



Deciphering AI Speak: A Primer for English Language Educators

by [Joshua M. Paiz](#) and [Ilka Kostka](#)

If you are like us, AI (artificial intelligence) has come to play some role in a growing number of professional conversations—either at conferences, in meetings, or during breaks with fellow teachers. In these conversations, you have likely heard an almost dizzying array of jargon that might get in the way of clear communication. In this article, we offer a simple guide to some of the more common words and ideas surrounding AI so that you can better participate in these conversations and continue to advocate for yourself and for your multilingual learners. From there, we offer advice for gaining familiarity with AI tools.

AI Jargon

The field of AI is a subfield of computer sciences that is focused on creating intelligent computer systems. To begin, we draw your attention to some fundamental terms that come up in many conversations about AI and AI-based systems. In Table 1, to help you more comfortably engage in AI-focused conversations, we list the most common AI-related terms, working definitions, and, where relevant, examples of AI platforms.

- **Large language model (LLM):** An AI system trained to understand and generate human-like text/speech, aiding in tasks like translation, summarization, and conversation.
- **Machine learning (ML):** A field of AI that enables computers to learn from data and make predictions or decisions without explicit programming.
- **Natural language processing (NLP):** An interdisciplinary field at the intersection of AI and machine learning that focuses on teaching machines to understand and interpret human language(s).
- **Transformers:** AI technology that can consider a whole text, being aware of relationships between ideas across the entire text and how this creates unique context for meaning making, resulting in more accurate and coherent text generation.
- **Generative Pre-trained Transformer (GPT):** Advanced AI model that uses the transformer architecture to generate human-like text based on a given prompt. It was trained on a set of data containing more than 400 billion tokens of text and code.
- **Pathways Language Model 2 (PaLM2):** Large language model developed by Google that was trained on more than 4.6 trillion tokens of text and code and is seen as a more capable model than the most recent model GPT (i.e., GPT-3).

Table 1. AI Jargon for English Language Teaching Educators

Jargon	Working Definition	Example Platforms
Generative AI (GAI)	Branch of AI that takes user input and produces original and meaningful output through the use of sophisticated algorithms and language models.	<ul style="list-style-type: none"> • OpenAI's ChatGPT (text/code) • Google's Bard (text/code) • Grammarly GO (text) • OpenAI's DALL-E (Images) • Stability AI's Stable Diffusion (images) • StockImg.AI (images) • Soundful's AI Music Generator (music) • Twee (English language and literature lesson planning)
Constructive AI	Category of AI systems designed to enhance and improve existing user-generated content by applying modifications to address potential issues in that input.	<ul style="list-style-type: none"> • Grammarly Basic/Pro (text) • Hemingway APP (readability) • Krisp (voice) • Adobe's Audition (voice/sound) • Video2x (images/videos)
Assistive AI (AAI)	Agents that support users with some form of impairment, temporary or permanent, by enhancing abilities and improving accessibility to empower users and promote inclusivity.	<ul style="list-style-type: none"> • Orcam (vision) • eSight (vision) • Proloquo (nonverbal-to-verbal) • Braina (voice control) • Ava (hearing)
AI agent(s)	Platform powered by AI to perform a certain function for the user.	See <i>Generative</i> , <i>Constructive</i> , and <i>Assistive AI</i> , above.
Prompt engineering	Process of crafting effective instructions or queries to guide AI models' behavior by optimizing prompts to improve output quality, align with user objectives, and account for model capabilities.	<ul style="list-style-type: none"> • Learn Prompting's Prompt Engineering Guide (beginner to advanced users) • DAIR AI's Prompt Engineering Guide (advanced user)

Getting Started With Generative AI

The use of generative AI in English language teaching (ELT) is relatively unexplored; yet, as technology continues to rapidly develop, educators will need to keep up with the latest developments. Following, we offer suggestions for building AI literacy skills and better understanding of how they work. Because of its ease of use and because it is currently freely available, we take ChatGPT as an example here of a path to skilling up. However, our advice can be generalized to many chat-based AI tools.

1. Begin With Free Tools

With the availability of free versions of many AI programs, teachers should not have to pay for most of these tools. For instance, [ChatGPT 3.5](#) is currently freely available; users simply need to create an account and log in with their username and password. If a teacher decides to use a tool more regularly or extensively, they might opt to pay for a more powerful version to maximize its benefits through more capable models with expanded abilities.

2. Experiment and Explore

ChatGPT is simple to use. Users type a prompt into a box that resembles a chat box, and ChatGPT immediately produces human-like responses to the prompt. Considering this, we suggest appreciating the conversational nature. For instance, you can ask ChatGPT for clarity or you can continually refine your prompt until the AI produces a sufficient response. When using ChatGPT, for instance, creating effective prompts is critically important for getting useful output. This process is referred to as [prompt engineering](#), and it is developing into its own field of scholarship and practice.

