




Leveraging Artificial Intelligence to Enhance Creativity: Tools, Collaboration, and Classroom Applications



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Collaborating with A.I.

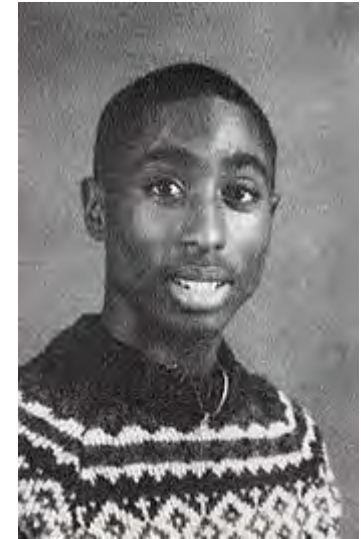
It's the thought that counts...and computers can't think



Drake



Snoop Dogg



Tupac Shakur



Image sources:

The Come Up Show. (2016). *Drake and Future 2016 Summer Sixteen Tour* [Photograph]. Flickr.

<https://www.flickr.com/photos/thecomeupshow/28082662994/in/album-72157671052327671/>. CC BY-ND 2.0.

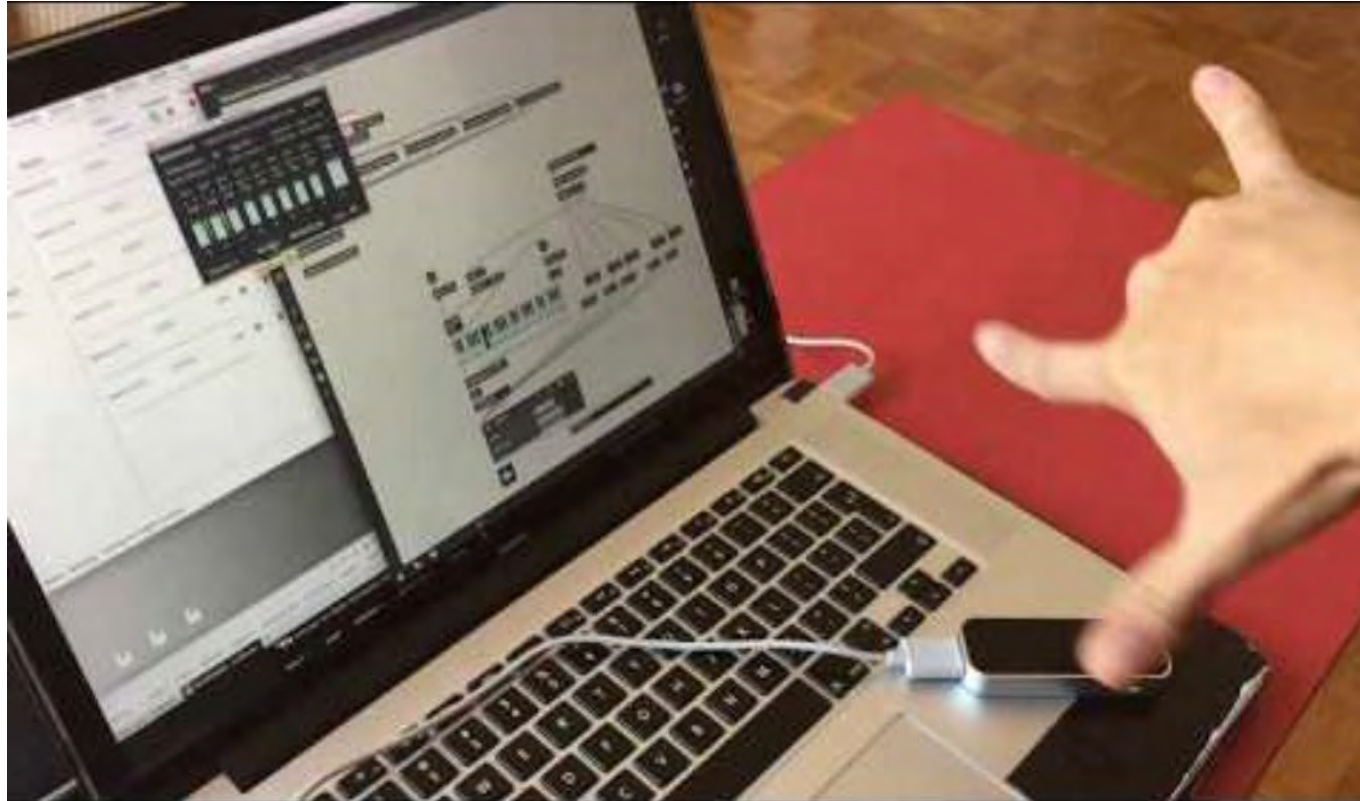
Jennings, Steve/Getty Images for TechCrunch. (2015). *Snoop Dogg* [Photograph]. Flickr. <https://www.flickr.com/photos/techcrunch/20985801623>. CC BY 2.0.

