Exploring Al in Higher Education

AJ Barse, M.Ed Instructional Technologist, ATUS Learning Systems 2024 September





I USED AI TO MAKE PARTS OF THIS Presentation

IT SAVED ME TIME.... AT TIMES

BUT THE IDEAS I SHARE ARE ALL MINE. AND THE TIME IT SAVED ME, I SPENT MAKING THIS BETTER.

Trail Guide

WHAT IS THE BUZZ ABOUT AI?

UNDERSTANDING HOW STUDENTS MAY UTILIZE AI

WHAT IS THE BUZZ ON AI AT WWU?

APPS and software using AI

HOW SHOULD I USE IT IN COURSES AND THE CLASSROOM? - AI & PLABIARISM AND POLICIES

- Pathway

Barriers / Challenges / Advantages of AI

AI Use Presentation Disclosures

Al Images generated in <u>Adobe Firefly</u> containing C2PA information Al video generated in <u>Colossyan</u> Stock Images provided by Microsoft Stock for PowerPoint



so... What do y'all know about AI?

THE BUZZ

AROUND AI

10

Data ISNT Free ...and neither is ai

That's what makes them an LLM, Large Language Model

← All Open Letters

Pause Giant AI Experiments: An Open Letter



Coalition for Content Provenance and Authenticity

About FAQ

We call on all Al labs to immediately pause for at least 6 months the training of Al systems more than GPT-4.

Signatures **1187**

Add your signature

FTC sets its sights on Al

The FTC, to its credit, has been thinking out loud about the potential sumers. In a series of blog posts released in recent months, the agen media" can make it more difficult to parse out what's real online, a p deceive people en masse.

"Evidence already exists that fraudsters can use these tools to general disseminating it to large groups or targeting certain communities or An open technical standard providing publishers, creators, and consumers the ability to trace the origin of different types of media.



Content credentials provide confident information about the image's history and origin.

Created with Adobe Firefly May 30, 2024 at 10:03 AM

Those concerns, however, fall far short of the potential society-level crisis depicted in the letter released this week by the Future of Life Institute. AI experts, both those who signed the letter and others who did not, expressed deep divisions in the level of concern about future LLM models. Though almost all concerned AI researchers agree policymakers need to catch up and draft smart rules and regulations to guide AI's development, minds are split when it comes to ascribing human-level intelligence to what are essentially extremely good guessers trained on potentially trillions of parameters.

"What we should be concerned about is that this type of hype can both over-exaggerate the capabilities of AI systems and distract from pressing concerns like the deep dependency of this wave of AI on a small handful of firms," AI Now Institute Managing Director Sarah Myers West previously told Gizmodo.

ETHICS & LEGAL DISPUTES



I NEWS 🖌 CULTURE 🔓 MUSIC Ω PODCASTS & SHOWS 🔍 SEARCH

LAW

Tennessee becomes the first state to protect musicians and other artists against Al

MARCH 22, 2024 · 5:50 AM ET

By Rebecca Rosman



Country music star Luke Bryan gives a fist bump to Gov. Bill before Lee signed a in Nashville, Tenn.

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We, the social media users, the creators and proponents of Overlai, a pioneering platform dedicated to safeguarding digital assets through innovative watermarking and opt-out mechanisms, address Meta[™] and its platforms Facebook[™] and Instagram[™], YouTube[™] / Google[™], Reddit[™], ar other synonymous big tech (FANNG: Facebook[™], Amazon[™], Apple[™], Netflix[™] and Alphabet's Google[™]), with a shared commitment to fostering responsible content sharing practices and upholding the integrity of intellectual property rights on your platforms.

Introduction

Add Your Organiza

✓opt out and I progression.

Impact onArtists andCreatives

IS AI BIASED?

The Analytical Engine has no pretensions whatever to originate anything. It can do whatever we know how to order it to perform. It can follow analysis; but it has no power of anticipating any analytical relations or truths.

> Ada Lovelace First Computer Programmer (1815–1852)

Or is it reflecting society's data it's being fed?

What defines "creative" now?

