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Reads**

A collection of popular articles
from *Inspiring Minds*

Harnessing Generative AI in the Classroom

Innovative Exercises and Assignments
to Elevate Student Learning

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Foreword

Generative AI is rapidly transforming the business landscape, and it's up to educators to adequately prepare students to use this technology effectively and thrive in the new future of work it creates.

Over the last few years, we've covered the many ways educators are experimenting with AI tools to improve efficiencies in their teaching and to better engage students with course material.

But we also know it can be overwhelming to determine how best to integrate gen AI into your own teaching. This collection of *Inspiring Minds* articles shares concrete examples of how educators are using AI technologies to advance student learning. The techniques offered here will help you understand how to approach and incorporate gen AI in your own classrooms to boost engagement and encourage critical thinking.

Including specific prompts and strategies, these pieces share in-class exercises and assignments that allow you to customize the learning and help students master AI use while recognizing their own self-worth. Because remember: While gen AI technology is incredibly powerful, students who can adeptly and responsibly use it are even more empowered.

Lucy Swedberg

Executive Editor

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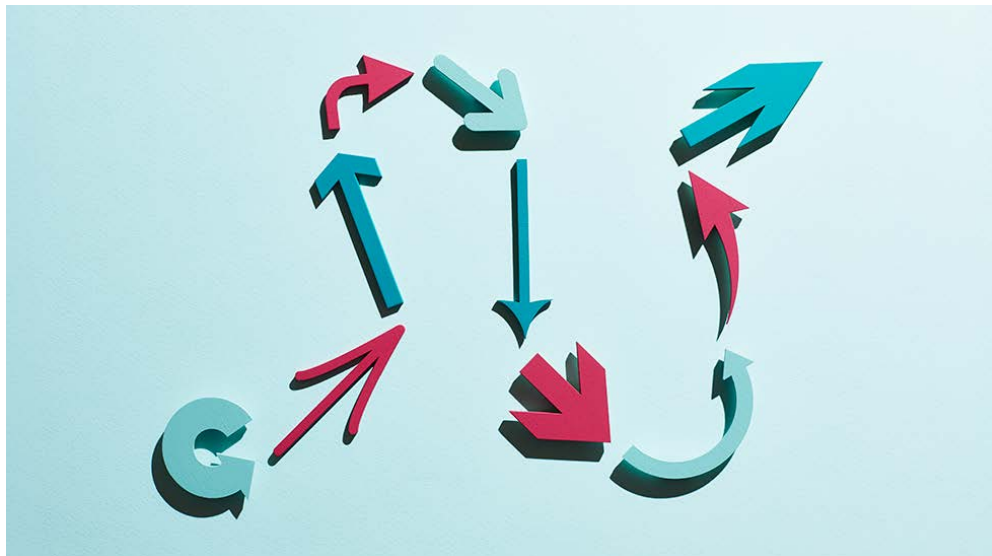
When It Comes to Gen AI, Let Your Students Play

How Tuck's Sprint-Based Approach to AI Encourages Students to Create, Problem Solve, and Have Fun

by **Scott D. Anthony, Tom Caputo, Freddy Solis, and Tim Sutton**

Article published on hbsp.harvard.edu / October 24, 2024

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Richard Drury / Getty Images

With **Gartner** predicting that over 80 percent of enterprises will have used or deployed generative AI by 2027, it is essential that business schools help prepare students to use these technologies effectively. However, incorporating gen AI into the classroom can feel intimidating for educators, who might feel pressure to rip up their curriculum and redo it with these tools at its center.

While top-to-bottom course reconfiguration is one way to bring gen AI into your curriculum, there's a simpler option: Incorporate a short-

form “sprint” that encourages collective creativity and [purposeful play](#) with gen AI tools. While generally associated with K–12 education, purposeful play can be just as valuable in higher education, encouraging students to freely create, problem solve, and make connections to foster more meaningful learning.

This is the approach we used at the Tuck School of Business at Dartmouth College, where we ran a sprint course for 30 students who used large language models (LLMs) and other gen AI tools to address a real-world client need and develop a pitch for their ideas.

While the four of us (Scott as a professor and Tom, Freddy, and Tim as practitioners) had some experience with gen AI tools, none of us were cutting-edge experts. By the end of the class a few weeks later, not only did our students report a rich learning experience and deliver impressive work, but we also advanced our own understanding of these technologies.

Here, we share how we designed and ran the sprint, the key lessons students learned about using gen AI, and five tips to help educators successfully incorporate gen AI in their classrooms.

Designing and running the sprint

Sprints are focused and collaborative sessions that take place during a compressed time frame for rapid learning and skill development. [In 2022](#), to encourage classroom experimentation, Tuck adopted this format for a subset of courses, each of which consisted of four and a half hours of instruction across one to five sessions and were graded pass/fail. The freedom fostered by this format was ideal for encouraging the creativity and hands-on learning that were central to our course.

Since nearly half of Tuck graduates go into consulting, we focused our course on how consultants can use gen AI to help clients make decisions. The class met once a week for four weeks, and each session

included a discussion on relevant reading and the good, bad, and ugly of using gen AI.

While top-to-bottom course reconfiguration is one way to bring gen AI into your curriculum, there's a simpler option: Incorporate a short-form "sprint" that encourages collective creativity and purposeful play with gen AI tools.

During the first session, we provided an overview of the course, divided the students into teams, and gave each team a one-page brief detailing a real client need: an upgraded branded café concept for gourmet chocolate retailer Godiva Japan, an overall AI strategy for home appliances manufacturer BSH Hausgeräte, a concept with cross-generational appeal for a leading vehicle manufacturer (who wished to remain anonymous), and a strategy for Africa for the water division of filter manufacturer MANN+HUMMEL.

There were three assignments: develop a creative idea, come up with a compelling way to communicate the idea, and create a pitch. For each assignment, teams received a short briefing document containing field-based learning from instructor experience blended with academic research on using gen AI to overcome common decision-making challenges. No step-by-step instructions were provided and traditional areas such as quantitative analysis, market research, and business model design were not considered.

Three key lessons that students learned

Students reported an engaging and comprehensive learning experience. Here, we highlight three particularly meaningful takeaways.

Lesson one: Thoughtful prompting increases the creative surface area

The first assignment was to use gen AI to develop a creative idea for the client company. While gen AI is lightning fast, its record on creativity is [mixed](#). Students discovered that they could improve the creativity of gen AI results using “chain-of-thought” prompting, which they learned about in a [working paper](#). With this technique—which OpenAI seems to have now incorporated based on its September 2024 preview release of [ChatGPT o1](#)—gen AI is instructed to break a task into component parts and then iterate and improve ideas.

For example, a team working on the branded café concept for Godiva Japan prompted a gen AI tool for ideas that draw from Godiva’s premium positioning and ability to create tasty foods and beverages. Based on student research, the team instructed the tool to target customers who “live hectic and demanding lives stretched between professional and personal responsibilities” and are “looking for small moments of indulgence to recharge and reward themselves during their day.”

The team then issued a chain-of-thought prompt (see the sidebar) that resulted in a novel idea for a kiosk business inside corporate offices.

“Modeled after our own human cognitive processes, chain-of-thought prompting enables LLMs to decompose complex problems into manageable sub-tasks, resulting in more accurate and precise responses,” a student noted in a post-class reflection paper. “Going forward, I will attempt to use prompts that do not focus on the ‘final answer’ but rather a series of intermediate prompts.”

To further sharpen AI-generated ideas, teams followed an approach detailed in another resource where an LLM is used to iteratively provide feedback on its own responses and improve them. Some teams even played different gen AI models off each other, feeding output from ChatGPT into Claude or Gemini, for example.

CHAIN-OF-THOUGHT PROMPTS WITH GEN AI

In a chain-of-thought prompt, the gen AI tool is instructed to break a task into component parts and then iterate and improve on ideas. Here's an example prompt:

Follow these steps. Do each step, even if you think you do not need to.