Tupac Shakur [Photograph]. (1988). Tupac Shakur in Baltimore: Friends, teachers remember the birth of an artist – Baltimore Sun.

<https://www.baltimoresun.com/food-drink/bal-tupac-shakur-baltimore-school-for-arts-hall-of-fame-induction-story.html>

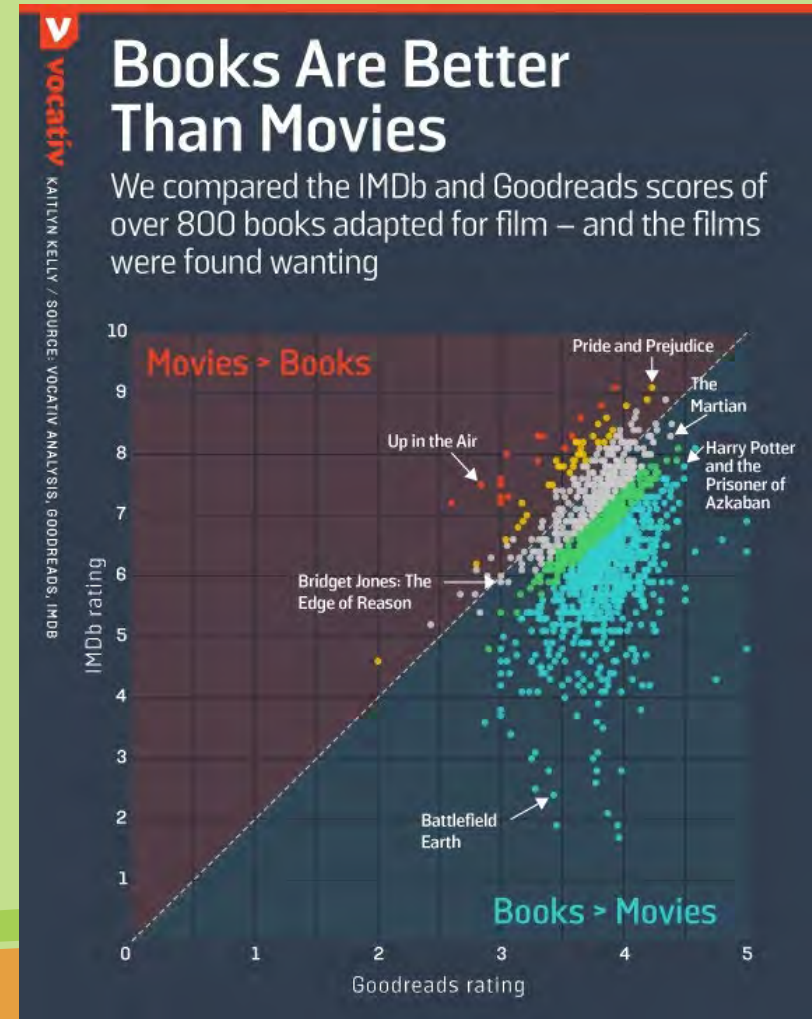
Collaborating with A.I. for Creativity

Exploring new frontiers



Exercise: A Walk through Your Mind's Journey

Two people meet for a drink. They discuss what is happening. When they part ways, they both feel differently about it than before they met.



What Happens when Two People Meet with AI?



OpenAI. (2024). *CoPilot* [Large language model]. (<https://copilot.microsoft.com/>)
Image powered by DALL-E 3 (<https://openart.ai>) prompted by the CoPilot result on this slide..

AI in Education



- Analysis & prediction
- Personalized feedback & tutoring
- Speed & efficiency
- Idea generation:
 - Brainstorming & new perspectives

Augmentation, not replacement.

AI in Creative Industries – 1

- Design
- Writing
- Music



Adobe Firefly – an Example of Art with AI

Prompt:

A hot summer night in the city. People sitting on their porch steps in front of row houses made of concrete and brick with marble steps. Jazz influences. In an abstract style of the Harlem Renaissance.