AUTOMATION Creation Generation



\$

Ada Lovelace was a pioneering mathematician and writer who is often credited with being the world's first computer programmer. She was born on December 10, 1815, in London, England, the only legitimate daughter of the poet Lord Byron and his wife, Annabella Milbanke. Ada's mother, a mathematician, was determined to provide her daughter with a rigorous education in science and mathematics.

By the age of 17, Ada had become fascinated with the work of Charles Babbage, a British mathematician and inventor who designed a machine called the Analytical Engine. Ada corresponded with Babbage and began to write notes about the machine, which demonstrated her keen insight into the potential of computing. Her work on the Analytical Engine is now regarded as groundbreaking and visionary.

In 1843, Ada published her most famous work, a set of notes on the Analytical Engine that included a description of how the machine could be programmed using what she called "the language of signs." Ada's notes are now considered to be the first computer program, and they helped to establish the idea that machines could be programmed to perform a wide range of tasks.

Ada's contributions to computing were largely forgotten for many years, but in the 20th century, her work was rediscovered and she became recognized as a pioneer of computer science. Her legacy continues to inspire women in STEM fields, and she is remembered as a visionary mathematician and writer who helped to shape the future of computing.

"Generative"

Or....

Plagiarism? Academic Dishonesty? Cheating? Copyright infringement? Evolution of draft writing?

How might students use AI?

KNOWINGLY...OF UNKNOWINGLY



HOW DO YOU THINK STUDENTS USE AI?

WHAT ARE YOUR FEELINGS ABOUT STUDENTS USING AI?



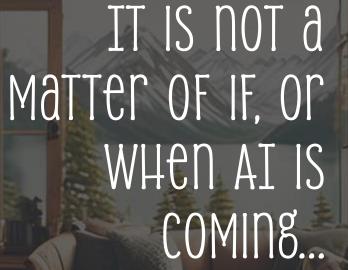
Copilot+ PCs

A new Al era begins

The fastest, most intelligent Windows PCs ever. Explore Copilot+ PCs, a new class of AI PCs and laptops.



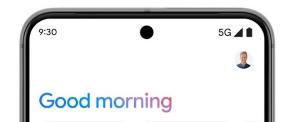
Watch the video





...IT'S already Here

Try <mark>Gemini</mark>, your new Al assistant



Apple Intelligence

Al for the rest of us.

Coming in beta this fall*



TEXT TO PODCaST

Speech Central Eleven Labs Reader warmth of returning circulation.

'Better?" the man asked, smiling.

Rudi nodded. And finally he was able to speak again. "And you, sir," he said, "you are all right?"

The man nodded. He was warming nimself now: flapping his arms and cicking his feet together. "A few minutes of sun and I'll be as good as new."

Nearby, a black boulder lay embedded in the glacial ice, and, going over to it, they sat down. The sunlight poured over them ike a warm bath. Rudi slowly flexed his aching fingers and saw that the man was loing the same. And then the man had raised his eyes and was looking at him.

'It's a miracle how you did it," he said. 'A boy of your size. All alone."

'It was nothing," Rudi murmured.

'Nothing?"

'I—I only—"

 (\mathbf{X})

1/1

'Only saved my life," said the man.

For the first time, now, Rudi was really seeing him. He was a man of perhaps

(···)

6h 51'

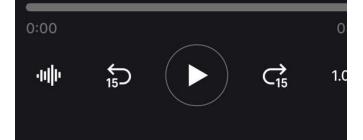
Cinderella

Brothers Grimm June 24th, 2024

CINDERELLA

by Jacob Grimm and Wilhelm Grimm

The wife of a rich man fell sick: and when she felt that her end drew nigh, she called her only daughter to her bedside, and said, "Always be a good girl, and I will look down from heaven and watch over you." Soon afterwards she shut her eyes and died, and was buried in the garden; and the little gir went every day to her grave and wept



SUMMARIZE OR WRITE THAT...

ChatGPT GrammarlyGO Bit stressed, so I'm in a pinch. I need a quick bio on Justina Brown at Western Washington University. Give me some some of the background that she has and what she's really badass at.