When teachers input effective prompts, they can use ChatGPT to create a lesson, generate ideas for in-class activities, and streamline materials creation. Table 2 shows a prompt that has been revised to push the AI to produce more meaningful output for an imagined academic writing class. You are welcome to try it for yourself, but because of the nature of generative AI, you will receive unique output each time you enter the same prompt. The Appendix includes screenshots of these prompts to show how they appear in ChatGPT, as well as an explanation generated by ChatGPT about when to use idioms in academic writing and ideas for creating a handout for students.

Table 2. Generative AI Prompt: Before and After Engineering

Before Prompt Engineering
Create a handout on academic idioms.
After Prompt Engineering
I'm teaching an EAP class for first-year college students, and I want to teach my students about how we can use idiomatic expressions in academic writing. I already have the class planned and will introduce the fact that we typically avoid idioms in academic writing, but we do use idiomatic expressions like "shed light on" and "a double-edged sword". Can you help me come up with a handout of 15-20 common idiomatic expressions with definitions and examples?

3. Upskill, Learn, Connect, and “Play”

Short of getting a master’s degree in computer engineering, you can learn more about AI and how it works a number of ways:

- Complete short, free courses like those from [Google](#) or [Coursera](#).
- Read professional reports like those from the U.S. Department of Education: “[Artificial Intelligence and the Future of Teaching and Learning](#).”
- Join discussions through organizations like [AI4Teachers](#).
- Glean ideas from resources that offer practical resources for teachers, such as [Stanford University’s CRAFT](#) (Curricular Resources about AI for Teaching), which offers teaching ideas that can be adapted for teaching multilingual learners.

With the increasing amount of literature and resources about AI in education, finding materials is relatively easy.

Final Thoughts

The release of large language models like ChatGPT was certainly a shock for many because of its profound implications for teaching, learning, and work. We would like to emphasize that AI is never a replacement for classroom teaching and learning, and it is most certainly not a replacement for the expertise of the English language teacher. Instead, given the realities of much ELT labor, we see AI as a potentially powerful tool for the educator, allowing them to leverage their expertise and save time preparing for instruction.

Our students are also entering an AI-rich world—one in which AI literacy will permeate the workplace (McKinsey, 2023) and in which the risks of AI are unknown. As such, preparing them to critically engage with AI tools and products will become increasingly important. Perhaps more worrying is the potential for AI abuses, further creating the need for an educated citizenry who can critically engage with AI-generated material (Vincent, 2023). For these reasons, ELT practitioners who engage with AI tools can help equip their students with the skills needed to safely and effectively navigate a new world in which AI plays a prominent role.

References

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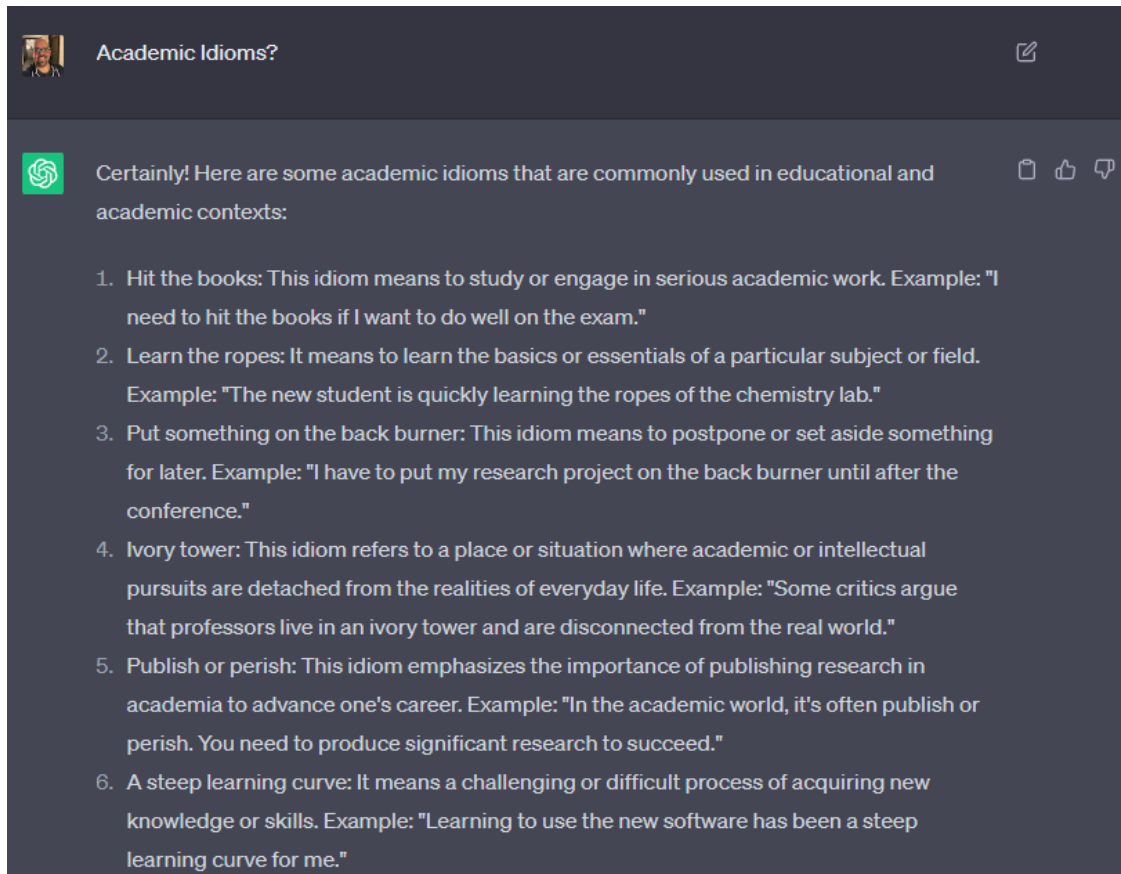
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Appendix: Sample ChatGPT Output Before and After Prompt Engineering