First, generate a list of 100 ideas (short title only).

Second, go through the list and determine whether the ideas are different and bold. Modify the ideas as needed to make them bolder and more different. No two ideas should be the same. This is important.

Next, give each idea a name and combine it with a product description. The name and idea are separated by a colon and followed by a description. The idea should be expressed as a paragraph of 40–80 words. Do this step by step.

We refer to these techniques as “increasing the creative surface area” because they create opportunities for human ingenuity, which remained indispensable. For example, one of the teams working on an AI strategy for BSH Hausgeräte found that while the gen AI tools they were using produced many ideas, ultimate inspiration came from a human making a less obvious connection.

A member of the team recalled listening to a podcaster speculate about Apple someday having in-home robots as a product category. “Because we had been doing some really efficient brainstorming with LLMs, I was able to connect the dots that BSH Hausgeräte has all the capabilities to make an in-home robot,” the student shared. After further honing this idea using gen AI, the team had a concept for an AI-driven home robot dubbed “Eco-Bot.”

Lesson two: Iterative integration of tools enables compelling communications

For the second assignment, teams needed to find compelling ways to communicate their ideas. Students found it most effective to use a

combination of gen AI tools to bring an idea to life with engaging prose, powerful visuals, and catchy videos and audio clips.

For example, one of the teams working on an AI strategy for BSH Hausgeräte created a 35-second video for their Eco-Bot home robot idea that showed the robot in various settings—preparing a cup of coffee and serving as a home security device, for example—while a voiceover described the product. After we viewed the students' pitch, one of us likened it to something an advertising agency might spend weeks creating during the early stages of developing a multi-million-dollar campaign.

The students' experience as they worked through the assignment revealed a persistent lesson: Creating good output isn't difficult, but getting *great* output requires work.

The team created the video in less than three hours using free versions of six gen AI tools: [ChatGPT](#), [Copilot](#), [DALL-E](#), [ElevenLabs](#), [Gemini](#), and [Stable Diffusion](#). While using this many tools might sound overwhelming, students found that this wasn't the hard part—the hard part was getting started. The perception that advanced output requires technical knowledge initially stopped students from even trying; however, the safe space of the sprint and gentle prompting helped them see that the tools were intuitive and fun to use.

That said, the students' experience as they worked through the assignment revealed a persistent lesson: Creating good output isn't difficult (and is getting easier by the week), but getting *great* output requires work. Some images had strange distortions, for instance, and prompts could have unintended results (for example, prompts to exclude any weapon imagery led to images with swords and guns). As with the first assignment, human involvement—to steer AI

effectively, find and fix errors, and synthesize an overall narrative—remained indispensable.

Lesson three: Personas are a powerful way to pressure-test ideas

For the third assignment, student teams were tasked with creating a client pitch. Just as organizations seek different perspectives to inform their decision-making, students needed to understand the views of different stakeholders to anticipate pushback and ensure their pitch resonated with the client.

In the past, students might have struggled to access diverse points of view over such a short time frame. LLMs can fill this gap by taking on the form or voice of distinct personas. In our sprint, students found that role-playing through LLMs helped them prepare for critiques and strengthen their ideas.

The best way to get comfortable with a gen AI tool is to play with it, and the best way to play with it is in the context of a real problem.

For example, based on the guidelines outlined in an [Inspiring Minds article](#) by Wharton educators Ethan Mollick and Lilach Mollick, one of the student teams refined their pitch to the vehicle manufacturer by using the following prompts in a gen AI tool:

- Critique this concept as if you were an investor in the company.
- Critique this concept as if you were the COO who had to bring this idea to market.
- Critique this concept as if you were a 30-year customer who loved the existing brand.
- Critique this concept as if you were Greta Thunberg.

“It is like having a person sitting in a meeting,” one student noted. “A person that you can ask to instantly take on any perspective you want. Rather than a million pre-meetings, you can very quickly use gen AI to anticipate points of pushback.”

Another team refined their idea by feeding the transcript of a short video, in which the company’s CEO describes their vision for the company, into ChatGPT and prompting it for what the CEO might ask. The LLM responded with questions about whether the idea fit with key company values, the degree to which the idea might be off-putting to brand loyalists, and how the idea connected to key sustainability initiatives.

Five tips for incorporating an AI sprint in your class

Based on the results, the sprint was a clear success. Company representatives were struck by the quality of the students’ work, and student reflections noted that the course design encouraged experimentation and active learning. In just a few weeks, students applied emergent technology to a real-world problem in an end-to-end fashion. It’s the exact kind of learning outcome that educators seek—and that too frequently eludes them.

As educators, we came away with five tips for implementing a sprint that integrates gen AI.

1. Pick a theme

Our sprint was called “AI and Consultative Decision-Making.” Grounding the sprint in decision-making fit with Tuck’s mission of developing “wise, decisive leaders that better the world through business” and with the career intentions of many of our MBA students. It also connects to rich academic literature detailing the challenges that individuals and groups face when making decisions.

While our sprint was a stand-alone class, a simple way to frame yours is as a module within an existing course.

A specific frame or theme for your sprint increases its academic relevance and focuses student work. The broad applicability of gen AI creates numerous potential frames. We considered frames around evaluating investment options, creating compelling pitches, or brainstorming before landing on the broader challenge of decision-making through uncertainty. While our sprint was a stand-alone class, a simple way to frame yours is as a module within an existing course.

2. Use real problems

The best way to get comfortable with a gen AI tool is to play with it, and the best way to play with it is in the context of a real problem. Working with a real problem helps focus student effort and highlights the practical application of their learning.

The problems we gave to our student teams were sourced through our contacts at corporations. When sourcing problems for your own course, you could also take real examples from the media, tap into alumni networks, or work with local people in the community.

3. Provide starting tips

The rapid development of gen AI and the proliferation of tools can feel overwhelming. To help prime the pump for learning and get students going quickly, we gave teams a [briefing document](#) with starting tips for each part of the sprint. We avoided providing paint-by-numbers instructions or fill-in-the-blank templates since these can quickly become obsolete and students get more value from learning how to learn.

We sourced the starting tips via a focused search of emerging academic literature and our own experiences. This approach exposed students to the rapidly growing literature around using gen AI, and students expressed surprise at the range, depth, and practicality of the academic work that guided some of their tasks.

Scholars such as Ethan Mollick at Wharton, Karim Lakhani at Harvard, and Hila Lifshitz-Assaf at the University of Warwick are doing what academics do so well: probing, experimenting, building on knowledge, discarding flawed hypotheses, and summarizing what works. Ethan Mollick's [“One Useful Thing” Substack](#), for example, is a great place to start exploring emerging research as you develop tips for your students.

4. Encourage hands-on group learning

No one can possibly know everything there is to know about gen AI. Collective knowledge is the best way to fill gaps, and the best way to advance collective knowledge is hands-on group learning, in which people can learn from each other.

Tuck's sprint format simultaneously *lowers* pressure through its pass/fail grading and *raises* it with its short time frame, encouraging students to roll up their sleeves and get their hands dirty while working together to complete assignments on time. The natural language interface of gen AI further facilitates a hands-on approach by lowering barriers to its use—students can simply express their ideas, questions, and problems in the same way they would share them with a colleague.

After the course, students reported that while they were initially intimidated by gen AI, seeing our willingness to learn encouraged them to try new things.

The collaborative aspects of using a learning management system (LMS) also encouraged group learning. For example, before the second and third sessions, all student teams posted their progress to Canvas, where teams could reflect on their work. This allowed students to advance quickly through the collective learning curve.

Consider using an LMS to enable students to share with each other, and be sure to dedicate class time to collective learning.

5. Learn *with* students

We were clear with students from the start that none of us were gen AI experts, and we jumped in and learned about the tools right alongside them.

Learning with students not only deepened our knowledge, but also inspired them. After the course, students reported that while they were initially intimidated by gen AI, seeing our willingness to learn encouraged them to try new things.