Sustina Brown is a Senior Instructional Designer at the Center for Instructional Innovation and Assessment (CIIA) at Western Washington University. With a Master of Education degree, she has extensive experience in instructional design and educational technology. Justina excels in one-on-one instructional design consultations, strategies for teaching and learning, and integrating educational technologies into pedagogy. She's known for her expertise in using Canvas for instructional needs and her dedication to promoting best practices in teaching and learning. She's a key figure in the Learning Systems team, collaborating closely with faculty and staff to enhance the academic experience.

			add to memory
	Subject: Re: September 16th Retu	🍰 Shorten it	
	Times New Ro 🗘 12 🗘 📥 🖌 🖪 🏾 🕹	Human Services Program Retreat September 16th, 2024, 9:30 am to 2:30 pm	
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	Objectives:		
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FRICTION is a part of the Learning process

THE BUZZ



Around at at wwu

Number: EA-01-03-G was 171.03.G

WA STATE CIO

INTERIM GUIDELINES FOR STATE EMPLOYEES

WaTech Washington Technology Solutions

Policy

Definition of Terms Used in Policies and Reports

Policy V Privacy V Security V

Services 🗸

Strategy 🗸

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IT Se

Awa

Home / Policies

/ Interim Guidelines For Purposeful And Responsible Use Of Generative Artificial Intelligence (AI) In Washington State Government

Interim Guidelines for Purposeful and Responsible Use of Generative Artificial Intelligence (AI) in Washington State Government

Number: EA-01-03-G was 171.03.G

Purpose

The rapid advancement of generative artificial intelligence (AI) has the potential to transform government business processes, changing how state employees perform their work and ultimately improving government efficiency. These technologies also pose new and challenging considerations for implementation. These guidelines are meant to encourage purposeful and responsible use of generative AI to foster public trust, support business outcomes, and ensure the ethical, transparent, accountable, and responsible implementation of this technology. This document serves as an initial framework for the responsible and ethical use of generative AI technologies within the Washington state government. Recognizing the rapidly evolving nature of AI, these guidelines will be periodically reviewed and updated to align with emerging technologies, challenges, and use cases.

Number: EA-01-03-G was 171.03.G

WA STATE CIO

INTERIM GUIDELINES FOR STATE EMPLOYEES (5 Pages)

Disclosure and Attribution

- Al-generated content used in official state capacity should be clearly labeled as such, and details of its review and editing process (how the material was reviewed, edited, and by whom) should be provided. *(Transparent authorship)*
- State personnel should conduct due diligence to ensure no copyrighted material is published...this includes content generated by AI systems, which could inadvertently infringe copyright.

Sensitive or Confidential Data

• Agencies are strongly advised not to integrate, enter, or otherwise incorporate any non-public data (non-Category 1 data) or information into publicly accessible generative AI systems (e.g., ChatGPT). *(Personal Identifiable Information)*

Compliance with Policies and Regulations

 <u>RCW 42.52.050</u> (the state's ethics law) : "No state officer or state employee may disclose confidential information to any person not entitled or authorized to receive the information," including commercial generative AI tools freely available in the market. ...generative AI system may result in creating a public record under Washington state's Public Records Act.



ATUS | Academic Technology and User Services

MAKE WAVES.

Home New to Western Find Answers ~ Get Help

Our Offices 🗸

FAQS: GENERATIVE AI GUIDELINES

Updated August 16, 2024

ATUS and Learning Systems are exploring how generative artificial intelligence tools, such as ChatGPT, are being used in higher education. We are coordinating with relevant offices and entities as we continue to learn more about the implications for teaching, learning, technology, policies, and procedures. See also:

- Academic Uses of AI for Students
- AI and Chatbots Teaching Considerations (TLCo-op)
- Evaluating Student Work when AI is Suspected
- Pathways for Academic Use of AI at WWU: Flowchart
- See also: AI Detection at Western and Plagiarism Detection at Western



Generative AI for Students and Educators

Ready to harness the risks and rewards of generative artificial intelligence (AI)? This technology has revolutionized teaching and learning...

