# Crafting Gamified Experiences with Al

By Jerry Jones, WCC CiTL





#### **Creative Problem Solving and Scenario Planning**

**Applications**: Ideation, strategy development, and troubleshooting in various contexts like business, education, or personal projects.



**Roleplay and Interaction** 

**Applications**: Simulated interactions for educational, training, or entertainment purposes, including language learning and cultural exchange.



**Research and Analysis** 

**Applications**: Assisting in information gathering, data analysis, and summarizing findings for academic, professional, and personal research.



**Creative Pursuits** 

**Applications**: Aiding in artistic endeavors like creative writing, music composition, and providing feedback on creative works.



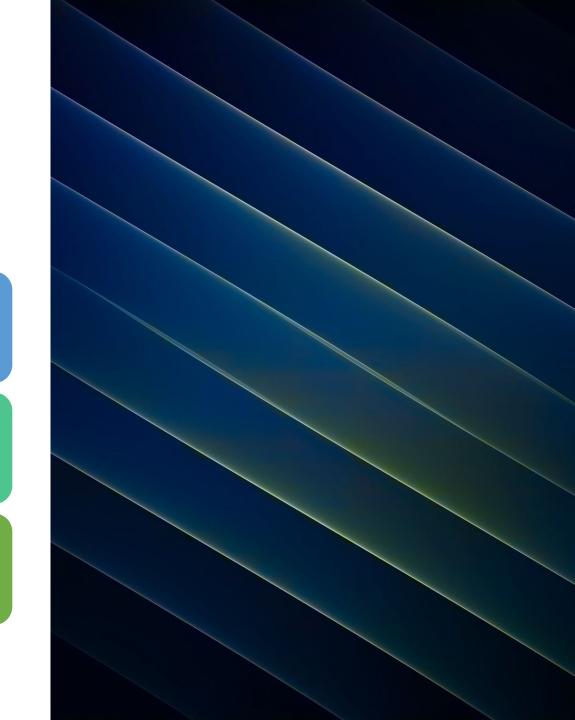
Communication Enhancement **Applications**: Assisting in drafting, refining written communication, and enhancing language proficiency, grammar, and vocabulary.

#### Gameification – Why?

Increases level of engagement in classrooms **1** 

Aids in accessibility by accommodating different learning styles 2

**Brain Games: Do They Really Work?** 



The impact of gamification on students' learning, engagement and behavior based on their personality traits (2020)

#### **Points**

Points appear to participants in two different parts of the system. When students are completing a programming task, they can see how many points they could earn if they solve it successfully. When the solution is incorrect, the score is decreased by five points for each submission (the students can lose a maximum of 70 points for each task). Students can also view their score histories for the solved exercises and the points previously earned. Students were warned that the scores obtained in the exercises would not affect their final grade on the course.

#### **Badges**

Nine distinct badges were granted to users by obtaining specific objectives, with three degrees (gold, silver, bronze), totalizing 27 badges. Badges were granted for students who have achieved a specific sum of logins, correct assignment, submitted assignments, submitted assignments with no errors, daily activity, and for whom have concluded challenges and were top of the class and the platform.

#### Ranking

The ranking is the sum of all points earned by students for all assignments solved. There are two distinct rankings available. The ranking of the class shows the participants with the best scores in the class; its goal is to promote local objectives for students. The second one is the general ranking, which contrasts the scores of all students of the platform who have used Feeper.

The results showed a change in the behavior of the gamified group showing a significant improvement in the accuracy of students with personality traits with low agreeableness, low openness, and introverts.

A reduction during the semester for accuracy was also verified for students with low conscientious personality who used the nongamified system, while, in the gamified group, this reduction has not occurred, indicating that gamification may help these groups."

#### Translation?

Gamification directly aids students who are more disengaged with our current curriculum designs.

In a college environment, this is more likely in 100-level courses

Gamifying education:
what is known, what
is believed and what
remains uncertain:
a critical review
(2017)

- (i) Insufficient evidence exists to support the long-term benefits of gamification in educational contexts
- (ii) The practice of gamifying learning has outpaced researchers' understanding of its mechanisms and methods;
- (iii) The knowledge of how to gamify an activity in accordance with the specifics of the educational context is still limited.