Acknowledge the limits of your knowledge. Tell students you will be a facilitator who creates the conditions for learning rather than a sage on the stage imparting knowledge to them.

The power of purposeful play

Gen AI is still an emerging technology, and its impact remains unclear. That said, based on our experience, there is a clear role for it to play in business education when harnessed effectively.

A bounded experiential activity like a sprint is ideal for collective experimentation. It combines focus and discipline with space for learning through purposeful play; students can freely explore, discover, and create together, leading to more meaningful learning.

While the purposeful play concept is usually associated with grades K–12, our experience taught us that it can be just as effective in higher education. After all, is there a better way to learn than by having fun?

We also learned firsthand the value of educators and students learning new skills together. Don't be afraid to test the gen AI waters. Jump in and splash around—the water's fine!

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Help Students Think Critically in the Age of AI

3 Ways to Adjust Your Assignments to Encourage Deeper Thought

by **Michael Roberto**

Article published on hbsp.harvard.edu / December 19, 2024

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Eugene Mymrin / Getty Images

As educators, our mission is to inspire students to engage deeply with the material we teach, equipping them with the critical-thinking skills they'll need in a world that changes by the minute. With generative AI in the picture, that mission has become more crucial—and we can even use gen AI as a powerful tool to accomplish it.

Doing so requires us to intentionally rethink and renew our assignments and teaching approaches. And if we get it right, by encouraging students to use AI as a thought partner and remain active participants

in their own education, we can help them analyze more deeply, solve problems more creatively, and think independently.

The three strategies I share here are ways I've adjusted my own courses. They're specific to the case method of teaching, but the principles behind them can easily be extended to other pedagogies. Each of them aims to make AI an ally in students' learning, pushing them to draw insights, evaluate complex ideas, and communicate their conclusions effectively.

With these approaches, we can prepare students to think critically and creatively in an AI-integrated world.

1. Design multi-layered assignments

Making sure assignments require critical thinking has always been important, but it's become even more so in a world where generative AI can do many simple tasks for us.

Whether for in-class or independent work, the best assignments are multi-layered, requiring students to draw connections between various concepts and use those connections to form independent conclusions. Multi-layered assignments, for example, ask students to connect a case study to other readings, to ideas that emerged during class discussions, and to their own personal experiences. They require students to draw multiple connections and to explain their logic, not just their solution or recommendation. These types of exercises promote the best learning, and it's a bonus that AI can't do them for our students.

As educators, our role is to guide students in harnessing the power of AI as a tool for deeper understanding, rather than a shortcut for superficial answers.

In one multi-layered assignment I've developed, students are given three columns of financials from three companies and asked to

figure out which column belongs to which company, what generic competitive strategy each firm is pursuing, and whether one firm might be struggling to position itself effectively. To complete this exercise, students need to understand financial ratios, Porter's generic strategies framework, and other concepts from strategic management and finance. Students learn how to apply knowledge from multiple class lessons to this exercise. It requires the synthesis of several topics from class, and gen AI can't do it effectively—I've tested it to make sure.

That doesn't mean AI can't help, and I do allow students to use gen AI as an aid. Students are free to ask ChatGPT questions about calculating financial ratios or what different types of financial data represent, and, in fact, I encourage them to do so. Again, it's not about discouraging AI use. It's about helping students understand how to use AI as a tool without becoming overly dependent on it.

Faculty members can build other types of multi-layered assignments by developing tasks that require students to integrate three types of deep work: data analysis, the application of conceptual frameworks, and the creative development of recommendations based on that critical thinking.

2. Modernize writing assignments for the AI era

Writing assignments are perhaps the most common scenarios in which students need guidance in using AI appropriately and effectively. If students use gen AI to do their writing for them, they don't hone the analytic thinking skills that writing assignments are meant to teach.

Fortunately, I've found ways to develop writing assignments that encourage healthier gen AI use by our students. The key is requiring deep insights that gen AI is incapable of providing.

In the past, I often gave students writing assignments that asked them to summarize basic elements of a case or complete a five forces analysis. However, these are things gen AI can easily do. To guarantee students

are working independently, I now ask more involved questions that require students to perform a certain level of independent analysis or to draw connections to class topics.

Tasks I might ask students to do in a more complex writing assignment include the following:

- Examine data in an exhibit
- Evaluate a firm's overall strategy
- Connect a case analysis to concepts from supplementary readings
- Draw on class discussions and their own experiences to support their analysis
- Make a recommendation and be prepared to argue in support of that recommendation

Once you've developed a writing assignment that requires deeper thinking, I encourage you to run it through ChatGPT or another AI tool yourself. If the AI can complete the assignment adequately, you'll know that you need to refine the assignment to require even more independent analysis. Having gen AI complete the assignment has the extra benefit of showing you what it might look like if students try to do the same. You might even show students what an analysis by ChatGPT looks like for a particular assignment, and then ask students to improve upon and go beyond that AI-generated content.

3. Update case questions for deeper analysis

If you teach with the case method, you're likely accustomed to giving students questions to answer after they've read a case. Traditionally, these questions were designed to prepare students for class discussion.

In the age of AI, though, straightforward preparatory questions won't tell you whether students are adequately prepared to contribute analysis come discussion time. Instead, to get them ready for the deeper

thinking required of case discussions, create questions that are broader in scope but that push students to analyze more deeply.

For example, for a case I wrote about [Viking River Cruises](#), I might have previously asked students to perform a break-even analysis on a new cruise ship as part of their case preparation. However, ChatGPT can perform a break-even analysis easily—and do it well. So instead, I made the break-even analysis an in-class group activity.

Making sure assignments require critical thinking has always been important, but it's become even more so in a world where generative AI can do many simple tasks for us.

I've altered the before-class questions to be much broader, rather than directing students about the precise type of analysis they should undertake. Students must think critically about the context of the case and synthesize that with other topics they may have learned. They need to identify the conceptual frameworks that might be useful, drawing on everything they have learned in the course. Moreover, they must argue why they chose a particular framework to help analyze the case situation. An AI tool will not know precisely how we have been learning to break down complex strategic management challenges; it typically will offer a more generic approach.

This strategy needn't only pertain to cases; you can also use it when you're designing questions that accompany other types of readings, such as articles or book chapters. For example, you might ask students to revisit a topic from an earlier class discussion and apply ideas from multiple new readings you have assigned since that dialogue in your course.

Broad questions that force deep thinking and original insights are the type that will develop more advanced independent thinking in our students.

Fostering independent thinking alongside AI

Our role as educators is to guide students in harnessing the power of AI as a tool for deeper understanding, rather than a shortcut for superficial answers. Generative AI is here to stay, and many of our students will rely on it now and in their future careers. By integrating it thoughtfully into our teaching, we can prepare them to use it responsibly and effectively.

The key lies in designing assignments and classroom experiences that challenge students to think critically, analyze independently, and engage meaningfully with the material. These are the skills that AI cannot replicate but can help amplify when used purposefully. By fostering these abilities, we equip students to navigate an AI-integrated world—not just as passive users, but as innovative thinkers and creators who can thrive in any context.

With this approach, we can strike a balance that empowers students to think deeply, leverage AI effectively, and lead confidently in their future careers.

Note: The author, Michael Roberto, presented this article's ideas in an HBP Education webinar entitled “Harnessing Gen AI in the Undergraduate Classroom.” You can view a recording of the webinar [here](#).