Continue reading Congrative Al for

WWU Resources

- Academic Honesty Office
 - Academic Honesty Violation Information for Instructors
 - Academic Honesty Violation Information for <u>Students</u>
- ATUS and Center for Instructional Innovation
 - <u>Academic Uses of Al for Students</u>
 - <u>AI and Chatbots Teaching Considerations</u> (TLCoop)
 - FAQs: Generative AI Guidelines
 - Pathways for Academic Use of AI at WW: Flowchart
 - Plagiarism Detection at Western | AI Detection at Western
- Disability Access Center
 - DAC Resources for Faculty
- Evaluating Student Work When Al is Suspected
- AJ Barse "Digital Alchemy" WWU Wordpress Blog

WWU DATG

🎿 Apply 🛇 Give 📟 Report Bias 😝 myWestern 🚔 Jobs



Descriptive Alt Text Generator

Home Generate Alt Text Contact Us

DESCRIPTIVE ALT TEXT GENERATOR (DATG)

Why Did We Create the DATG?

The intent of the design of the DATG, at its inception, was to create a tool that could help all content creators across Western Washington University (WWU) create more effective and engaging alt text without a bunch of frustration during the alt text creation process.

Please be aware that the results from these AI engines we use might not always be correct. Consider all responses from AI engines as a subjective idea rather than an objective truth. Verify your results from the AI engines before publishing results to the public.

How the DATG works

Upload an image file from your computer or link to an image. Linking to an image on the web is still a work in progress.

Quick Engage with the DATG

- · Sign In: Open https://datg.wwu.edu/ in your favorite browser.
- Generate Alt TextNavigate to the "Generate Alt Text element in the main navigation menu above."
- File Upload: Drag and drop a file from your device into the file area or select the 'Choose File' button to choose a file to evaluate.
- Link To Image: Input a direct link to an image on the web. This is a work in progress. We'll follow up with updates as we explore and experiment more.

https://datg.wwu.edu/Generate.html



Descriptive Alt Text Generator

Home Generate Alt Tex

>

GENERATE ALT TEXT

Input An Image

File Upload

Name of File, please.

Choose File No file chosen

Advanced Options

► A place for individuals to store their individual settings.

Evaluate Selected Image

Results

SOFTWare in AI

and stream out at



ATUS | Academic Technology and User Services

MAKE WAVES.

Home New to Western Find Answers v Get Help Our Offices v

ACADEMIC USES OF AI FOR STUDENTS

Updated 4/24/24

Note

Students must have absolute clarity from their instructors of appropriate use prior to using AI generators for course work.

Generative AI Product Comparison

The table below shows several free AI generator tools, whether they require accounts, their limits and key characteristics. Products referenced may be used at your own risk and without specific endorsement by WWU.

Comparison Elements	ChatGPT by OpenAl	Copilot by Microsoft (a.k.a. Bing Chat)	Gemini by Google	Designer by Microsoft	FireFly by Adobe
Туре	Text	Text generator;	Text	Image	Image
	generator;	internet	generator;	generator;	generator and

https://atus.wwu.edu/academic-uses-ai-students

AT USage and COMParison CHart

CANVAS LTT'S AT NUTRITION Facts

Al Nutrition Facts

Canvas Smart Search

Description

Natural language search of course content for students and educators.

Cohere Embed Multilingua	Base Model
No	Trained with User Data
Course	Data Shared with Model
stored in the Canvas database.	Course content is indexed by the model and
	Privacy & Compliance
	Data Retention
	Data is not stored or reused by the model.
Does Not Log Data	Data Logging
NORAM, EMEA, APAC, LATAM	Regions Supported
soon as AWS supports the required	Canada is not currently supported, but will b model in its data centers there.
Not Exposed	PII
s intentionally sent to the model.	PII in course content may be indexed, but no
	Outputs
Yes	AI Settings Control
Yes	Human in the Loop

Expected Risks

Search results may be incorrectly sorted or may not be relevant to the search term.

Intended Outcomes

Students are able to quickly find answers to questions, and instructors are able to quickly navigate their courses.

Instructure has developed nutrition fact labels for AI-enabled products to increase transparency and improve decision making.



Al Nutrition Facts





N
No
Course
Logs Data
w and reuse.
NORAM, EMEA, APAC, LATAN
Not Exposed
o PII is intentionally sent to the
Yes
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m with additional instructions.