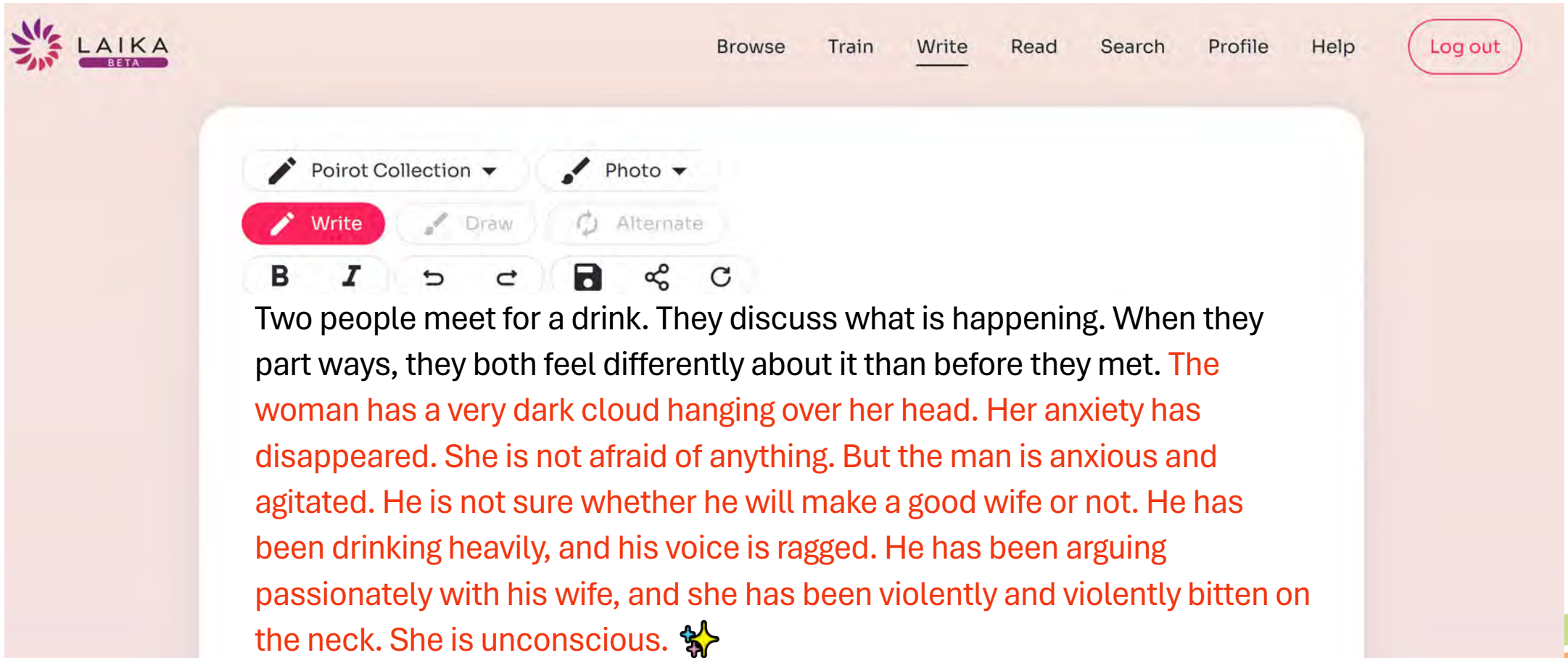


AI in Creative Industries – 2

- Design
- Writing
 - Copy editing
 - Coaching (prompting)
 - Organization
 - Idea generation
- Music



LAIKA – an Example of Creative Writing with AI



Two people meet for a drink. They discuss what is happening. When they part ways, they both feel differently about it than before they met. **The woman has a very dark cloud hanging over her head. Her anxiety has disappeared. She is not afraid of anything. But the man is anxious and agitated. He is not sure whether he will make a good wife or not. He has been drinking heavily, and his voice is ragged. He has been arguing passionately with his wife, and she has been violently and violently bitten on the neck. She is unconscious.** ✨

Written with LAIKA in collaboration with the following brains: Poirot Collection (Agatha Christie)

<https://www.writewithlaika.com/>

AI in Creative Industries – 3

- Design
- Writing
- Music





Collaborating with AI in Teaching and Learning



AI Used to Support our Students' Creativity and Critical Thinking

Understanding CREATE Frameworks for Prompt Engineering

(Birss)

- Character
- Request
- Examples
- Additions
- Type of output
- Extras

(Barrett)

- Clarity
- Relevant info
- Examples
- Avoid ambiguity
- Tinker
- Evaluate

Birrs, Dave. (2023). *How to Research and Write Using Generative AI Tools* [Video file]. LinkedIn.

<https://www.linkedin.com/learning/how-to-research-and-write-using-generative-ai-tools/>

Barrett, Tom. (2023, February 6). *Uplevel your prompt craft in ChatGPT with the CREATE framework*.

<https://edte.ch/blog/create-framework/?v=3a1ed7090bfa>

Possibilities with AI by Our Side

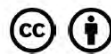
Revise activities to incorporate AI while encouraging creativity and motivating critical thinking



Bloom's Taxonomy Revisited

Use this table as a reference for evaluating and making changes to aligned course activities and assessments (or, where possible, learning outcomes) that account for generative Artificial Intelligence (AI) tool capabilities and distinctive human skills.

