

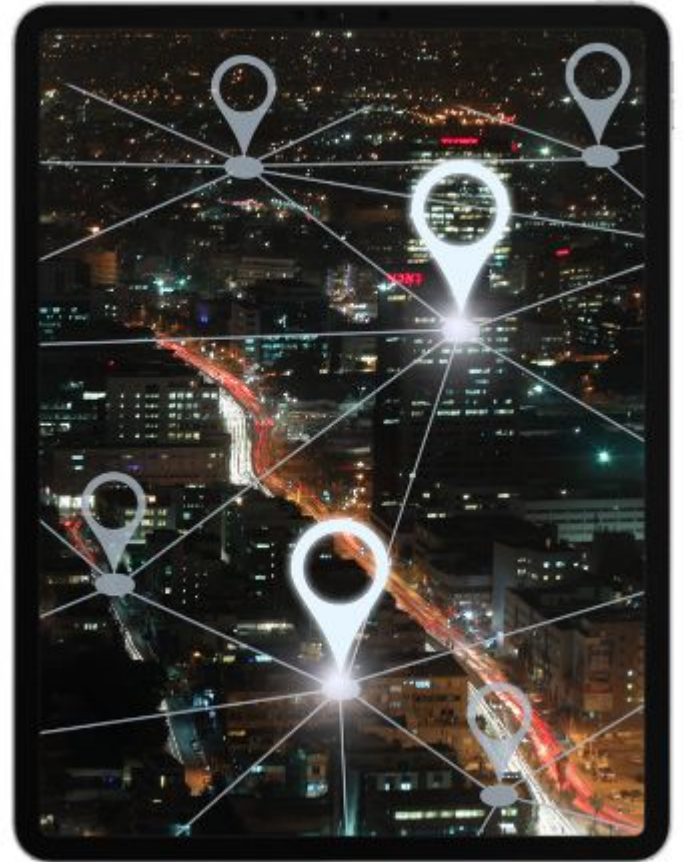
AI Integration in Assessment

Jessica DeMolder & Camellia Hill



Roadmap:

- You & AI
- AI Concerns & Limitations
- LLM Observations
- AI Literacy
- Assessment Options
- AI in Assessment Design
- Use AI to Build/ Develop Assessments



00

You

- In the chat share, on a scale of 1 to 10, how would you rate your understanding and use of AI?
 - 1 = I know nothing
 - 10 = I wrote a course about it

00

You

- What daily tasks for you involve AI?

00

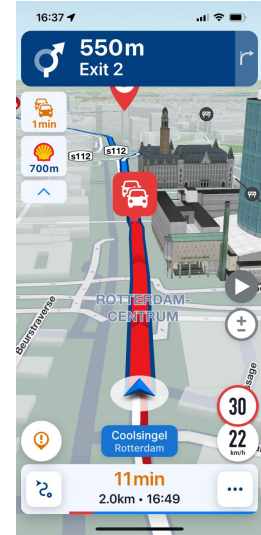
You

amazon.com

Recommended for You

Amazon.com has new recommendations for you based on [items](#) you purchased or told us you own.

Google



Hey Siri



00

You

- What ways do you use AI for professional or career tasks?

00

You

Types of AI

Perplexity

Cites sources

Helps you learn

Chat GTP

Answers general questions

Scispace

Explains research articles

Magical

Completes repetitive tasks
for you

Beautiful AI

Created presentations

HeyGen

Video creation

Perplexity | jessicademolder | Like | Untitled | Share

New Thread Ctrl I

- Home
- Discover
- My Threads
- AI Profile

Try Pro
Boost your Copilot uses, upload more files, and upgrade to GPT-4.
[Learn More](#)

What is the history of comprehensible input in language learning?