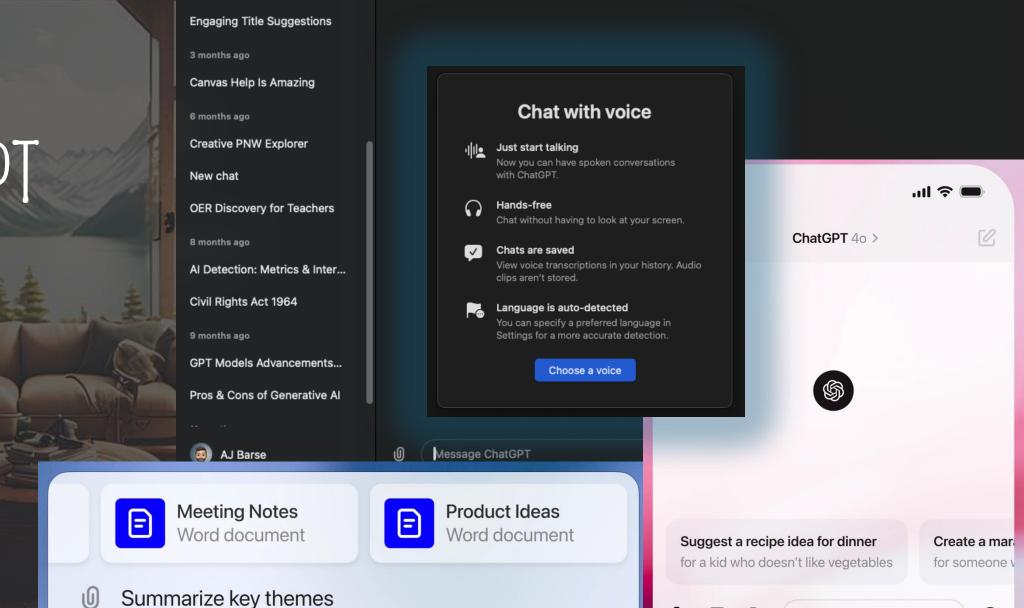
Intended Outcomes

Summaries allow discussion topics to be used in large-format courses and other environments where discussions were previously infeasible.

Instructure has developed nutrition fact labels for AI-enabled products to increase

•••

Q Search



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Message

ChatGPT >

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CHATGPT WEB & APPS

Adobe Podcast BETA



Adobe Podcast (beta)

Mar 23, 2023 — by AJ in Al, Instructional Design, Tech Research

The creative space has been heating up in recent weeks again with Adobe "FireFly" project and Microsoft "Designer". Putting aside the craze that was algorithmic generative images that were tied to blockchains, eg NFTs, DALLE and DALLE2 arguably started the renaissance that is currently generative-Al-based image creation. Services like MidJourney then taking the fidelity of... what you're able to do is record directly into Adobe podcast, and then you get a transcript · like we normally would for accessibility ·

• Or for just a general transcript of what was said on your show. •

• reason.

6.0

Except now • that is the method that you edit. You actually go in and edit by • the word or by the • break • in the actual transcript. • It's an interesting • take on editing • I haven't seen elsewhere, • and it's a cool use of artificial intelligence in the case of using it in • audio podcasting. •

• Now you're probably thinking, Well, AJ, what's the downside? • Because there's going to be one. It's you. •

Yep, • you're right. • There is. • So the thing about the Adobe podcast Beta that still • is a lot



Enhance Speech

Remove noise and echo from voice recordings



Studio BETA Record, edit, and enhance in your browser



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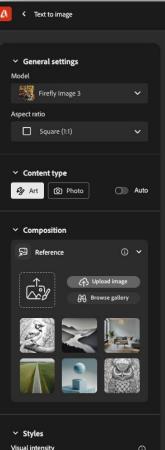
Mic Check Fix microphone issues before recording

ADOBE Creative CLOUD

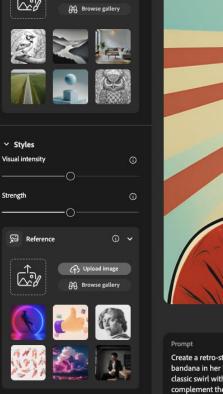
Get creative with Adobe Firefly

A heavenly sky full with etherial, misty fluffy clouds with sparkles. Clear, bright blues, pur