#### Translation?

While gamification is proven to be effective in studies, it has yet to be implemented on a real academic level. Hence, we cannot measure its long-term effectiveness yet.



#### My Two Cents

Gamification has largely been regarded as an academic novelty up until now because we've lacked the technology to more easily (and creatively) facilitate it.

**Enter Al** 



#### Two Lenses

# Al and Gamification

Al as the Learning Game

Al for Gamified Ideation



All Prompts in this demonstration have been run against ChatGPT multiple times to confirm accuracy and consistency.

### Disclaimer

Some of these exercises will require students to get a free or paid chatGPT membership. Part 2 will require your own free or paid membership.



#### The Manager

In this game the student will assume a management role related to the course.

For BUS a CFO or Entrepreneur For ENV a Policy Advisor For HST a Historical Leader

In a single instance or over a series of broader course interactions, the students will interact with ChatGPT and respond to a randomly generated crisis within a subject we define.



#### You

I am Commissioner Lin Zexu in 1839, dispatched by the Chinese government. Describe to me the challenges I am facing as if you were an advisor of the time.



#### **ChatGPT**

Commissioner Lin Zexu.

As your advisor in the year 1839, I must bring to your attention the formidable challenges you face in your commission by the Chinese government. The central issue at hand is the opium trade, which has burgeoned into a crisis of significant proportions. The British have been importing opium into China in vast quantities, leading to widespread addiction among the Chinese population. This addiction has not only caused severe social and health problems but also threatens the moral fabric of our society.

Your primary challenge is to curtail the opium trade, a task that is complex due to several factors. First, the trade is extremely profitable for the British, and they are unlikely to cease their activities without considerable resistance. The British have shown themselves to be formidable opponents, with advanced naval capabilities and a strong economic motive to continue the trade.

Secondly, the addiction has spread so widely that any abrupt cessation might lead to social unrest. Many in the upper echelons of society, including officials, are under the grip of this addiction, complicating your efforts to garner support for anti-opium policies within the government.

Furthermore, your actions could have significant diplomatic ramifications. The British may view any forceful action as a provocation, potentially leading to military conflict. This places you in a delicate position where you must balance the internal need to address the opium crisis with the external need to maintain peaceful relations with foreign powers.

In addressing this crisis, you will need to employ a strategy that combines firm administrative action, diplomatic skill, and a nuanced understanding of both the internal and external political landscapes. The fate of the nation's well-being, both in terms of its people and its international standing, rests heavily upon your decisions in this matter.



Students will have to apply the subject's principles in order to manage the system.

Instructors oversee these interactions, providing context and follow up.



Students turn in a reflection paper or chat log on the assignment



#### Mayor - Mayor

In this college-level exercise, I assume the role of a mayor in a small town. The town is amid a complex crisis, which I'd like you to simulate and describe. As the mayor, I must tackle the challenges you present, taking into account the town's history, economic state, and political landscape.

Your role is to act as my primary advisor. Begin by randomly generating the town's background and outlining a specific crisis based on the guide below, then assist me in developing solutions and strategies to address it. Proceed with Week 1 now.