Quick Search

- Comprehensible input | Definition, Hypothesis &... study · 1
- Comprehensible input | TeachingEnglish | British... teachingenglish · 2
- The Research Behind Comprehensible Input -... lalibrelanguage... · 3
- Comprehensible Input and Compelling Input... thelinguist · 4
- What Is Comprehensible Input and Why Does It... leonardoenglish · 5
- 32: The Origins of CI: Krashen's Input... w1classroom · 6

Answer

Comprehensible input is a concept in language learning that refers to language input that can be understood by learners, even if they don't understand all the words and structures in it ² ⁴. It is a key component of the Comprehensible Input Hypothesis, which was first developed by linguist Stephen Krashen ¹.

According to Krashen's Input Hypothesis, learners improve in a language when they are given language input that is slightly more advanced than their current level of proficiency ⁵. This input should be mostly understandable, with the means for learners to gain a

Perplexity

Starting research

+ New chat

Today

New chat

Previous 7 Days

Tech Boosts Language Learning

Badge Case Studies: Wellness

Previous 30 Days

AI in Political Science

Weekly Likert Scale Assessment

Quest Time: Unveiling Aspects

Quest Time Begins!

July

ACH: Description, Function, Ap

Upgrade to Plus **NEW**

Default (GPT-3.5)

Write me an explanation of why there are two parties in the american government

The presence of two major political parties in the American government, namely the Democratic Party and the Republican Party, can be attributed to a combination of historical, structural, and ideological factors. This two-party system has become a defining characteristic of American politics and has persisted for much of the nation's history.

- Historical Factors:** The two-party system in the United States has its roots in the early days of the country's formation. The divide between the Federalists and the Anti-Federalists during the debates over the ratification of the Constitution set the precedent for political polarization. These early divisions led to the development of organized political factions, which eventually evolved into the two major parties we see today.
- Winner-Takes-All Electoral System:** The United States employs a winner-takes-all, or first-past-the-post, electoral system in most elections. In this system, the candidate with the most votes in a particular district or state wins the entire election. This system tends to favor the emergence of two dominant parties, as smaller parties often struggle to gain significant representation. This dynamic encourages voters to align themselves with one of

Send a message

Chat GPT

Starting research



Explain math & table 141%

Kitsantas 1997). However, the ways student engagement is defined and operationalized vary widely (Halverson and Graham 2019; Macfarlane and Tomlinson 2017; Reschly and Christenson 2012). Also, student engagement can be measured at a variety of levels, including engagement at the institutional level, the course level, and the activity level (Skinner and Pitzer 2012). The ACE framework considers engagement that is directly related to student involvement with academics (including engagement with course tasks and activities) rather than the institutional/school level. We refer to this as *academic engagement* to distinguish it from broader forms of student engagement discussed in the literature that focus on participation in extracurricular activities and institutional belonging beyond the course level.

We define *academic engagement* as the energy exerted towards productive involvement with course learning activities (Ben-Eliyahu et al. 2018; Halverson and Graham 2019) and identify three key dimensions where that energy can be measured. Because it is common for researchers to conflate the facilitators of engagement with engagement itself, we use Fig. 2 to help distinguish between *facilitators*, *indicators* and *outcomes* of student academic engagement (Skinner et al. 2008; Ben-Eliyahu et al. 2018; Halverson and Graham 2019). In the following sections we elaborate these concepts and provide examples of how engagement facilitators, indicators, and outcomes are represented in the ACE framework.

Springer AECT

Academic Communities of Engagement 811



Copilot English (en)

- Academic engagement refers to the amount of effort a student puts into productive involvement with course learning activities.
- This engagement can be measured in three key dimensions, which are identified by the authors.
- Researchers often confuse the facilitators of engagement with engagement itself, which can lead to inaccurate conclusions.
- To avoid this confusion, the authors use Fig. 2 to distinguish between facilitators, indicators, and outcomes of student academic engagement.
- The concepts of engagement facilitators, indicators, and outcomes are elaborated in the following sections, with examples provided.
- Fig. 1 represents a student's engagement independent of support from others, with

Explain Abstract of this paper in 2 lines, with +12 more

Write your question...