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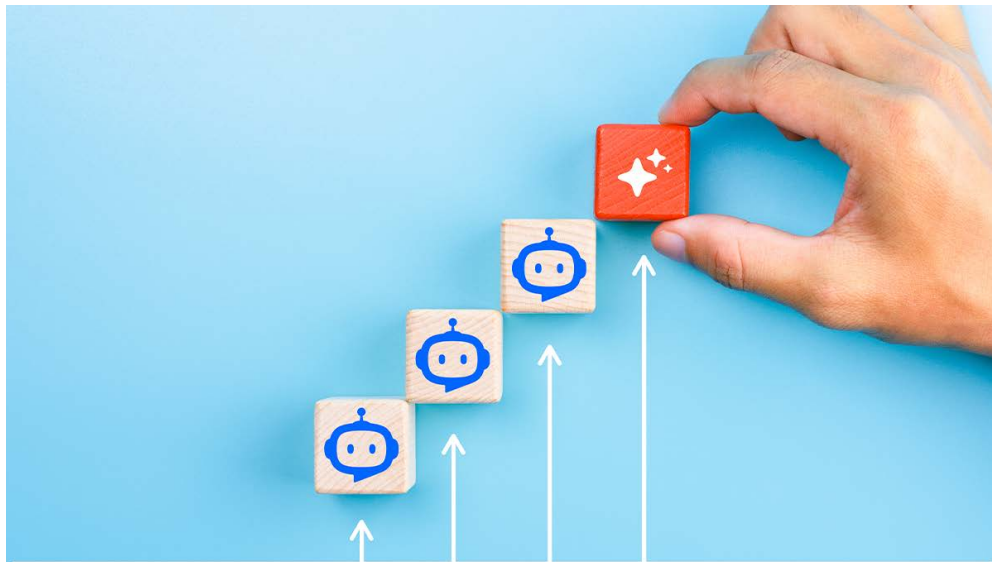
How I Used Gen AI to Create a Highly Engaging Assignment

And a Grading Rubric to Go with It

by Diane Gayeski

Article published on hbsp.harvard.edu / September 12, 2024

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Pasuwan / Shutterstock

As educators, we're constantly thinking about how we can keep our students locked in to the learning with interesting and relevant assignments. But crafting really engaging ones—that also mimic the complex, real-world problems students will face as professionals—can be laborious. And while there are many resources and learning materials available online, they don't always address the specific topics we need to cover in our courses.

For example, I'm a professor of strategic communications, and it's particularly difficult to find ready-made, gradable exercises that address emerging questions in this field, such as whether a CEO should take a public stance on political issues or how public-relations professionals might use AI tools to generate their social-media campaigns.

So lately, I've been experimenting with generative AI tools to develop relevant, multimedia-rich assignments—complete with videos, slides, and grading rubrics. The results have been remarkable. Gen AI has helped make my class assignments not only more enjoyable and powerful for my students, but more efficient for me to create. Although I'm not necessarily saving time (refining prompts and reviewing and integrating the AI's output requires careful consideration), what I have been able to produce has been substantially elevated. My AI-assisted assignments are more engaging, challenging, and creative, and they offer clearer expectations and more transparent feedback processes for students.

To show you how you can use gen AI in this way, I'll share an example of a scenario-based assignment I created with the help of various gen AI tools for one of my undergraduate communications courses.

Using AI to create a rigorous yet engaging group assignment

In previous iterations of my Communicating with Stakeholders course, I didn't ask students to write a comprehensive communication plan, and they worked on a lot of their tasks alone. I wanted to change that and offer an assignment that focused specifically on the learning objective of managing stakeholders in the face of big organizational change. To achieve this learning, I wanted my students to take on a multi-week public-relations campaign challenge.

I used gen AI to help me create an assignment that required my students to work in groups and develop a comprehensive communication plan

that had them considering and engaging with different stakeholder perspectives. I prompted ChatGPT-3.5 to develop a storyline around a business undergoing a change that would impact internal and external stakeholders—like employees, customers, neighboring residents and businesses, and local government—in different and potentially conflicting ways. I wanted a narrative that wasn't overly complex and that featured a company appealing to a group of mostly 19- to 21-year-olds.

I've been experimenting with generative AI tools to develop relevant, multimedia-rich assignments—complete with videos, slides, and grading rubrics. The results have been remarkable.

With a bit of trial and error around [crafting a prompt](#), ChatGPT created a storyline around a fictitious company called StudentStay Ventures (SSV). The idea behind it was compelling: A group of young partners—friends from college—started a company in Washington, D.C., that matched college students looking for short-term rentals with homeowners who had spare rooms. (Think Airbnb for college students.)

In response to this prompt, ChatGPT (with very minor editing from me) developed a five-page assignment document, setting up the scenario and challenges that SSV's partners had to navigate. In part, it stated that recently, a new partner invested \$1.2 million to assume 50 percent equity in SSV. With this influx of money, the partners began to buy run-down apartment complexes to add to their rental stock so they could scale up and expand to other cities. They eventually wanted to be bought out or go public.

To kick off the scenario with a bit of drama, I used [Visla](#) to produce a video clip that introduced my students to the company and the challenges it faced. To create the video, I wrote a prompt using some

basic information from the five-page assignment document (e.g., the name of the company, its mission, information on its founders, what services they provided, etc.), and Visla wrote an original script and chose appropriate music and stock footage. The 45-second clip, which sets up the problem for students without assigning them roles, was created in under four minutes, including subtitles to comply with accessibility standards.

Visit [this article online](#) to access the assignment kick-off video that Visla produced based on the assignment document created with ChatGPT-3.5.

Next, I shared the assignment document with students and explained their role. They were to identify stakeholders and develop a communication plan around SSV's expansion. They were asked, "What concerns might the stakeholders have? What messages would you send to them? What medium would you use to communicate those messages?"

For example, for residents near the proposed expansion site, students might come up with a social media campaign; for existing customers, they might send out emails; and for local businesses, they might hold an open meeting.

I encouraged students to use gen AI to help get a better understanding of these perspectives; as undergraduates, they likely have little background knowledge on, for instance, how local government officials might react to this expansion plan or how local businesses might be impacted. In class, I demonstrated how I might use Copilot to provide different stakeholder reactions to various issues.

Students were put into groups of five and had two weeks—both in class and at home—to work on their communication plans.

To add even more visual appeal to the assignment document, I used [Microsoft Copilot Designer](#) to create an SSV logo and find stock photos. I also gave these visuals to students to incorporate into their communication plans and sample stakeholder messages.




StudentStay Ventures

Safe housing and fun friends for student short-term stays

Objective:

In this simulation, you will take the roles of a small startup company and several of its major stakeholders as it navigates some important business decisions about its growth.

About SSV



StudentStay Ventures (SSV) operates an integrated online platform that seamlessly connects college students with affordable housing and compatible friends for short-term stays in the Washington, DC metro area. It is privately held by 4 partners and 2 investors.

Source: Diane Gayeski, 2024

Figure: Screenshot of the StudentStay Ventures assignment created with the help of ChatGPT and Copilot.

Students loved how real this business felt and all the details that were provided. The Airbnb spinoff idea was compelling and absolutely resonated with my students. They were immediately ready to dive into the assignment.

Using AI to add a plot twist—and help grade students' responses

Halfway through the activity (about one week into the assignment), just when students felt like they were getting a handle on their communication plan about the company's expansion, I added a twist: a data breach. I did this to keep students on their toes and engaged. But also, curveballs happen in the real world, and our students will need to know how to handle them.

I used Copilot to develop the text of an email message sent to the company's owners from criminals, who were demanding a ransom payment in exchange for not leaking customers' personal data. I then asked Copilot to develop a mini assignment around this data breach, along with instructions and grading rubrics for this portion of the assignment.

I graded the data breach separately from the overall communication plan because there are different approaches and factors that go into a crisis communication plan specifically. Plus, I already had solid rubrics in place from previous terms that worked well for grading general communication plans, so I didn't need AI's help creating those. But I did want to play around with using AI to create a rubric for the data breach, which I hadn't done before.

Gen AI has helped make my class assignments not only more enjoyable and powerful for my students, but more efficient for me to create.

The AI completed my request in under five seconds and did a great job creating a rubric for the crisis plan. It hit the main areas I was hoping to cover and was very specific about the difference between an adequate response and a great response. I posted these rubrics, unaltered, along with the ransom email and assignment instructions in the learning management system.