ADOBE Creative CLOUD



📑 Generate



SE Effects (1)

All Popular Movements Themes



Create a retro-style postcard illustration featuring a woman from the 1950s enjoying an ice cream cone. She should have fair skin and wear a polka-dotted red bandana in her hair. Her makeup should include bright red lipstick, and she should be wearing vintage-style sunglasses from that era. The ice cream should be a classic swirl with a waffle cone. Use bold, flat colors and clean lines to evoke a nostalgic 1950s feel. Include a stylized sunburst background in pastel tones to complement the retro theme.

Clear 🛛 😻 Art × 🛛 🌆 Cartoon ×

후 🏢 🌒

✓ Arial

← → Paragraph

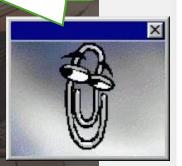
Re

Cit

WOLDS...

CoPilot GrammarlyGO ChatGPT

Hi, AJ, It looks like you are writing an essay, do you need assistance?



Implications of AI in Teaching and Learning

What I wrote

What I AI and machine based learning modeling engines such as ChatGPT and Dall-E 2 has taken mainstream media by storm in recent months. Education has been trying to find, or fight, its uses in the classroom. Much like any new technology, it is a pandora's box that is already open and so we need to work around it and even leverage it for teaching and learning. This session is meant to ignite the discussion on where it can be helpful for learning, where policy can help set expectations, and even avenues where it could be a tool for teaching. It will also present a futurist view on where the technology could be adapted for the digital educator.

<u>U</u> <u>A</u> \checkmark <u>A</u> \checkmark

What QuilBot (with rephrasing)

In recent months, mainstream media has been captivated by artificial	intell	igence (AI) and mad	chine-
based learning modeling engines like ChatGPT and Dall-E 2. In the $\boldsymbol{\varepsilon}$	Ð	Paraphrase	₩+Alt+P
attempting to find or combat its uses. It's a Pandora's box that's alrea	=	Summarize	₩+Shift+S
technology, so we need to find ways to get around it and even use it	*	Suggest Text Ctr	+Shift+Spacebar
to teaching and learning. This session aims to spark a discussion ab			
teaching tool, where policies can help set expectations, and where it	*	Cut	¥€+X
Additionally, a futurist perspective on how technology might be modif	D	Сору	₩+C
will be presented.	¹⁰	Paste	S€+V
	[1]	Paste without formatti	ng #l+Shift+V
What I submitted		Search 'In recent mont	t' ⊮+Shift+F
In recent months, mainstream media has been captivated by artificia	+	Add Citation	೫+Shift+C
🚔 🗐 Paraphrase 🚍 Summarize 🦑 Suggest Text	371	Words ^	2)