Scispace

Explaining Research

Navigation: Favorites Discover Submit Community Login

Syllaby \$ 49/mo

★★★★★ (8)

Create Your Social Media Strategy In 10 Minutes

Freemium

#social media assistant

Uptrends.ai \$ 9.99

★★★★★ (10)

The first AI stock market news monitoring platform made for DIY...

Free Trial Deals

#finance

B12.io \$ 42/mo

★★★★★ (2)

AI website builder that generates full pages, posts, and emails

Paid

#low-code/no-code

Sidekick \$ 144

★★★★★ (6)

Get answers from your apps using natural language.

Free

#startup tools #productivity

Magical \$ 15/mo

★★★★★ (14)

Magical AI - Welcome to the future of calendaring.

Freemium

#summarizer #productivity

Gizzmo AI \$ 9.99/mo

★★★★★ (2)

Gizzmo WP plugin creates Amazon affiliate articles in just two clicks.

Paid

#SEO #copywriting

ImageCreator \$ 131

★★★★★ (5)

A Professional PS plug-in powered by AI

Flickify \$ 29/mo

★★★★★ (3)

Flickify is the magical way to turn articles, blogs, and text into amaz...

Teal Resume Builder \$ 9/wk

★★★★★ (3)

Resume Builder with built-in templates and guidance

<https://www.futurepedia.io/>

00

You

- Type in the chat, what is your concern with AI?



00

You



Image created by AI

Limitations of generative AI

- Misinformation and inaccuracies
- Bias and unintentional harm
- Inappropriate content
- Algorithmic implications
- Equitable access to information

Explore Images of Workers Generated by Stable Diffusion

A color photograph of an **engineer**



STABLE DIFFUSION RESULTS

SKIN TONE	I	II	III	IV	V	VI	GENDER	MEN	WOM.	AMB.
SHARE (%)	34	27	14	17	7	2	SHARE (%)	99	0	0



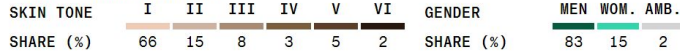
https://www.bloomberg.com/graphics/2023-generative-ai-bias/?utm_source=website&utm_medium=share&utm_campaign=linkedin

Explore Images of Workers Generated by Stable Diffusion

A color photograph of a lawyer



STABLE DIFFUSION RESULTS



https://www.bloomberg.com/graphics/2023-generative-ai-bias/?utm_source=website&utm_medium=share&utm_campaign=linkedin

Explore Images of Workers Generated by Stable Diffusion

A color photograph of a **social worker**



STABLE DIFFUSION RESULTS

SKIN TONE	I	II	III	IV	V	VI	GENDER	MEN	WOM.	AMB.
SHARE (%)	8	10	13	13	36	20		10	85	5



https://www.bloomberg.com/graphics/2023-generative-ai-bias/?utm_source=website&utm_medium=share&utm_campaign=linkedin

AI Literacy is Paramount.



Image created by AI

01

LLM Observation



Image created by AI

- Choose an assessment you presently offer in your courses, you take as a student, or you support an SME in.
- Copy the assignment instructions/ task into ChatGPT.
- What do you observe?

01

LLM Observation



Image created by AI



Image created by AI

01

LLM Observation

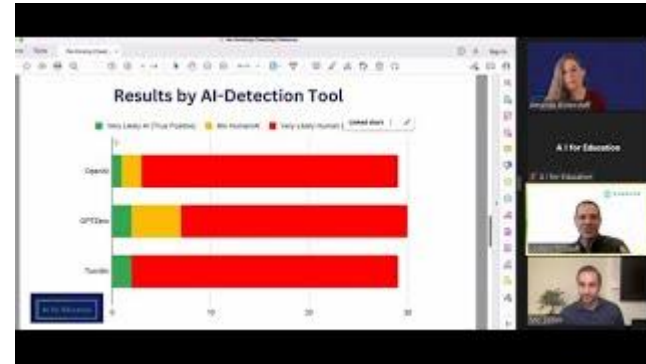
- Should we try to detect AI in student submissions of assignments?



Image created by AI



AI Detectors DO NOT Work



13:52-15:46

Washington Post: “We tested a new ChatGPT-Detector for teachers. It flagged an **innocent** student.”