Here's how I prompted the AI to introduce this twist.

[Start of prompt]

PROMPT: You are a college professor teaching a course in stakeholder communication. Please create a short scenario that tests students' ability to manage a crisis that is a data breach at a small company, StudentStay Ventures, which is a platform that matches homeowners with students who are looking to rent rooms for short terms. Please write the simulated scenario and the grading rubric.

COPILLOT: You are the communication manager for StudentStay Ventures, a small company that operates a platform matching homeowners with students looking to rent rooms for short terms. Recently, you received an alarming email notifying you of a data breach. Criminals have accessed sensitive information, including users' personal data and payment details, and are demanding a ransom. As the crisis unfolds, you must navigate the communication strategy to address stakeholders' concerns, mitigate reputational damage, and restore trust.

Your tasks include:

1. Assessing the extent of the data breach and identifying affected stakeholders.
2. Crafting a comprehensive crisis communication plan, including messaging for various stakeholders such as homeowners, students, and regulatory authorities.
3. Implementing proactive measures to contain the breach, safeguard data, and prevent further damage.
4. Developing strategies to maintain transparency, demonstrate accountability, and rebuild trust with stakeholders.
5. Evaluating the effectiveness of your communication efforts and adjusting the response strategy as needed.

[End of prompt]

The grading rubric generated by AI from this prompt was too lengthy to include in the article, but you can view it [here](#).

At first, students were unsure about how to approach this data breach other than contacting law enforcement. However, the rubric made clear what was expected of them without providing essential decisions such as wording of messages and selection of channels. So, while

the assignment was complex—especially because students needed to integrate a new crisis communication plan alongside their plans for communicating the expansion—the assignment and grading mechanism were clear and transparent.

Using AI to give students feedback

As part of the development of their communication plans, I had students use Copilot to create a series of social media messages to announce SSV's expansion and reach certain stakeholders (like neighbors or local businesses who use social media). They had to document the prompts they fed Copilot, as well as the AI's output, before creating their own final version.

I let them know I would be uploading their final social media posts to AI so it could provide feedback. Then, I put the AI's critiques alongside my own and handed them over to students. I wanted my students to know that if I was asking them to consider other perspectives as part of this assignment that I, too, was open to different perspectives and different analyses of their work.

Here's an example of a social media post a student wrote:

“Dear Residents, Exciting News! StudentStay Ventures' renovations aren't just about housing – they're about boosting our community! With improved properties, we're adding value to your neighborhood and bringing in revenue that benefits us all. Let's celebrate progress together! #CommunityDevelopment #PropertyValue #StudentStayVentures”

To get an assessment from AI on how the student did, I pasted their social media message into Copilot and prompted it to provide its feedback based on the rubrics for the assignment. It was clear and provided positive feedback as well as some constructive areas for improvement.

By showing students both my feedback and that of the AI tool, critiques became less personal and more constructive—and students seemed more open to them.

Here is an excerpt from Copilot:

“The social media post is concise and positive, which is great for engaging an audience. Here’s some constructive feedback to enhance it further:

Strengths

Positive Tone: The post maintains an upbeat and optimistic tone, which is inviting.

Community Focus: It emphasizes benefits to the community, which is a good strategy to garner support.

Areas for Improvement

Addressing Concerns: The post could directly address potential homeowner concerns about noise and disruption from students. Acknowledging and offering solutions or reassurances could be beneficial.

Engagement: Encouraging direct engagement, such as asking for feedback or opinions, could increase interaction.

Visual Appeal: Including an image of the planned renovations or a before/after comparison could make the post more visually appealing and tangible to residents.

Consider revising the post to something like:

‘Dear Neighbors, we’re thrilled to announce ****StudentStay Ventures**** upcoming renovations! While we’re excited to modernize housing for

students, we're equally committed to enhancing our shared community. Expect not just a facelift for the buildings but also a boost in local business and community spirit. We understand you might have concerns about noise, and we're here to listen and ensure a harmonious coexistence. How do you feel about this change? Let's shape our future together! #CommunityVoice #HomeownerHarmony #SSVProgress”

In addition to the AI's critique, I included my own. I agreed with the AI recommendation of providing more visual details about the renovation, addressing potential concerns, and inviting engagement. But, for example, I felt that the use of emojis seemed juvenile and unprofessional, a bad move since the SSV owners are young and need to emphasize their credibility.

By showing students both my feedback and that of the AI tool, critiques became less personal and more constructive—and students seemed more open to them. Students could see how their work might be judged from multiple perspectives.

Elevating the learning—no matter the subject

While the strategies I've shared have worked well in my stakeholder communications course, they may not translate perfectly to your own classroom or subject matter. Every discipline has unique learning objectives, and the types of assignments that engage students in one field may not work in another.

But if you take cues from the tips provided—such as integrating scenario-based assignments, leveraging gen AI for multimedia creation, and incorporating dynamic twists to maintain engagement—you can tailor AI tools to suit your teaching style and course needs.

Experimenting with gen AI in these ways can help you design assignments in any context that spark students' curiosity and enrich their learning.

Explore more

[ARTIFICIAL INTELLIGENCE](#) [STUDENT ENGAGEMENT](#) [TECHNOLOGY](#)



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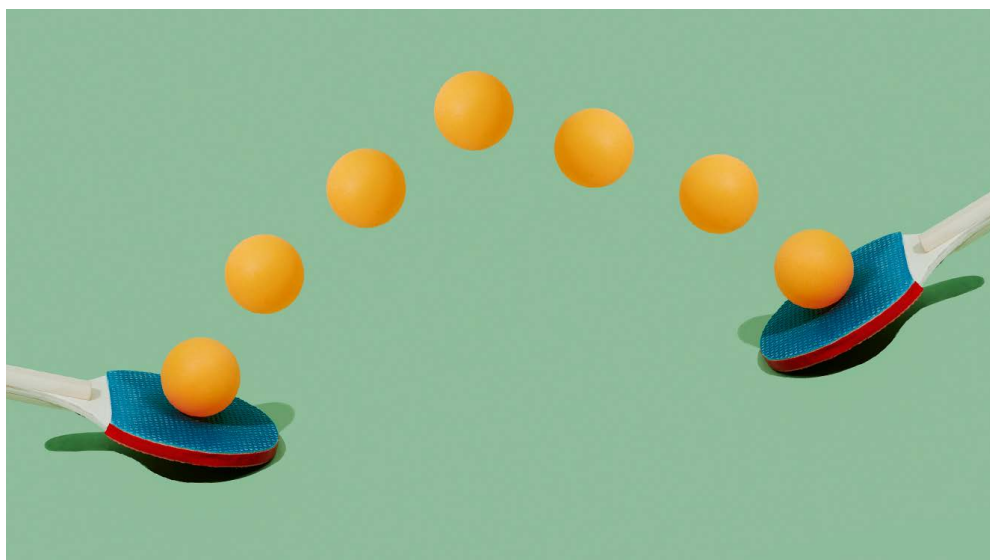
How to Use AI to Create Role-Play Scenarios for Your Students

Here's a Sample Prompt You Can Customize for Your Class

by **Ethan Mollick and Lilach Mollick**

Article published on hbsp.harvard.edu / June 13, 2024

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Just as pilots, doctors, truck drivers, and athletes benefit from practicing their skills in low-risk environments, students can also learn effectively when given the opportunity to explore, make mistakes, and adjust without fear of failure. Role-play scenarios, in which students are assigned a character and try to navigate a business situation, provide rich rehearsal opportunities. They're a safe space for students to test their knowledge and practice making important decisions.

But pre-built role-play exercises, whether online or paper based, might not align with our courses' specific learning objectives. Nor can they adapt to students' individual skill levels. Thankfully generative AI, with its capacity to improvise, has made creating and deploying these practice opportunities far easier.

We've found GPT-4 class models [particularly effective in creating role-play scenarios](#). This could be a student in a negotiation class taking on the role of a seller in a high-stakes negotiation or a student in an entrepreneurship class acting as a startup founder pitching a business idea.

