Who am I?
Disclosure

- I am not a computer engineer, developer, or programmer.
- I’m not a technical expert, I can always get back to you with an answer.
- Our technology is proprietary, so I can’t provide that exact information but I can point you in the direction
- I am a husband & father of 2 young daughters (12 & 1)
- I am the first of my family to graduate from college
  - My younger sister is now the 2nd
- I am concerned that people no longer can express themselves properly and because of that, lots of disagreements form
What is Artificial Intelligence?
Let’s ask AI, “What is Artificial Intelligence”?

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think and perform tasks like humans. It encompasses a broad range of technologies and sub-fields, from simple rule-based games to complex systems that can process vast amounts of data, recognize patterns, learn from experience, and make decisions. The main goals of AI include reasoning, learning, problem solving, perception, language understanding, and the potential to replicate human cognitive functions.

Source: OpenAI, GPT-4
So what is AI?

At its simplest form, artificial intelligence is a field, which combines computer science and robust datasets, to enable problem-solving. It also encompasses sub-fields of machine learning and deep learning, which are frequently mentioned in conjunction with artificial intelligence. - IBM

Types of AI

**Narrow AI:** AI systems that are designed to perform specific tasks of functions within a limited domain (Packback, Siri, Alexa, ChatGPT). These systems do not possess general intelligence.

**General AI:** AI Systems that exhibit the ability to understand, learn, and apply knowledge across a wide range of tasks, similar to human intelligence. (No current public examples of General AI)

**Superintelligence:** Superintelligence refers to an AI system that surpasses human intelligence across all domains and capabilities. This hypothetical form of AI possesses intellectual abilities that far exceed human capabilities in virtually every aspect.
Here’s what’s been happening with AI
Artificial intelligence (AI)

Programs to detect AI discriminate against non-native English speakers, shows study

Over half of essays written by people were wrongly flagged as AI-made, with implications for students and job applicants

Ian Sample Science editor

@iansample
Mon 10 Jul 2023 11.00 EDT
What is Generative AI?
Generative AI is a broad category for a type of AI, referring to any artificial intelligence that can create original content. Not all GenAlis are built upon LLMs.

Large Language Models are AI systems that work with language. In the simplest possible terms, they are next-word prediction engines.
What is Instructional AI?
What is Instructional AI?

1. **Instructional AI** is the application of Artificial Intelligence that teaches students how to write and critically think, but *does not do the writing or thinking for them*, *unlike generative AI*.

2. Instructional AI should also give educators more sophisticated methods to both engage, assess, and provide feedback to students to ultimately *be better teachers*.

3. **Instructional AI** should be rooted in educational methodology, and lead to improved student success & educator satisfaction.
Instructional AI

This is a term coined by Packback. It's not an “industry term” or widely used term... yet

We've used it to help conceptualize what our AI does, and how it is DIFFERENT than generative AI

“Packback’s AI is instructional AI. It is not generative AI like ChatGPT. Let me dig in and explain what Instructional AI is and does.”
A language model is a statistical tool which determines the probability of a given sequence of words occurring in a sentence.

- Provide line-by-line instruction on how to improve, reducing the **benefits** of cheating.
- Still provide AI-detection software (and plagiarism), but place greater emphasis on the **process** of the assignment versus the **product** of the assignment.
- Empower teachers with information.
What if you could use AI to...

- Provide more consistent writing opportunities for students **without more grading**
- Encourage **more critical thinking** and discourse in your classroom, **without more work**
- Get support grading the writing mechanics of student work, freeing **more capacity for evaluating ideas**
What is Packback?

Packback’s mission is to empower every student to be fearlessly curious and find their unique voice.

We leverage A.I. to do this!
Let me show you how...
Self-Determination Theory

For *Intrinsically Motivated* learning to occur:

- Purpose
- Autonomy
- Mastery

Must be in alignment which leads to: Self-driven, engaged and effective learning
A digital writing tutor for every student. A digital grading assistant for every teacher.

Packback Questions
Inquiry-based Discussion

Packback Deep Dives
Essays & writing assignments

Both products are integrated with Canvas.
Edit Question

What is your question? *

What is Packback's Instant Feedback feature?

44 / 255 ✓ Great! Now, add a description to make your question interesting.

Add a Description

Packback's Instant Feedback feature provides real-time feedback through tips that pop up as a user types, responding to the content question or answer as it's being written.

These tips will help you to be sure to:

- Phrase your question properly and include a question mark
- Add a description to your question
- Keep your question title concise for easy reading and clarity

Instant Feedback

Curiosity Score

Predicted Score Range: 31-70 Curiosity Score

This post may be flagged

Feedback Breakdown

Curiosity

- Your question appears closed-ended.
  Try rewriting it to allow for discussion and debate, instead of a direct answer.
- Add a more detailed description.
  Add a more detailed description to spark more engaging discussion.

Credibility

- Great job citing a source!
  Citations help readers gain context and assess a post's credibility.

Communication
What is the most interesting thing you have learned so far? What might we have discussed more?

We have our first exam this week, so I anticipate you all are reviewing (or reviewed) your notes about the material we have discussed so far. For this week's Packback I would like to hear from what you what you is the most interesting thing you have learned so far OR what is something you wish we have discussed more?
Outcomes of Instructional AI

32% More A’s and 32% Fewer F’s
When compared to students using traditional discussion boards, students using Instructional AI were shown to receive significantly better grades.

30% Less Time Spent Grading
Instructors using Instructional AI in their classrooms spend up to 30% less time grading assignments, and note they’re able to grade more thoroughly.

89% of Instructors Saw Improvement
According to a research study, 89% of instructors agree that they saw improvement in the quality of their students’ writing after using Instructional AI.

88% of Students Found Instructional AI Helpful
According to that same research study, 88% of students reported the Instructional AI writing assistant helped improve their writing.
Some Additional Context...

**AI has potential for good**

**AI Can Make Education More Personal (Yes, Really)**  
Frequent, trustworthy feedback to teachers helps them interact more with students

**National ChatGPT Survey: Teachers Accepting AI Into Classrooms & Workflow — Even More Than Students**  
42% of students use ChatGPT, up from 33% in a prior survey. Their teachers are way ahead of them, with 91% saying they’ve used the tool on the job

**Not all AI is helping educators**

**We tested a new ChatGPT-detector for teachers. It flagged an innocent student.**  
Even high school students expect our tech to catch some of the chatbots. When Turnitin runs, students know it’s not something to mess with. It’s enough to get someone in trouble.

**Turnitin’s solution to AI cheating raises faculty concerns**  
When Turnitin was launched in 1999, the early ed-tech startup promised a solution to one of the most pressing threats to academic integrity...

**Professors are using ChatGPT detector tools to accuse students of cheating. But what if the software is wrong?**

**ChatGPT Has a Spectacular Failure**  
The artificial intelligence chatbot, developed by OpenAI, may not have all the answers you need.

**Professor Flunks All His Students After ChatGPT Falsely Claims It Wrote Their Papers**  
Texas A&M University—Commerce seniors who have already graduated were denied their diplomas because of an instructor who incorrectly used AI software to detect cheating.

**This ain’t our first rodeo**

**Packback is building A.I. to enhance university learning**  
Amit Chauhury, founder and CEO of Packback, said in a recent interview that the company has been developing a state-of-the-art AI engine for 6+ years, becoming the go-to instructional AI platform in education.

Packback has heavily-tested AI use cases in education with IRB-sponsored studies that prove the benefits of Instructional AI.

Packback’s platform enhances student outcomes and reduces educator burnout.
To Schedule a Meeting with Me

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