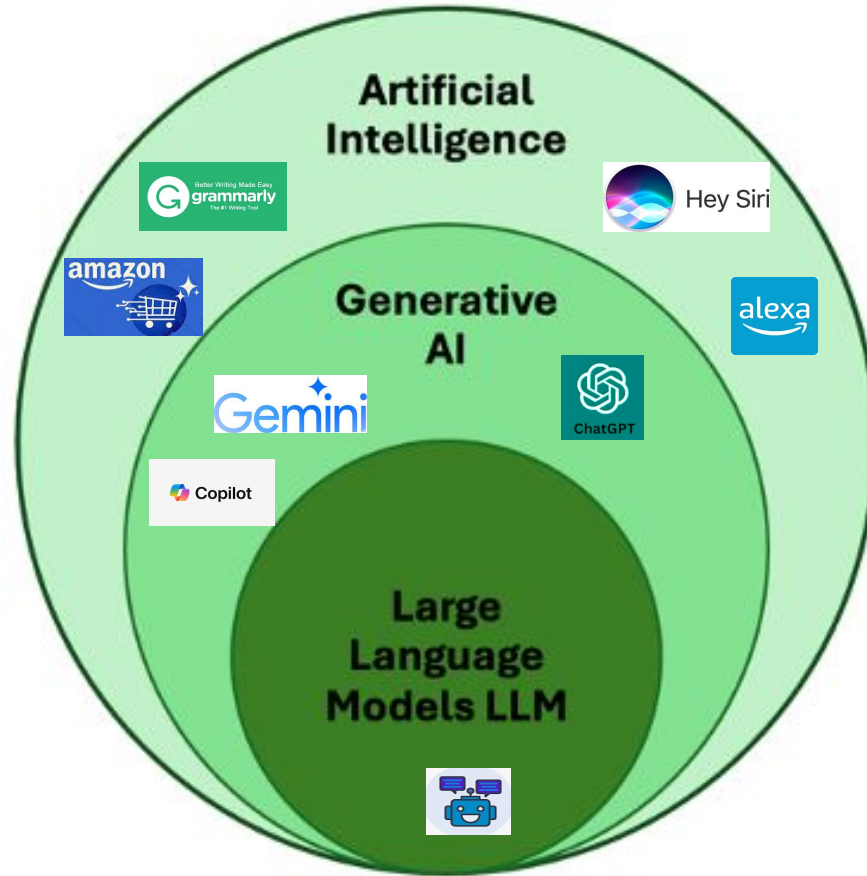## Advice | Why You Should Rethink Your Resistance to ChatGPT

By Flower Darby | November 13, 2023

NDSU   INSTRUCTION
INFORMATION TECH

PART 1:
What is Generative AI (GenAI) and how it works?
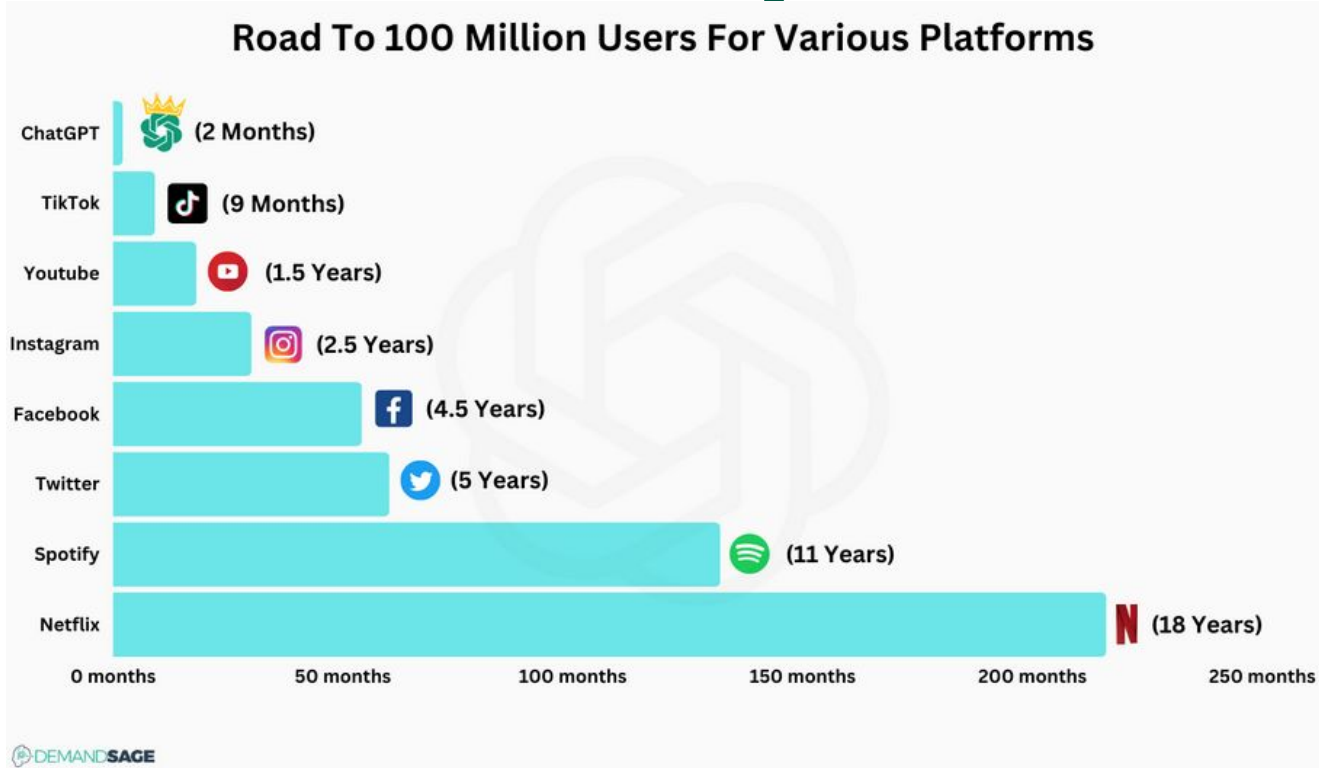
What is GenAI?