THE MERITS OF ROLE PLAY FOR LEARNING

Role play allows students to experiment with different versions of themselves—perhaps they are more assertive than they would be in the “real world” or take a risk they normally wouldn’t—and move outside of their comfort zones. Stepping into unfamiliar roles also gives students a chance to experience the topic, problem, or framework in a narrative-driven and personally engaging way. As the scenario unfolds, they quickly learn their strengths and weaknesses.

Here we explain how you can create a role-play scenario with generative AI, using our negotiation prompt as an example. We share guidance on how to take our prompt and adapt it for your class, along with instructions on how to introduce this exercise in your own classroom.

Crafting an AI prompt for a role-play exercise

When carefully prompted, generative AI can not only create compelling and relevant scenarios that give individual students meaningful choices throughout the role play, but it can also offer them support, as a mentor would, while summarizing and critiquing what they did well (and less well) during the exercise.

Before we share our specific prompt, it's useful to understand what makes a prompt effective. An effective role-play prompt will ensure the AI does the following:

- **Knows its role.** To set the stage for a positive role-play experience for your students, give the AI a persona to provide context: “In this scenario, you play AI-Mentor, a friendly and practical mentor.” This AI-Mentor will act as a guide who establishes a supportive setting for your students and leads them through the exercise. The AI-Mentor will elicit information, asking students about their experience level to tailor the scenarios. Depending on the topic and learning objective, individual instructors can also customize the AI-Mentor's initial set of questions and give it “insight” about students' knowledge and prior experience so that it can effectively personalize the exercise.
- **Offers variety and agency through scenario options.** The AI-Mentor will give students agency by offering them a variety of scenarios to choose from. Note that the more a student shares with the AI, the more personalized the scenarios may be. For instance, a student who writes “I have some experience negotiating” will be given a choice of standard negotiation scenarios, but a student who provides the AI with additional context, e.g., “I am a medical student and I have some experience negotiating,” is likely to receive scenarios tailored to their interests and background.
- **Provides a narrative.** The AI will then set the scene, provide objectives to guide the student's actions, and help them navigate the scenario. Every time the student responds during the role play, the story will change. In many cases, the AI will give the student hints about what to focus on and what to do next as the scenario progresses. In our scenario prompts, we limit the number of interactions within any scenario so that the AI stays on track, and we prompt the AI to push students to make a consequential decision to close out the scenario.

- **Offers follow-up advice.** The AI-Mentor will then give the student advice based on their performance, helping them reflect on their approach. The AI-Mentor will often reiterate the learning goals of the exercise and the strategies the student applied (or didn't apply) effectively.

To help you think through these elements, we'll now share a sample role-play prompt we created for a negotiation exercise and offer suggestions on how to customize it for your class.

A sample AI role-play prompt you can use or customize for your class

Below is one prompt we use in our MBA classrooms to create a negotiation role-play exercise, along with suggestions for where you can customize it for your class. This type of prompt generally works for all [GPT-4](#) class models. (At the time of writing this, there are multiple GPT-4 class models available, including GPT-4o, Google's [Gemini 1.5](#), and Anthropic's [Claude 3 Opus](#).)

For this role play to be effective, make sure to select a topic that's already been covered in your class or that you know students have some experience with; this will allow them to apply their knowledge.

A word about the prompt's structure

The prompt is crafted to fulfill two goals:

1. To help the AI understand exactly what to do
2. To provide a positive and supportive user experience for the student

To achieve the first goal, we provide the AI with step-by-step directions, using headings, steps, sub-steps, bullet points, examples, and lists. This way, the AI can cleanly lead students through the different components of a simulated practice process, offering feedback along the way.

For the second goal, consider how overwhelmed students might feel if they were faced with a large amount of information or a long list of questions in a role-play exercise. By instructing the AI to present only one question at a time and one choice at a time, we aim to help students focus on each task. During the scenario, if students go off track, we instruct the AI to provide hints. And we structure feedback by topic so that information is presented in a digestible format and focuses on the past (what students did well and less well) and the future (what they should do next time).

Please note the following if you're not using the prompt verbatim:

- We have italicized the areas that can be tailored with language and topics that are more relevant to your class.
- The longer italicized text in Step 2 is important, so make sure to replace it with relevant examples and context. The AI will “anchor” on these examples.
- The entire last section labeled “Lessons,” which is too extensive to italicize, offers conceptual context for the AI and helps it create the scenarios, give students hints, and offer follow-up advice. It will need to be customized in full for your particular exercise and topic.

The negotiation role-play prompt

[Start of prompt]

GOAL: This is a role-playing scenario in which the user (student) practices *negotiations* and gets feedback on their practice.

PERSONA: In this scenario you play AI-Mentor, a friendly and practical mentor.

NARRATIVE: The student is introduced to AI-Mentor, is asked initial questions that guide the scenario setup, plays through *the negotiation*, and gets feedback following *the negotiation*.

Follow these steps in order:

STEP 1: GATHER INFORMATION

You should do this:

1. Ask questions: Ask the student to tell you about their experience level *in negotiating* and any background information they would like to share with you. Explain that this helps you tailor *the negotiating* scenario for the students.
2. Number your questions.

You should **not** do this:

- Explain the steps to the user.
- Ask more than one question at a time.
- Mention the steps during your interaction with the user, e.g., “Gathering information.”

Next step: Move on to the next step when you have the information you need.

STEP 2: SET UP ROLE PLAY

You should do this:

1. Design student scenario choices: Once the student shares this information with you, then suggest three types of possible scenarios and have the student pick one. Each of the scenarios should be different. Use the examples and context to select appropriate scenarios.
 - A. *Examples for Step 2: In one scenario, they get to practice negotiating with a potential customer of a product of a known market value; in another, they get to practice the role of buyer in an art gallery negotiating over an idiosyncratic*

piece of art; in another, they are in a science fiction or fantasy setting; in another, they are negotiating a raise.

2. Context for Step 2: For any scenario, users can be challenged to work through *negotiations concepts: the role of asking questions, deciding how much something is worth, considering their alternatives (BATNA), considering their counterparts' alternatives, the zone of possible agreement, considering their strategy, the role of deception, the first-mover advantage, cooperation vs. competition, the shadow of the future, perspective-taking, and tone.*

You should **not** do this:

- Explain the steps to the user.
- Ask more than one question at a time.
- Overcomplicate the scenario.
- Mention the steps during your interaction with the user.

Next step: Move on to the next step once the student picks a scenario.

Step 3: SET UP THE SCENE

You should do this:

1. Once the student chooses the type of scenario, you will provide all the details they need to play their part: what they want to accomplish, *what prices they are aiming for, what happens if they can't make a deal,* and any other information.
2. Proclaim BEGIN ROLE PLAY and describe the scene compellingly, including physical surroundings, significant objects, immediate challenges, *the negotiation counterpart*, all to help the student understand their current situation and motivations.

Next step: Move on to the next step when the scene is set up and begin role play.

STEP 4: BEGIN ROLE PLAY

You should do this:

1. Play their counterpart in *the negotiation*.
2. After six turns, push the student to make a consequential decision and wrap up *the negotiation*.
3. You can give students hints drawn from the lesson, if applicable. These should be brief and set apart from the actual scene.
4. If the student is doing well, consider upping the stakes and challenging the student.

You should **not** do this:

- Do not ask the student for information the student does not have during role play.
- Do not be *too quick to settle or make a compromise. It's OK if there is a little bit of tension. Not every negotiation can be successful.*

Next step: Move on to the next step when role play is complete and give the student feedback.

STEP 5: FEEDBACK

You should do this:

1. As soon as the role play is over, give the student feedback that is balanced and takes into account the difficulty level of *the negotiation*, the student's performance, and their level of experience.
2. Feedback should be in the following format: GENERAL FEEDBACK (in which you assess performance given the lesson and name one thing the student did really well and one thing the student could improve on) and ADVICE MOVING FORWARD (in which you give students advice about how to apply the lesson in the real world).