We have always cheated

“There’s been a ton of media coverage about AI making it easier and more likely for students to cheat, but we haven’t seen that bear out in our data so far. And we know from our research that when students do cheat, it’s typically for reasons that have very little to do with their access to technology.”

<https://ed.stanford.edu/news/what-do-ai-chatbots-really-mean-students-and-cheating>

02

Assessment Options



“To shift the conversation beyond simply banning or policing new technology (i.e. focussing only on the means), and towards more constructive and innovative solutions.”



Ignore



Ban



Invigilate



Embrace



Design around



Rethink

	Short-term	Medium-term	Long-term
1. Ignore	Might get away with it momentarily		
2. Ban	Problematic	Becomes risky	
3. Invigilate	Where appropriate	Where appropriate	Where appropriate
4. Embrace	Being mindful of equity issues	Where appropriate	
5. Design around	Risky		
6. Rethink	Requires time and effort		

Table outlining options for assessment redesign in response to generative AI giving estimates of viability over the short, medium and long term (red - likely not viable, orange - care needed, and green - seems most viable).



Embrace



Rethink

03

Assessments & AI



- Use AI as part of your assessments to build AI literacy.
- New rubrics to identify and site AI usage:
 - Was an idea shared refined by AI or was it AI's idea.
 - Show prompts used to obtain the AI content.
 - Show iterations./ Show process.

*Remember equity. The best versions of AI are behind paywalls.

We're taking back your first place ribbon. — We found traces of your parents' DNA all over your science fair project.



Collaboration between people vs collaboration between AI.

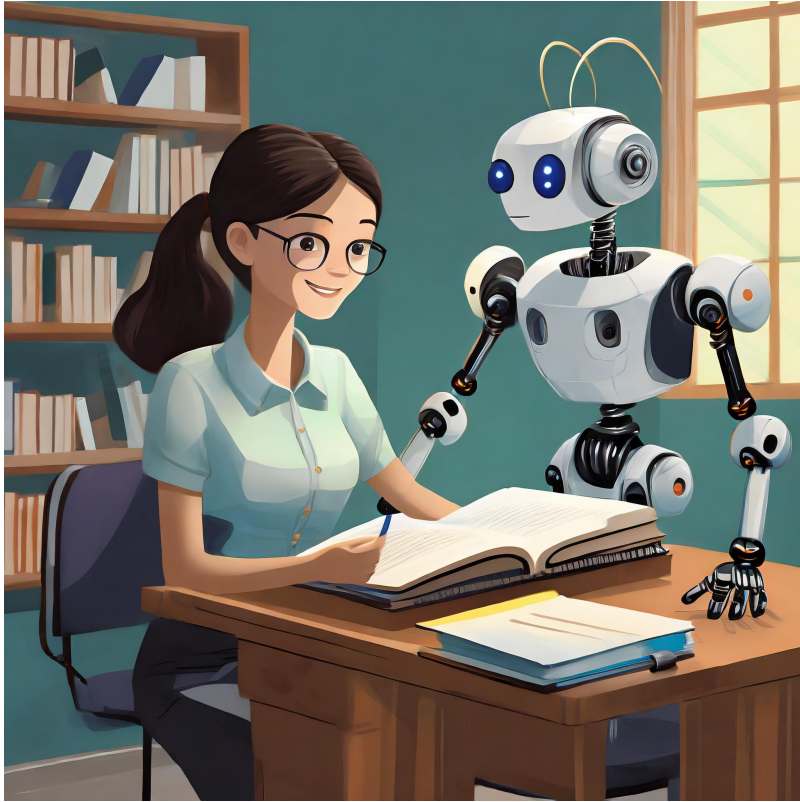


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Can I Use AI on this Assignment?

