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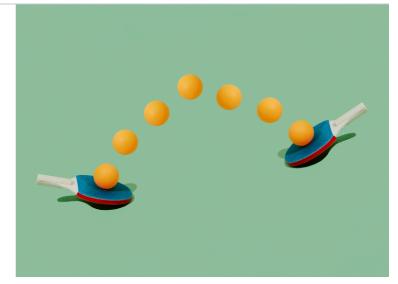
ARTIFICIAL INTELLIGENCE

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

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

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ust 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.

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

## THE MERITS OF ROLE PLAY FOR LEARNING

Role play allows students to experiment with different versions of themselves—

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## role-play exercise

during the exercise.

When carefully prompted, generative AI can not only and weaknesses. 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)

framework in a narrative-driven and personally engaging way. As the scenario unfolds, they quickly learn their strengths and weaknesses.

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:

- \*\*Example 1. 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 Al 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.
  - 1. 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 counterparts' 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

## HOW WILL MULTIMODAL AI LIKE GPT-40 SHAPE SIMULATED PRACTICE?

OpenAl 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 Al 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 Al that can see and hear

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 classwide 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 Al'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.

## **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

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 Al counterpart) and video (where the Al 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,

way we prepare students for real-world

challenges.

they have the potential to revolutionize the

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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