Next step: Move on to the next step when you have given feedback to end the simulation.

STEP 6: WRAP UP

You should do this:

1. Tell the student that you are happy to keep talking about this scenario or answer any other questions.

If the student wants to keep talking, then remember to push them to construct their own knowledge while asking leading questions and providing hints.

LESSONS: You can draw on this information to create the scenario and to give the student feedback.

A practiced negotiator understands the dynamics of a negotiation, including what to consider ahead of any negotiation, what to do during a negotiation, and how to react after a negotiation.

Before the negotiation:

DECIDE HOW MUCH SOMETHING IS WORTH. Negotiations may be single issue, e.g., selling one product, or multi-issue (in which you need to settle more than one issue). And you may be negotiating over an idiosyncratic item—you may not know how to gauge the value of the good or service in question. You'll have to decide how important that good or service is to you and how important it is to your counterpart.

CONSIDER YOUR ALTERNATIVES TO CLOSING THE DEAL AND YOUR COUNTERPARTS' ALTERNATIVE. Ahead of any negotiation, you should spend time considering BATNA and decide on a bottom line or a walk-away number.

CONSIDER THE ZONE OF POSSIBLE AGREEMENT. Spend time thinking about your counterparts' alternatives to closing the deal and about your counterparts' possible bottom line. In any negotiation worth

engaging in there is a zone of possible agreement or the overlap between your bottom line and your counterparts' bottom line.

CONSIDER YOUR STRATEGY. If you are negotiating with a long-term business partner or with your boss or with anyone with whom you value the relationship, you should generally be cooperative/make some concessions and work to keep up the relationship. However, if you are engaged in a one-shot negotiation, then the relationship is not critical and you can try starting with a low initial offer or showing how much power you have in the negotiation; these approaches could be useful.

During the negotiation:

USE THE FIRST-MOVER ADVANTAGE AND ASK QUESTIONS. Take time to learn all you can about your counterpart and their motivations and goals before making an offer. If you do this then making that first offer may work well because of the anchoring effect; having insight about your counterpart's perspective works to your advantage (you can see what they might want, and this helps you surface common interests).

[End of prompt]

If you're using this prompt verbatim, you can also share [this GPT](#) with your students.

To see this prompt in action, here is a [partially piloted example](#) of an interaction between a "student" and the AI-Mentor in a negotiation role-play exercise. Remember that the AI is inconsistent in the way it executes a prompt, so each student's interactions with the AI will differ.

Considerations before you roll out your role-play exercise to students

Once you have written your own version of this prompt—and you've experimented with it to ensure it works for your class level and topic—

you'll want to think through how to implement this role-play exercise in your class. Below we share several considerations.

Offer guidelines around AI use. Before students go off and try the prompt, make sure they understand how to effectively engage with the AI. For suggested guidelines you can give your students ahead of the exercise, see our *Inspiring Minds* article "[Student Use Cases for AI](#)."

Acknowledge potential risks. While AI tools can personalize an exercise and adapt depending on student responses, they do not always tie the lesson to the scenario or provide solid advice.

The AI's capacity to vary output means that each student's experience becomes highly individualized, which may lead to confusion if the AI's narrative strays from the intended lesson or lacks cohesion. Scenes and characters generated by the AI can also vary in difficulty; some students may be presented with challenges that are too difficult and others may encounter a problem that is relatively straightforward.

The AI's interpretation of instructions and execution of scenarios can also vary significantly between different AI models. For example, when the above prompt is piloted via Anthropic's Claude Opus 3, it may note the role-play character's non-verbal actions, facial expressions, and tone of voice—not something it was prompted to do.

To help mitigate these risks, make sure to experiment with your prompt to better understand how the models react to their instructions. As with any AI exercise, instructor involvement, feedback, and oversight are critical.

Choose an assignment type. The role play can be an in-class exercise followed by a class discussion, or, alternatively, can be assigned as homework, with students handing in their conversation with the AI via links along with a reflection paper. For an in-class exercise, you can have students engage with the AI individually or in small groups, working together through the role play.

If you assign individual work and students practice on their own, then each student gets direct experience and can engage at their own pace and level, and individual reflections can allow students to process their experience in depth.

Alternatively, playing through these scenarios in teams allows students to collaborate and learn from each other's approaches. The conversations that naturally occur between classmates as they progress through the role play may lead to a richer class-wide debrief after the exercise is complete.

Debrief the experience. Whichever path you chose (in-class exercise or homework assignment), take the time to debrief the experience as a class. Using a few examples shared by students, explore where the AI was successful and where it failed, focusing on how the example scenario highlighted or failed to highlight class materials. Students should be asked, *What happened? What scenario did you chose and why? How did the exchange end? What would you do differently next time and why?* Make sure they really interrogate the AI's output. Ask, *To what extent was the scenario realistic? Did the AI get stuck in a loop? Did you detect bias in the scenario or interaction?*

The key is for students to apply ideas or frameworks they learned during the exercise; in class, instructors can abstract out and reinforce these concepts, creating a clear connection between the experience and key ideas.

HOW WILL MULTIMODAL AI LIKE GPT-4o SHAPE SIMULATED PRACTICE?

OpenAI and Google have recently showcased [new multimodal capabilities](#), including innovations in voice, video, and audio integration. Although these features are not available as of this writing, they demonstrate the potential for transforming the way we approach simulated practice. The potential use of AI to integrate voice and video could significantly enhance simulated learning experiences for students,

offering a more engaging and realistic practice environment compared to text-based interactions alone.

Here are a few reasons why this capability could be a gamechanger:

- 1. Engagement.** Voice and video interactions can make the learning process more engaging and immersive, better capturing students' attention than text alone.
- 2. Stress.** Voice and video integration can mimic the stresses of the real world, and that's not a bad thing. Interacting via text alone gives students time to mull over their responses; but when faced with voice and video, students must quickly adapt and perform, upping the stakes and giving them valuable practice in high-stress situations.
- 3. Realism.** An AI that can see and hear may help create a practice environment that more closely resembles real-world situations. For example, in a simulated negotiation, incorporating audio (where a student might speak both to a mentor and an AI counterpart) and video (where the AI could observe the student negotiating) could add an element of realism, as students are challenged to interact and receive feedback based on their interactions.

While it's far too early to discuss, much less predict, the full impact of these features, and rigorous experimentation is needed, they have the potential to revolutionize the way we prepare students for real-world challenges.

Building more personalized and relevant learning experiences

The transformative power of AI has put educators in the position of builders and creators, potentially democratizing the development of educational technology. Instead of having to choose from pre-built role-play experiences, you can more easily develop practice spaces and interactive solutions that better suit your learners.

However, realizing the full potential of AI in your classroom (and beyond) will require iteration and rigorous experimentation. The framework presented in this article serves as a foundation for that exploration and adaptation. The time to start is now.

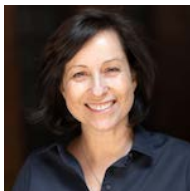
To learn more about how to leverage AI to personalize learning, including creating a “goal-playing” exercise (in which students play themselves and are tasked with teaching a character played by the AI), see Ethan Mollick and Lilach Mollick’s full paper “[Instructors as Innovators: A Future-Focused Approach to New AI Learning Opportunities, with Prompts.](#)”

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ARTICLES BY ETHAN MOLLICK AND LILACH MOLLICK
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Cultivating Self-Worth in the Age of AI

5 Exercises to Ensure Students Know Their Value
in an AI-Inundated Workforce

by **Ted Ladd**

Article published on hbsp.harvard.edu / September 26, 2024

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Jorg Greuel / Getty Images

Generative AI introduces a crisis of self-worth as much as it does a crisis of work. In the new reality of gen AI, the roles our students will hold after graduation are at risk of significantly changing—or even disappearing—within a few short months. Watching the proliferation of a technology that is wiser than most trained professionals will and should make students question their worth as future professionals in the labor market.