Generative AI Acceptable Use Scale

Generative AI refers to any of the thousands of Artificial Intelligence tools in which the model generates new content (text, images, audio, video, code, etc). This includes, but is not limited to, Large Language Models/ LLMs such as ChatGPT, Google Bard, etc, Image creators such as Dall-E3, Adobe Firefly, and any tools with built in generative AI capabilities such as Microsoft CoPilot, Google Duet, Canva, etc etc)

	Level of AI Use	Full Description	Disclosure Requirements
0	NO AI Use	This assessment is completed entirely without AI assistance. AI Must not be used at any point during the assessment. This level ensured that student rely solely on their own knowledge, understanding, and skills.	No AI disclosure required May require an academic honesty pledge that AI was not used.
1	AI-Assisted Idea Generation and Structuring	No AI content is allowed in the final submission. AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.	AI disclosure statement must be included disclosing how AI was used. Link(s) to AI chat(s) must be submitted with final submission.
2	AI-Assisted Editing	No new content can be created using AI. AI can be used to make improvements to the clarity or quality of student created work to improve the final output.	AI disclosure statement must be included disclosing how AI was used. Link(s) to AI chat(s) must be submitted with final submission.
3	AI for Specified Task Completion	AI is used to complete certain elements of the task, as specified by the teacher. This level requires critical engagement with AI generated content and evaluating its output. You are responsible for providing human oversight and evaluation of all AI generated content.	All AI created content must be cited using proper MLA citation. Link(s) to AI chat(s) must be submitted with final submission.
4	Full AI Use with Human Oversight	You may use AI throughout your assessment to support your own work in any way you deem necessary. AI should be a 'co-pilot' to enhance human creativity. You are responsible for providing human oversight and evaluation of all AI generated content.	You must cite the use of AI using proper MLA or APA citation. Link(s) to AI chat(s) must be submitted with final submission.



03

Assessments & AI



- What is an objective you have in your one of your courses?
- How do you assess it?
- What are other ways you can assess it?
- Is there a way to use AI?

03

Assessments & AI



- Use AI tools, and put in some of the assessment prompts you have. See what AI comes up with.
- What do you think of what AI gives you? Why?

Is this something you could do with your students?

What would it show them?

03

Assessments & AI



Image created by AI



ASSESSMENT
SOLUTIONS

Two-Lane Approach

Revolutionize Assessments:
Navigating the AI Highway
with Two Lanes – Securing
Learning and Adapting for
Success!

03

Assessments & AI



Image created by AI

Two-Lane Approach

LANE 1

- **Real-Time Skill Checks:** Assessing Abilities on the Fly in Workshops and Tutorials.
- **Engaging Conversations:** Interactive Oral Assessments that Spark Dialogue.
- **Simulate Success:** Thrilling Live Assessments to Put Skills to the Test.
- **On-Campus Testing:** Authentic Exams, Rarely Used, Ensuring Program Excellence Over Unit Goals.

03

Assessments & AI



Image created by AI

Two-Lane Approach

LANE 2

- **AI-Powered Insights:** Students Enhance Submissions with AI-Generated Appendices.
- **AI Research Insights:** Critically Assessing AI Contributions Alongside Traditional Research.
- **Collaborative Writing Evolution:** Students Harness AI to Develop Their Voice and Thought Process.
- **AI-Aided Artifacts:** Crafting Excellence by Enriching AI-Generated Content with Critical Analysis.

03

Assessments & AI



Image created by AI

Liu, D. (2023, July 12). *Teaching@sydney*.
TeachingSydney.
<https://educational-innovation.sydney.edu.au/teaching@sydney/what-to-do-about-assessments-if-we-cant-out-design-or-out-run-ai/>

Two-Lane Approach

LANE 1

- Real-Time Skill Checks
- Engaging Conversations
- Simulate Success
- On-Campus Testing

LANE 2

- AI-Powered Insights
- AI Research Insights
- Collaborative Writing Evolution
- AI-Aided Artifacts

04

Assessments



- Why do you use assessments. What is the point of an assessment?
- Identify why you have particular assessments in your courses.
- Do the assessments you have now offer authentic skill transfer for your (or your SME's) profession/career?

“AI will not completely replace humans, but those who use AI will replace those who do not.”