• Week 1: Fiscal Policy and Government Intervention

**Prompt**: "Present a fiscal dilemma involving government revenue and expenditure in my growing economy."

Week 2: International Trade and Relations

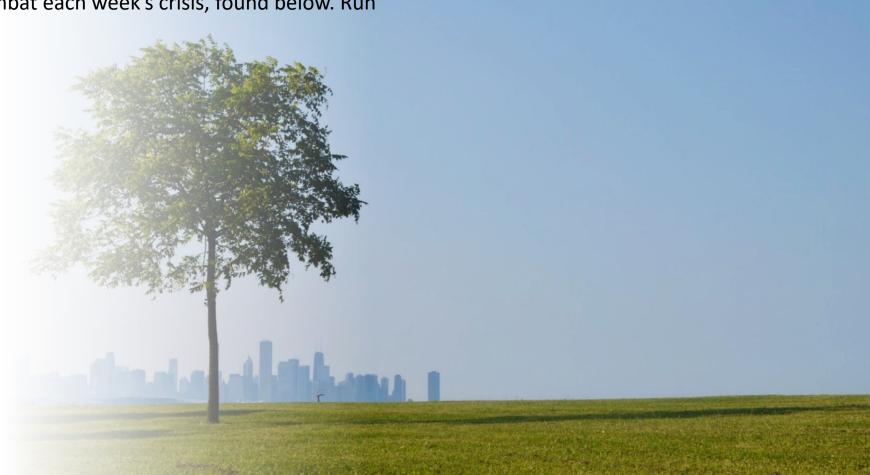
**Prompt**: "Generate a scenario involving international trade disputes or opportunities for a fictional country."

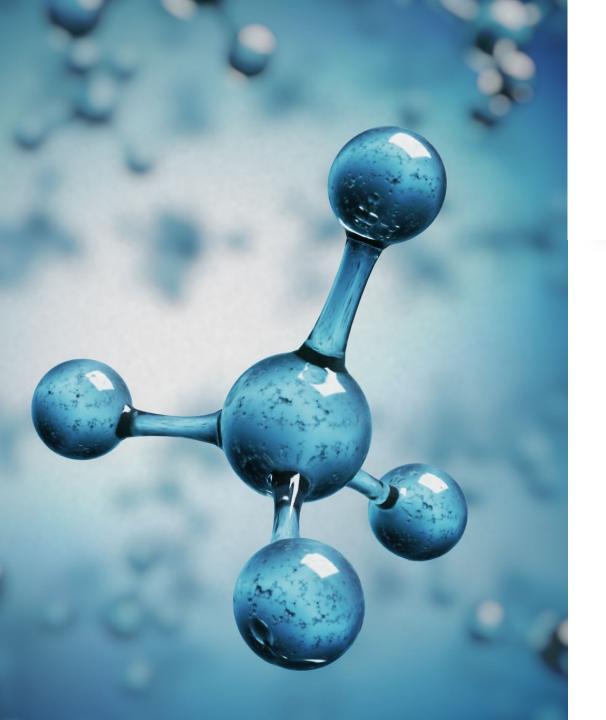


In this college exercise, I am the head of an Environmental Protection Agency in a region facing significant ecological challenges. I need you to simulate and describe a complex environmental crisis. My responsibility is to address the challenges you outline, considering the ecological balance, socio-economic impacts, and regulatory framework.

Your role is to assist me as my primary advisor. Begin by randomly generating the specifics of the the region's environmental background, then guide me in formulating sustainable and effective policies to combat each week's crisis, found below. Run Week 1 now.

#### **Environmental Advisor**





#### **Chief Chemist**

In this college exercise, I am the chief chemist in a stateof-the-art laboratory faced with a unique chemical conundrum. The scenario involves a complex chemistryrelated challenge that encompasses organic chemistry, materials science, and environmental impact. Your role is to simulate and outline this intricate chemical problem.

As the chief chemist, my task is to analyze and resolve the issue, considering factors like chemical reactions, safety protocols, and potential industrial applications. Begin by randomly generating the details of the chemical challenge, including its composition and context, then assist me as my primary advisor in devising a safe and effective solution."