All course activities and assessments will benefit from **review** given the capabilities of AI tools; those at the **Remember** and **Analyze** levels may be more likely to need **amendment**.



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	RECOMMENDATION	AI CAPABILITIES	DISTINCTIVE HUMAN SKILLS
CREATE	Review	Suggest a range of alternatives, enumerate potential drawbacks and advantages, describe successful real-world cases	Formulate original solutions incorporating human judgement, collaborate spontaneously
EVALUATE	Review	Identify pros and cons of various courses of action, develop rubrics	Engage in metacognitive reflection, holistically appraise ethical consequences of alternative courses of action
ANALYZE	Amend	Compare and contrast data, infer trends and themes, compute, predict	Critically think and reason within the cognitive and affective domains, interpret and relate to authentic problems, decisions, & choices
APPLY	Review	Make use of a process, model, or method to illustrate how to solve a quantitative inquiry	Operate, implement, conduct, execute, experiment, and test in the real world; apply creativity and imagination to idea & solution development
UNDERSTAND	Review	Describe a concept in different words, recognize a related example, translate	Contextualize answers within emotional, moral, or ethical considerations
REMEMBER	Amend	Recall factual information, list possible answers, define a term, construct a basic chronology	Recall information in situations where technology is not readily accessible

Exercise: Assignment Redesign



Students are tasked to draft a statement of purpose for a research project. The project must investigate the relationship between a musical genre and a historic or other cultural happening.

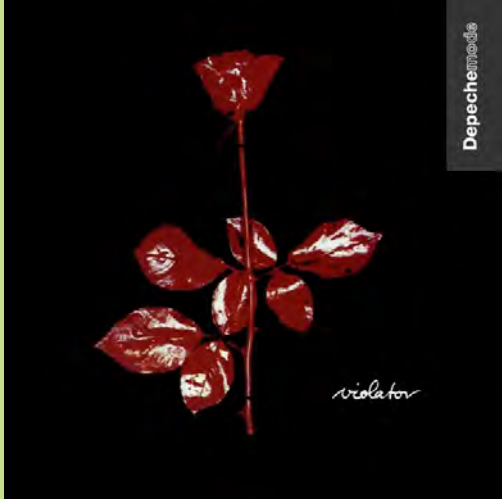
What Happens when the Assignment Incorporates AI?

For the genre of music you've been assigned, propose three statements of purpose for this term's main research paper. The proposed research topics must all be different, yet all must be related to the genre and must investigate how either historic, cultural, or even your own personal influences shaped it. You may use AI (ChatGPT, CoPilot, etc.) to assist you. *Consider using the prompt template.*

Suggested prompt template:

**IDENTIFY THE TASK + PROVIDE RELEVANT DETAILS + PROVIDE
DIRECTION FOR OUTPUT + AVOID AMBIGUITY**

Example Prompt: Task + Details + Output + Specific



*Identify a research topic for an **undergraduate music theory course** that is related to Synthpop as the genre related to Britain societal events in the 1980s and 1990s. The research topic should be **written in the form that can be used as a statement of purpose for a term paper.** This statement of purpose should be **200 words or less.***

A Cautionary Word



Careful use is part of AI literacy.

- Privacy, rights
 - Data collection (PII)
 - Security
 - Copyright
- Ethics
 - Academic integrity
 - Transparency
- Quality, accuracy
 - “Confabulations” (hallucination)
 - Bias
- Accountability



Practical Strategies for Leveraging AI to Enhance Creativity

In faculty's hands

- Consider Bloom's Taxonomy Revisited
- Expand scenario-based activities
- Incorporate AI in student direction (assignments)
- Model appropriate use and AI literacy

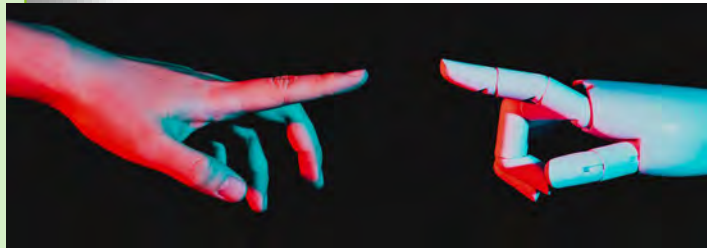
In students' hands

- Collaborate with AI
- Focus on creativity while using AI tools to assist in copy editing and organization
- Idea generation
 - Brainstorming & new perspectives
- Implement appropriate use and develop literacy

Human and Technological Collaboration

Humans

- Experiencing authentic emotions and building relationships
- Making decisions according to abstract values
- Making products and results usable for humans



A.I.

- Repetitive/predictive tasks
- Making decisions based on concrete rules
- Classifying large amounts of data
- Tasks that hinge on computational power

Collaborate!

It's the creative approach of collaboration that allows us to enjoy what's in the mind of the creator.