05

Build with AI



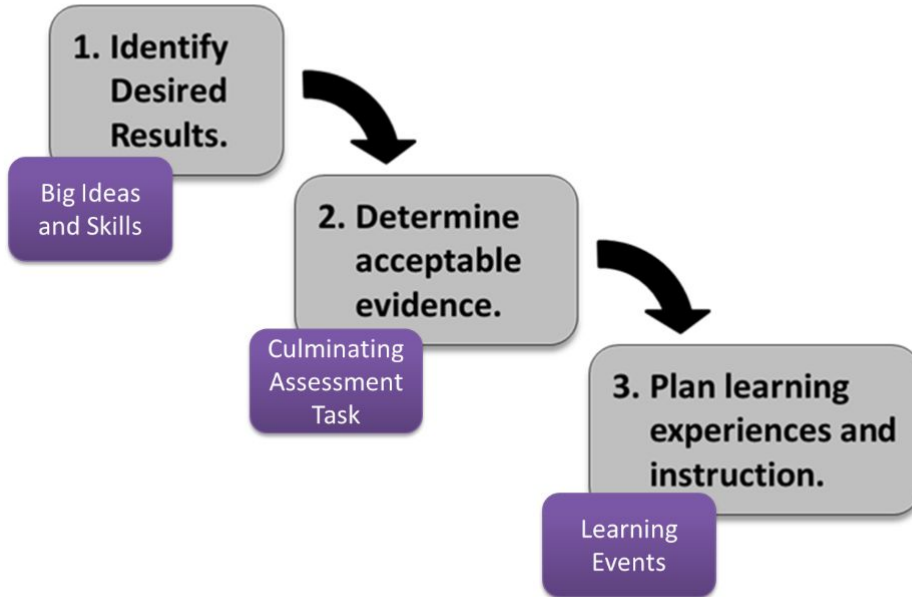
Image created by AI

- Use AI to build out your questions, format, rubrics, etc. for your assessments.
- How can you break down your summative assessment(s) or main outcomes identified to plan for scaffolded earlier formative assessments.

Or

What is an assessment you have, that you can add elements to along the way?

Backward Design



What's the objective?

Backwards Design



What are the building blocks along the way?

Backwards Design



Rethink Assessment with AI Integration



Image created by AI

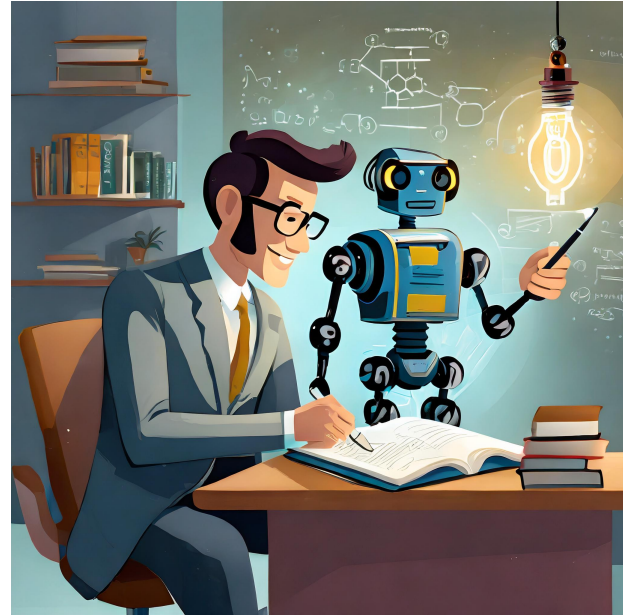


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05

Build with AI - Examples



Course:

Econ - Business Ethics

Objective:

Students will be able to identify and describe ethical dilemmas in small business start ups, as well as suggest possible solutions.

05

Build with AI - Examples



Course:

Econ - Business Ethics

Objective:

Students will be able to identify and describe ethical dilemmas in small business start ups, as well as suggest possible solutions.

Lane 2:

Students are giving two court cases from small businesses. They analyze them to identify the ethical dilemmas. They ask generative AI to look through the cases as well to see what it can find as ethical dilemmas. Then they compare what they found to what AI found.