# 1,000

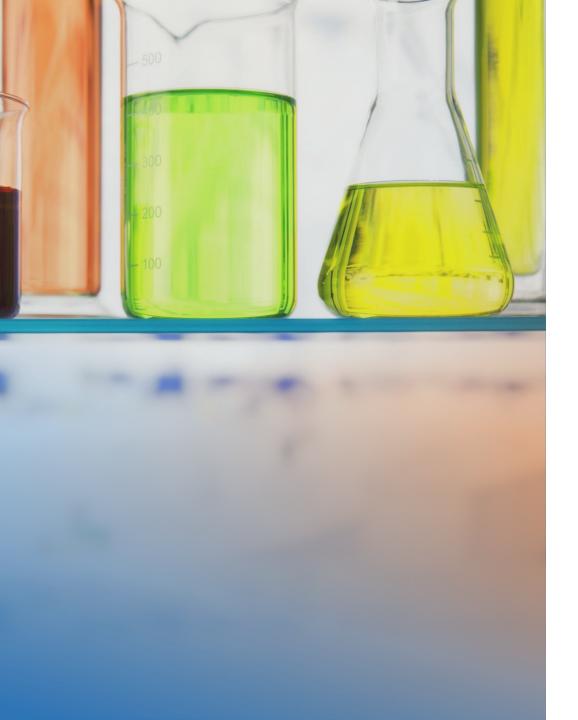
Entrepreneur

I am an aspiring entrepreneur planning to launch a startup in a competitive industry.

Your role is to simulate a dynamic business environment and describe a specific challenge facing my startup week to week. As the entrepreneur, I need to strategize and make decisions, considering factors like consumer trends, funding options, and technological advancements.

Begin by randomly generating details about my industry, market conditions, and the nature of the challenge, then assist me as my primary advisor in crafting a robust business plan and overcoming the presented obstacles. Run Week 1 now.

# Pocket Sized Assignments



#### Chemistry: Pharmaceutical Challenge

 Prompt for ChatGPT: "Create a detailed scenario involving the discovery of a new rare disease and outline the chemical challenges in developing a medication for it. Provide the disease's characteristics and the kind of chemical properties a potential medication should have."

#### Business/Economics: Market Expansion Strategy

 Prompt for ChatGPT: "Generate a description of an emerging international market, including its economic conditions, consumer behavior, and cultural aspects. Outline potential challenges and opportunities a small business might face in this market."

- 3. Environmental Science: Climate Action Plan
- Prompt for ChatGPT: "Describe a hypothetical city dealing with specific climate change challenges, such as rising temperatures or pollution. Include details about the city's geography, population, and current environmental policies."

- 4. History/Political Science: Diplomatic Simulation
- Prompt for ChatGPT: "Create a historical conflict scenario between two fictional countries, including their cultural, political, and economic backgrounds. Detail the main points of contention leading to the need for a peace treaty."





#### Implementing

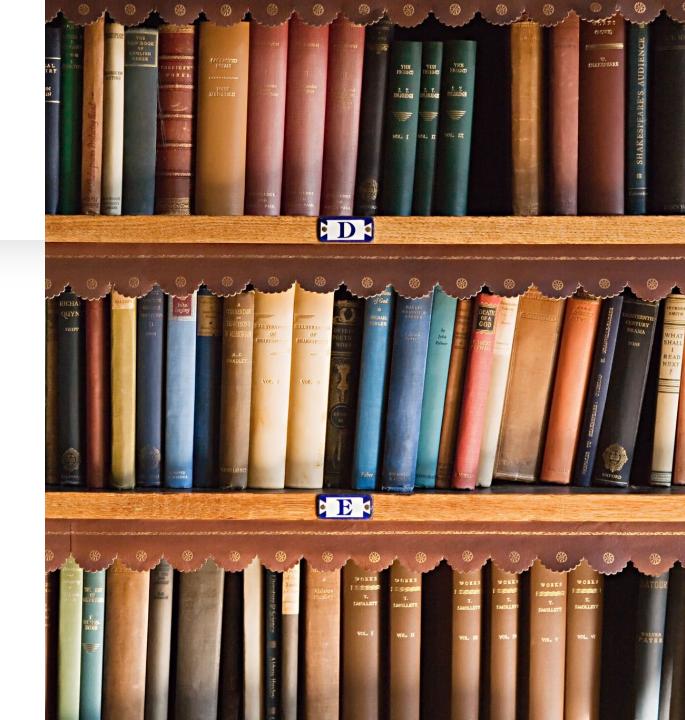
These shorter assignments would be excellent ice breakers, opening writing prompts, or week to week inspiration.

One could generate these details separately, then share with students.