How do AI text generation tools work?

If you ask GenAI a question, you are giving the GenAI an instruction along the lines:

"Here's a fragment of text (I like my bagel with…). Tell me how this fragment might go on. What words are likely to come next?"

"[It's just adding one word at a time]()"
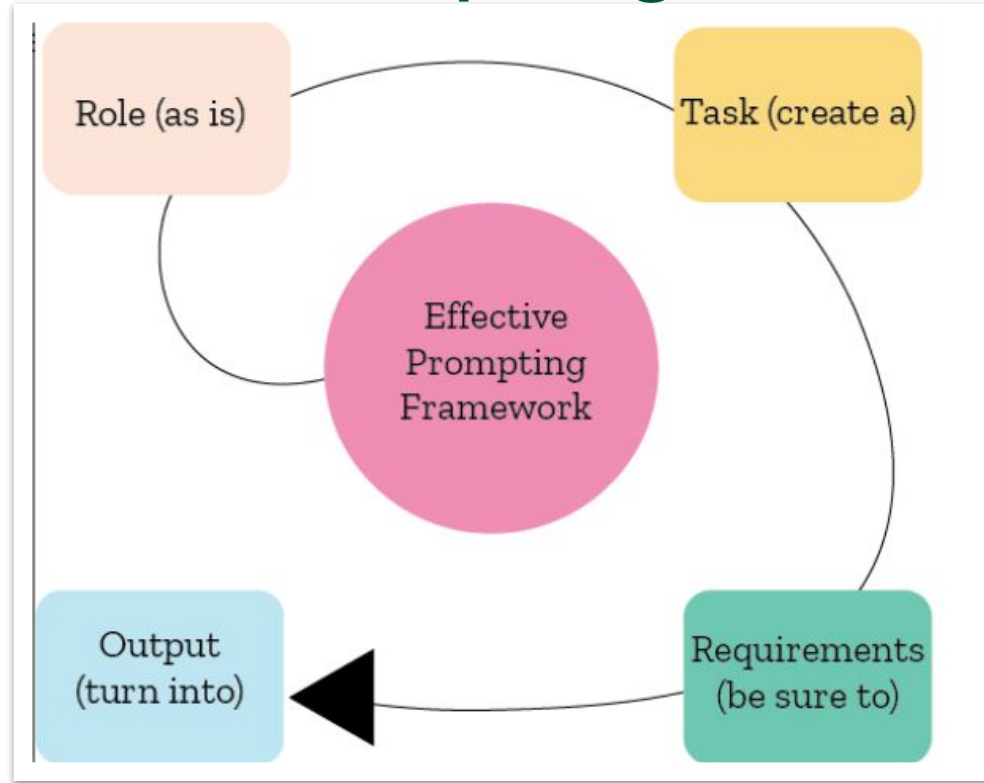
Fun Fact: Do you know!

Road To 100 Million Users For Various Platforms

ChatGPT — (2 Months)

TikTok — (9 Months)

Youtube — (1.5 Years)

Instagram — (2.5 Years)

Facebook — (4.5 Years)

Twitter — (5 Years)

Spotify — (11 Years)

Netflix — (18 Years)

0 months   50 months   100 months   150 months   200 months   250 months

DEMANDSAGE

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INFORMATION TECHNOLOGY

PART 2:
Effective prompting techniques

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What is Prompting?

- A prompt is an instruction given to a language model to elicit a specific output.