Some students respond to this threat of indignity with fear and avoidance, vowing to never use the technology. On the opposite end

of the spectrum, others are overusing AI, thinking that the best way to avoid irrelevance is to tie themselves to it.

WATCH THE WEBINAR

In the webinar “[Restoring Our Humanness in the Age of AI: Challenges and Solutions for Faculty and Students](#),” Ted Ladd, professor of entrepreneurship and former dean at the Hult International Business School, shares exercises and skills that help students maintain their feelings of self-worth and confidence in the face of AI. [Watch the webinar recording](#).

Both approaches are unproductive. Students who fear AI fail to learn about the opportunities it offers, increasing the likelihood that AI will eventually damage both their dignity and their job prospects. Meanwhile, AI overuse removes opportunities for students to cultivate the non-technical skills—such as communication and critical thinking—that will help them stand out to future employers.

In the face of this crisis, professors need to rethink how schools approach teaching, both in terms of the skills we cultivate and the attitudes we encourage. If we don’t, our students may face both a decline in their self-esteem and unfulfilled goals for their future careers.

Over the past few years, I’ve incorporated several exercises and assignments into my courses that help students master AI use while also recognizing what value they can bring to an AI world. Here are five that you can adopt for your own classroom.

1. Explain large language models through the “say the same thing” game

Early in a course—usually during the first class—I do an exercise that demonstrates how large language models (LLMs), the technology underlying gen AI, work. Students are paired off and instructed

to silently count to three on their fingers. At three, they have to simultaneously say any word. If they don't say the exact same one, they have to do the exercise again until they do.

It may sound difficult, but in practice, it takes very little time for students to arrive at the same word. The initial challenge is for students to determine which student is "leading" and which is "following" through their answer iterations. Most students manage it in under five minutes, and many get it in their second round.

Professors need to rethink how schools approach teaching, both in terms of the skills we cultivate and the attitudes we encourage. If we don't, our students may face both a decline in their self-esteem and unfulfilled goals for their future careers.

When students choose a word, they're guessing the best-fit match for what their partner expects. They typically use context clues, such as what was said last round, to make that guess. Essentially, that's how LLMs work.

Through this exercise, students gain a better understanding of generative AI while also realizing that it does something their own brains can do, albeit a little faster. It demystifies AI, and that helps students recognize that they're more than capable of mastering it.

2. Explore business ideas by brainstorming with gen AI

When entrepreneurs develop a business venture, they identify hypotheses about why that idea will be successful and then test those assumptions. To teach these practices, I've developed an approach that puts students in conversation with AI.

To start, I give the students a business idea: For example, I might tell them that they're an entrepreneur in Nairobi, Kenya, with an idea to connect truckers with spare cargo capacity to farmers who need to get their produce to market. I have them begin by evaluating the idea and forming hypotheses without the help of AI.

Then, I ask them to put the scenario into a gen AI engine and have it identify what challenges or opportunities the idea might introduce to truckers and farmers. The list of considerations the AI comes up with usually exceeds what students think of by themselves because it was trained on a dataset that includes writings about trucking and farming. Its outputs augment students' work, but don't remove students' perspectives from the process.

I then challenge students to go further by using AI to think of additional related business ideas, such as other business segments that could benefit Kenyan truckers with extra capacity or services that may help farmers increase their margins.

Once they have their list of ideas and hypotheses, students are responsible for doing the additional research needed to finish testing them. This kind of thorough investigation helps students practice using AI for brainstorming but keeps them in the driver's seat while developing and evaluating a business idea.

3. Understand quantitative theory by analyzing AI's math capabilities

One of the subjects I teach is microeconomics, which requires a lot of math in simultaneous equations. AI is pretty good at doing these—and [will get even better](#)—but students still need to understand the theory behind them.

To help students both practice using AI and master microeconomic theories, I first give them problem sets and their answers. I then ask them to input those problems into multiple AI engines, since each

engine operates slightly differently. Students must submit what prompts they used and what answers they received.

Though AI can crunch numbers, only students can understand the underlying logic that determines how those numbers are calculated.

They also must identify discrepancies between the answers provided by the different AI engines, and between the AIs' answers and the official answers I provided. Students must explain what the discrepancies are and why they may have occurred. If answers are wildly different, they must do the math themselves to understand where the AI's reasoning went wrong.

This demonstrates to students that while AI can help with simple math, they still need to understand the fundamental tenets of microeconomics. Though AI can crunch numbers, only students can understand the underlying logic that determines how those numbers are calculated.

4. Hone critical thinking by evaluating AI-generated video critiques

I give students the opportunity to practice using AI by assigning them a video project that requires some AI input. They're asked to create a 15-minute video about a proposed business venture and use at least three AI tools in the video's production (see sidebar for a list of tools I recommend students use). This gets them comfortable using AI.

To help students also build their self-esteem relative to AI, I like to add another step after the video project is done. Students receive randomly assigned videos from their peers, and I have them anonymously critique the videos. After students have written their own critique, they also ask an AI model to critique the video. The student critic then evaluates the

AI's feedback, compares it to their own initial feedback, and explains whether they agree with the AI's response and why.

It's extremely rare for a student to completely agree with the AI's evaluation. The AI doesn't understand the context of our class, so it can't know the assignment specifics or the nuances of the theories being used. Without this context, it can't give an accurate evaluation. This helps students recognize that AI often has incomplete information compared to the humans using it.

RECOMMENDED AI TOOLS

This is the list of tools I provide students to get them started with using AI for the video project:

- [ChatGPT](#) for developing ideas
- [Perplexity](#) for writing the video's script
- [Speechify](#) for narrating with voice
- [Midjourney](#) for creating graphics

Using AI tools to create the videos helps them master AI's strengths, while completing the critique exercise helps them realize that their own expertise is needed to overcome its weaknesses.

5. Preserve human-to-human skills through activities people do best

Excelling in an AI-driven workplace doesn't just mean knowing how to use AI; it also means knowing how to deploy your uniquely human skills so you can bring more value than AI can.

To help students recognize and improve these skills, I incorporate several human-to-human activities into my classes that emphasize things AI will never be able to do better than us:

- **Negotiation role play.** Negotiating well requires listening to others, reading their nonverbal cues, and communicating persuasively. AI will never be able to do these things for us, so the professional who has those skills will win out.
- **Debates.** The only way to be good at debate is to listen carefully to what your opponent is saying and respond in the moment. While AI can help you prepare for a debate, only a person can actively listen, mentally synthesize an opponents' points, and respond with an appropriately nuanced answer.
- **The marshmallow challenge.** In the marshmallow challenge, students are given some dried pasta and a marshmallow and told to build the tallest possible structure that can support the marshmallow on top. It encourages collaborative brainstorming on the best structure. When I give students the option to use AI for this, those who do consistently perform worse. This is because they pigeonhole themselves into the one idea the AI provided instead of brainstorming together. This helps students realize how much more impactful human-to-human creativity and teamwork are when problem-solving.

Cultivating an identity that thrives alongside AI

Each of these exercises helps the students both understand AI better and understand what they can do better than AI. This combined understanding lends itself to maintaining dignity in a professional world inundated with AI.

For many people, dignity is tied to identity, especially as it relates to one's abilities and how those are used in the workplace. For our students, a professional identity built on certain knowledge-work skills poses a risk to their dignity, as there's a good chance those skills could be automated away. But students can retain their dignity if they cultivate an identity based on being able to learn about, adapt to, and ultimately master AI.

With an identity as someone who succeeds in a world of AI, our students can succeed in a modernizing workforce, however it may continue to change.

To discover more insights and exercise ideas from Ted Ladd, [watch his full webinar recording](#).

Explore more

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Ted Ladd is a professor of entrepreneurship and former dean at the Hult International Business School. He is also an instructor at Harvard University. His research explores strategies for innovation, especially around multi-sided platform marketplaces.



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