I'm teaching an EAP class for first-year college students, and I want to teach my students about how we can use idiomatic expressions in academic writing. I already have the class planned and will introduce the fact that we typically avoid idioms in academic writing, but we do use idiomatic expressions like "shed light on" and "a double-edged sword". Can you help me come up with a handout of 15-20 common idiomatic expressions with definitions and examples?



Certainly! Here's a handout of 15 common idiomatic expressions with definitions and examples that can be used in academic writing:



1. Shed light on: To provide clarification or reveal information about a particular topic.
Example: "The study sheds light on the causes of climate change in the region."
2. A double-edged sword: Something that has both advantages and disadvantages.
Example: "Increased reliance on technology is a double-edged sword; it enhances efficiency but also raises privacy concerns."
3. Tip of the iceberg: A small visible part of a much larger problem or issue.
Example: "The reported cases of plagiarism are just the tip of the iceberg in terms of academic misconduct."
4. In the same boat: In a similar situation or facing the same challenges as others.
Example: "Many students struggle with time management; you're in the same boat as your peers."
5. Catch-22: A situation where one is trapped by contradictory conditions or rules.
Example: "To gain work experience, you need a job, but to get a job, you need work experience—a classic catch-22."
6. By the same token: Similarly or for the same reasons.
Example: "Stress can negatively affect academic performance. By the same token, effective stress management can lead to better outcomes."



Great, can you add some explanation about when a person might choose to use idioms like these in academic writing, since we tend to avoid idiomatic expressions for clarity's sake?



Certainly! Here's an additional explanation to provide guidance on when a person might choose to use idiomatic expressions in academic writing, despite the general practice of avoiding them for the sake of clarity:



While it is true that idiomatic expressions are generally avoided in academic writing to maintain clarity and precision, there are situations where their use can be appropriate. Here are some instances where idiomatic expressions may be considered:

1. **Familiarity with the audience:** If you are writing for a specific audience that is familiar with the idiomatic expression, using it can enhance communication and create a connection with the reader. For example, if you are writing for a linguistics journal where idiomatic expressions are commonly discussed, employing them may be suitable.
2. **Expressing nuance or creativity:** In some cases, idiomatic expressions can add a layer of nuance or creativity to your writing. They can help convey complex ideas concisely or provide a fresh perspective on a topic. However, exercise caution and ensure that the idiomatic expression is relevant and effectively contributes to your argument.
3. **Quotations or references:** If you are quoting or referencing a source that employs idiomatic expressions, it may be appropriate to include them in your writing to maintain the integrity of the original text. However, make sure to provide sufficient context or explanation to ensure comprehension.
4. **Informal or narrative sections:** Academic writing may occasionally contain sections where



Thanks. Can you put this and the second set of examples together into a handout that I can share with my students?



Of course! Here's the complete handout with the explanations and examples of idiomatic expressions for academic writing:



Title: Idiomatic Expressions in Academic Writing

Introduction:

In academic writing, it is generally advisable to use clear and precise language to ensure clarity and accuracy. However, there are situations where the use of idiomatic expressions can be appropriate. This handout presents some common idiomatic expressions along with explanations and examples to help you understand when and how to use them effectively in your academic writing.

1. Shed light on:

- Definition: To provide clarification or reveal information about a particular topic.
- Example: "The study sheds light on the causes of climate change in the region."

2. A double-edged sword:

- Definition: Something that has both advantages and disadvantages.
- Example: "Increased reliance on technology is a double-edged sword; it enhances efficiency but also raises privacy concerns."

3. Tip of the iceberg:

- Definition: A small visible part of a much larger problem or issue.
- Example: "The reported cases of plagiarism are just the tip of the iceberg in terms of academic misconduct."