ZOOM AI COMPANION

Zoom Meetings 9:20 AM

Meeting Summary with AI Companion

Marketing Sync

Summary

Improving Brand Awareness with new Marketing Strategy

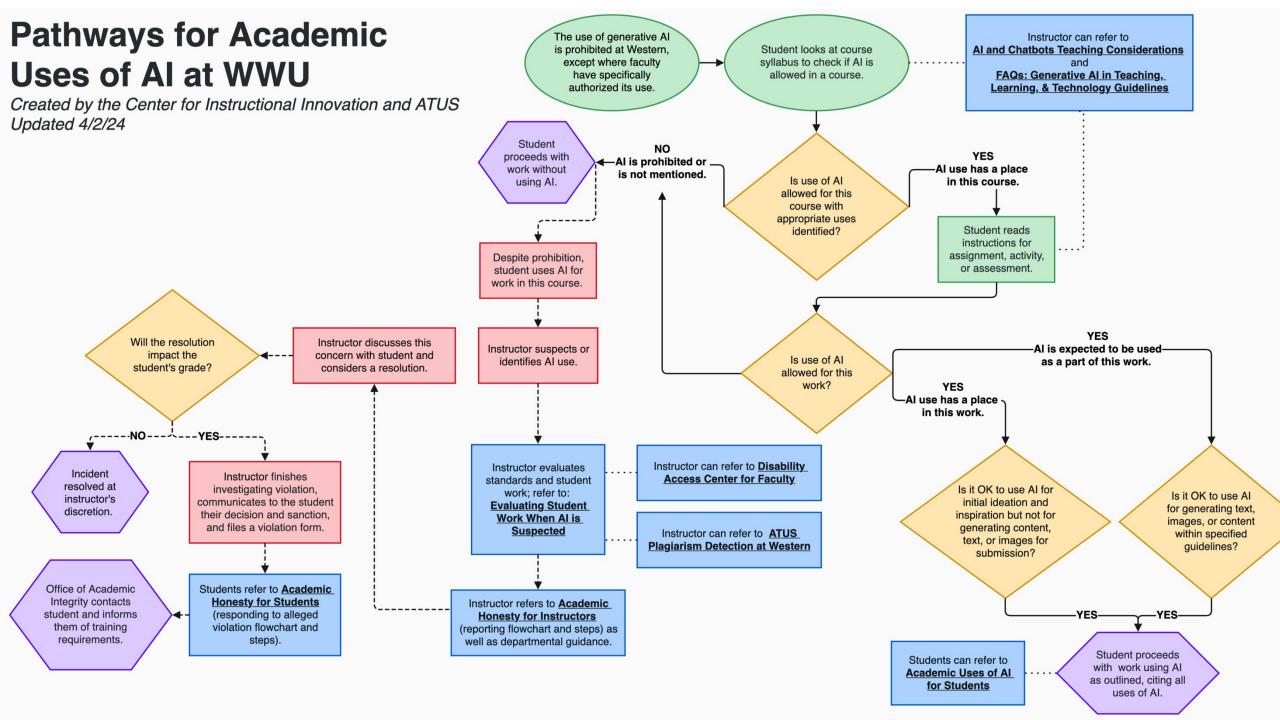
Julie met with Rob and Max to discuss the current state of the business and explore future plans to propel the company forward. Julie provided a comprehensive overview of the existing marketing strategy. With compelling data, she showcased the remarkable success the current strategy had achieved to boost brand awareness and drive impressive sales figures. Rob and Max were excited and appreciative of the outcomes that were presented. Next Steps

- Julie to incorporate feedback and send newest version of the marketing strategy to Rob and Max tomorrow.
- Schedule follow up meeting next week to discuss competitive landscape.

View More

How should educators use, or consider using AI, in the classroom?

Product VS Process OF Learning



1. <u>Practical Responses to ChatGPT</u>, Montclair State Univ. Al...Considerations for Course Design - Illinois State Unv.

Design considerations

Provide clear academic honesty expectations.

Refer to University policies and your own in your syllabus & assignments. Provide a statement:

"Use of an AI text generator when an assignment does not explicitly call or allow for it without proper attribution or authorization is plagiarism."1

Consider projects that are multi-modal or collaborative.

Ask for process: drafts, notes, show your work. Incentivize showing the learning process/struggles.

Have students annotate existing content to show their thinking.

Watch for style & citation inconsistencies.

Be open and have conversations with your students **and be up front within your syllabus**

RESHAPING PRACTICES ...to "discourage" use of Al generation services

Expression of purpose, the value, in writing, explaining why things matter to them.

- Incorporate critical AI literacy to recognize its weaknesses and human strengths.
- Tie course content to ethical concerns or to examples from students' personal lives and their own growth.
- When students are desperate or confused, they are more likely to cheat. Provide a framework for success and ensure workload is appropriate.

Al...Considerations for Course Design - Illinois State Univ. Artificial Intelligence Writing - UCF ChatGPT Advice Academics Can Use Now, Inside Higher Ed.. (multiple authors). Adapt as Technology Adapts

Reevaluate the Use of Class Time <u>The flip teaching model !!</u>

> Emphasize frequent, short writing vs. lengthy in-class papers.