- An effective prompt must include:

  - Clear instructions

  - Provide reference text

  - Split complex tasks into simpler subtasks

  - the appropriate phrases, words, and sentence

Effective Prompting Framework

Prompt Example

Worse	Better	Best
Write a paragraph about why group work is important.	Act like an experienced teacher. Write a paragraph about why group work is important.	Act like an experienced teacher. Write a paragraph about why group work is important. Make the writing engaging but smart. Make sure there is an example.

PART 3:
Strategies for creating
authentic assessments with GenAI

"I need 10 types of authentic assessments for college students"

Sure, here are ten types of authentic assessments that can be effective for college students:

1. **Case Studies**:
2. **Research Projects**:
3. **Presentations**:
4. **Portfolios**:
5. **Simulations & Role-Playing**:
6. **Project-Based Learning**:

"Provide ten more with descriptions"

11. **Design Challenges**: Students are given a design problem or challenge related to their field, such as …
12. **Field Work Reports**: Students gather data or conduct observations in real-world settings and produce reports based on their findings...
13. **Case Presentations**: Similar to case studies, students present their analysis and solutions to a…

Help from Bloom's Taxonomy

Assignment

- Analyze

- Research Project

- Exoskeleteton

- Community/local

Can GenAI Help You?

- What is **your** assignment objective?
- What type of help do you need?
- Ideas for research projects?
- Project details?
- Can GenAI help **you** with ideas and getting started?

Creating a Prompt

You are an expert Biology instructor. You would like to design a research project for students to demonstrate the exoskeleton and why it is important to the water areas in your community.

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Revise Prompt with More Direction

"You are an **expert Biology instructor teaching undergraduate students in a public research university**. You would like to design a research project for students to **demonstrate the exoskeleton and why it is important** to the **water areas in your community**. This project will be a **semester-based activity over three months with group of 3 students**. Provide three examples".

Three Projects: Next Steps

- Project 1: "The Impact of Crustacean Exoskeletons on Aquatic Ecosystem Health"
- Project 2: "The Role of Insect Exoskeletons in Aquatic Food Webs"
- Project 3: "Assessing the Effects of Pollution on Exoskeleton Integrity in Local Aquatic Species"

What Works, What Needs Improvement?

- Project 3: "Assessing the Effects of Pollution on Exoskeleton Integrity in Local Aquatic Species"

- This project aims to assess how pollution affects the exoskeleton integrity of local aquatic species. Students will evaluate the health of exoskeletons in polluted versus non-polluted water areas and its implications for species survival.

Example of Role Playing

"You are a **Nursing professor at a 4 year public university**. Your course includes **3rd year nursing students on Gerontologic Nursing**. Develop 10 role playing scenarios to **help the students practice listening to and questioning** an elderly patient to complete an initial assessment. Create examples that include patients with a variety of questions, complaints, and difficulty communicating".

What is missing? What would help make this more authentic?

Scenario 1: Managing Multiple Complaints

Patient: Mrs. Smith, an 82-year-old woman

Situation: Mrs. Smith reports feeling fatigued, having difficulty sleeping, and experiencing frequent dizziness.

Objective: Students should listen to Mrs. Smith's multiple complaints, prioritize her symptoms, and ask relevant follow-up questions to assess the potential causes and severity of her issues.
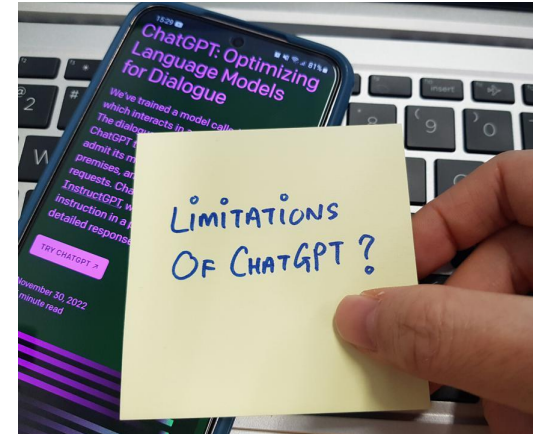
Example Questions:

- "Can you describe the dizziness you're experiencing? Is it constant or does it come and go?"

- "How long have you been feeling fatigued and having trouble sleeping?"

Scenario 2: Difficulty Communicating Due to Hearing Loss

Limitations

- Lack understanding (superficial knowledge)
- Contextual limitations
- Ability to reason & critical thinking
- Bias and fairness
- Quality and reliability
- Creativity and innovation
- Legal & privacy concerns

Questions

Questions are the path to learning

LAIC Resources

- Knowledge Base Article pages
  - [Teaching and Learning with Generative AI](#)
  - [Introducing Generative AI in Higher Education](#)
- Professional Development
  - [GenAI Fundamentals: Understanding and Selecting an Appropriate AI Tool](#)
  - [Teaching with GenAI - Designing assignments with AI](#)
- Book Discussion: [Teaching with AI](#)
- Faculty Cert. Course: [Teaching with AI for Educators](#)– Avaliable in Fall 24