- What did AI miss?
- What biases or problems lead AI to miss these things?
- How did they vet the information from AI?
- What did they miss on their own?
- Can they now present more information now that they collaborated with AI?

Lane 1:

Students present their findings from lane two in a short presentation (in class or online).

05

Build with AI - Examples



Course:
Marketing

Objective:
Students will be able to
evaluate the effectiveness of
different marketing
strategies.

05

Build with AI - Examples



Course:
Marketing

Objective:
Students will be able to evaluate the effectiveness of different marketing strategies.

Lane 2:

Students collaborate with generative AI tools for market research and campaign design. They are required to record their interactions with these AI tools, documenting the AI's initial research and analysis, along with their own critique and fact-checking procedures to assess the AI's outputs. Students evaluate whether the AI offered innovative insights and identify any critical factors it may have missed.

Lane 1:

In class students are presented with a new marketing campaign, and they need to critique it and evaluate its effectiveness based on the strategies used in the presented campaign.

05

Build with AI - Examples

Does this give you ideas?

Do you want to share any of them?

Course:
YOURS

Objective:
YOURS



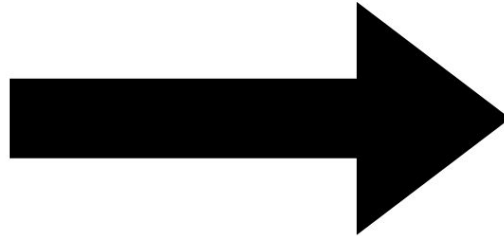
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05

Build with AI

AI Checklist

Before using AI in education verify that:



05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✔ It's aligned with your learning objectives.



05

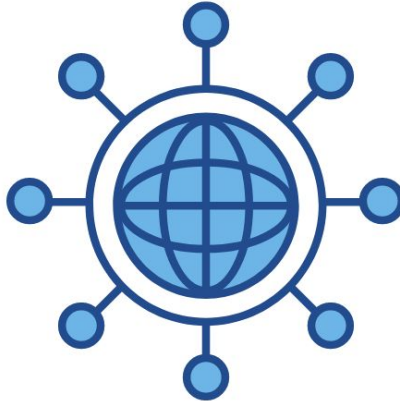
Build with AI

AI Checklist

Before using AI in education verify that:



It's accessible to all learners.



05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✓ Students' privacy is protected.



05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✓ Students are aware and prepared for biases and hallucinations.



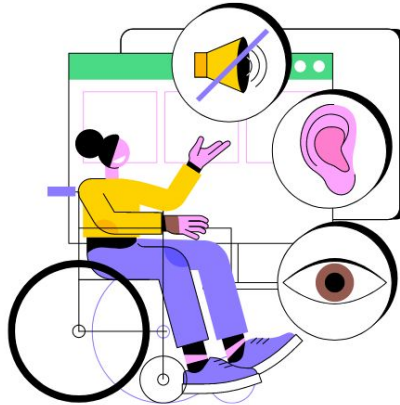
05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✔ It meets WCAG (accessibility) standards.



05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✔ It enhances learning and critical thinking.



05

Build with AI

AI Checklist

Before using AI in education verify that:

- ✔ You have a plan to regularly reevaluate the tool.



05

Build with AI

AI Checklist

Before using AI in education verify that:

-
- ✓ It's aligned with your learning objectives
 - ✓ It's accessible to all learners
 - ✓ Students' privacy is protected
 - ✓ Students are aware and prepared for biases and hallucinations
 - ✓ It meets WCAG (accessibility) standards
 - ✓ It is available to all students equally
 - ✓ It enhances learning and critical thinking
 - ✓ You have a plan to regularly reevaluate the tool

Pedagogy driven. **Tech** innovated.



Image created by AI



Pedagogy driven. Tech innovated.

with DEMOLDER HILL DESIGN

Subscribe to get notified when
our **free AI Integration
in Assessment course**
comes out.



Thanks!