> > Assess During Class (handwriting, verbal, etc

Disincentivize Cheating

Reevaluate the Purpose of

Writing

Use Proctoring for High Stakes Exams

Using Al and Chatbots as a Learning Tool

Customizing Learning

Incorporating AI/Editing

- Use as "online tutors," with pre-tested prompts, to ensure equitable starting points in terms of prerequisite knowledge.
- Use as an extra challenge after engaging in a writing prompt to get virtual feedback.
- Have students Incorporate an AI quote into writing, cited as 3rd party AI content.
- Have students create an effective prompt for an Al generator and then use track changes to show heavy editing of the generated text.
- Use as a way to break "writer's block," provide feedback on written copy or code, to help create a title with rephrase tools, or do a citation search for additional references.

• Have students grade an AI-generated essay, providing feedback and analysis.

Analysis

- Have a chatbot generate several conclusions to a conundrum or set of data, possibly using different voices/tonality and analyze them during class discussions.
- Have students write an effective prompt to create an Al image or video to represent their thinking.

Creativity

- Explore ways to use bots a virtual labs or virtual field trips.
- Have groups/pairs gather Al-generated topics, factcheck, add to, and share out to class.

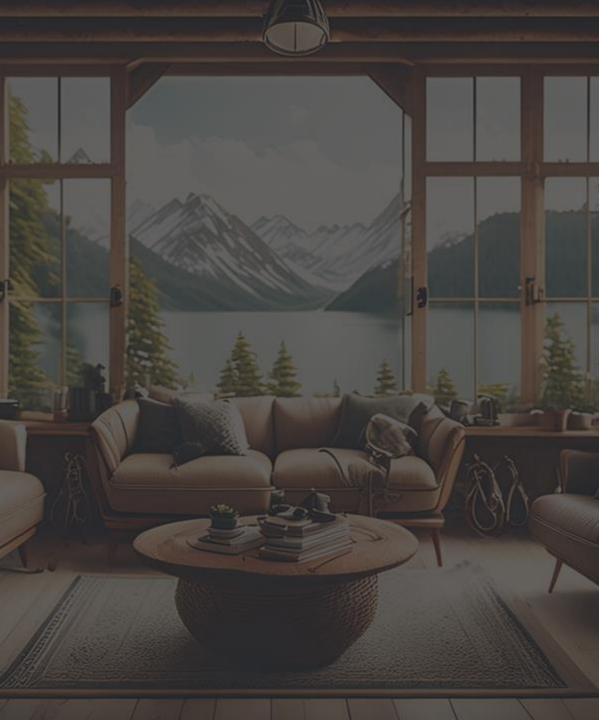
Artificial Intelligence Writing - UCF Embrace the Bot in the Classroom - Medium Al...Considerations for Course Design - Illinois State Unv.



Barritrs... Challenges... Advantages



And how do we balance them?



Using AI in Teaching

- Using image generators
 - Assist students visualize writing prompts
 - Generate images for presentations
- Co-writing / writing coach
- Writing critique
- Debate | Fact finding
- Podcasting
- Al video editing based on student screen-writing
- Virtual sets

Al is... and will be... in the workplace (it already is)

Technology Literacy / AI Literacy and Competency

HUMAN ON THE LOOP

VS

HUMAN IN THE LOOP

AI as a Frontend To Data

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default	
- New thread	×
New thread	×
+ New Thr	ead
器 CSV	
🔠 OER-Bio	Chem
88 ^T	
器 WWU on (Ollama



a).)

what are the latituyde and logitude of this data?

4)° 🗘

Based on the provided data sheets, I can help you with that!

CONTEXT 1: This context provides information about the latitude and longitude of a mark.

According to the data sheet, the coordinates for DN8535* (one of the stations mentioned) are:

• Latitude: 18 05 37.87 (N)

• Longitude: 065 28 16.89 (W)

These values are listed under "GL0314*" in the context information. Let me know if you'd like to know the coordinates for any other station! $\square \ \mathscr{O} \ \widetilde{\sim} \ \bigtriangleup$

Show Citations

Şend a message	
/ @ T	

And data-driven, or predicted, analytics







In any conflict between humanity and technology, humanity will win.

Albert Einstein

Wicked smart with cool hair

AJ Barse M.Ed. Instructional Designer Western Washington University

AJ.Barse@wwu.edu http://wp.wwu.edu/ajbarse