#### Roleplay

Historical Figures and Scientists, Philosophers, Media and Literary Characters

**Practicing Clinical or Counseling Techniques** 



#### What subject benefits the quickest?

#### Languages of course!



#### You

Por favor habla español conmigo para que pueda aprender.



#### ChatGPT

¡Hola Jerry! Claro, estaré encantado de hablar contigo en español para que puedas practicar y aprender. ¿En qué puedo ayudarte hoy?









#### Other Great Roleplay Possibilities

- **1. History and Social Studies**: Role-playing historical figures or participating in simulated historical events can deepen understanding of different eras, cultures, and the impact of historical decisions.
- **2. Psychology and Counseling**: Practicing therapeutic conversations or exploring psychological theories through role-play can aid in understanding complex human behaviors and mental health concepts.
- **3. Business and Management**: Simulating business negotiations, leadership scenarios, or conflict resolution can enhance skills in communication, strategic thinking, and problem-solving.
- **4. Science and Technology**: Role-playing as scientists or tech professionals tackling ethical dilemmas, research challenges, or innovation brainstorming sessions can foster critical thinking and creativity.
- **5. Creative Writing and Storytelling**: Developing characters, dialogues, and plots through role-play can be a dynamic way to enhance writing skills and storytelling techniques.





#### You

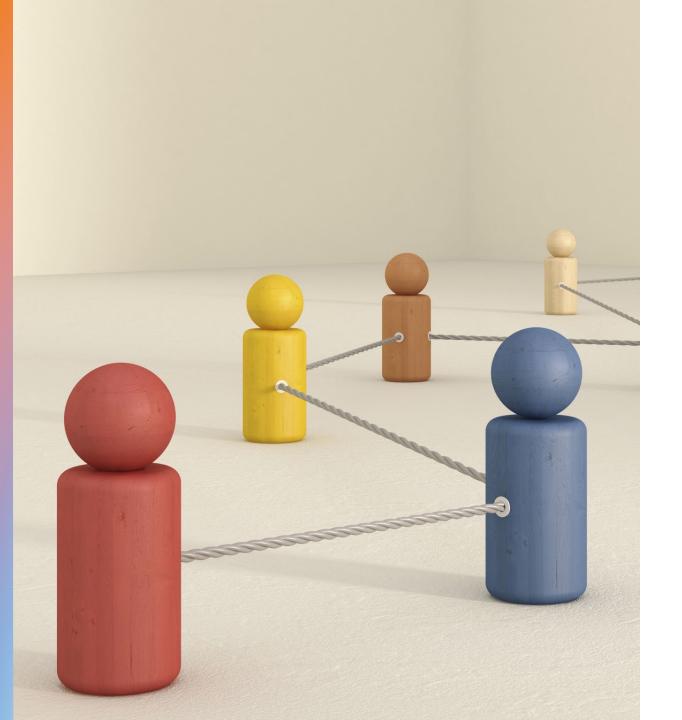
Let's play a game. You are Winston, the main character from 1984, a little before the events of the book take place. Why are you so discontent?

#### \$

#### ChatGPT

Ah, the air in Airstrip One carries a weight, a kind of despair that clings to your chest long before you can name it. Every day's much the same; the telescreens, the propaganda, the ceaseless eye of the Party watching over us. It's a life, if you can call it that, hemmed in by the rigid walls of orthodoxy, where even a thought out of line can spell doom. I suppose, old friend, it's this suffocation of freedom, this relentless grey that paints our days without a hint of blue, that stirs a restlessness in me. It's the crushing realization that we are but cogs in a vast machine, one that grinds away the very essence of our humanity. We are told to forget, to unsee the untruths, to accept what is given and never to ask for more. But how can one not feel discontent when every spark of individuality, every dream of something different, is snuffed out like a candle in the endless night? The soul rebels, Jerry, it has to—because to accept this world as it is would be to deny that part of us that yearns for something more, something beyond the reach of Big Brother's gaze.





ChatGPT can express concepts visually, great for both accessibility and informational fun.



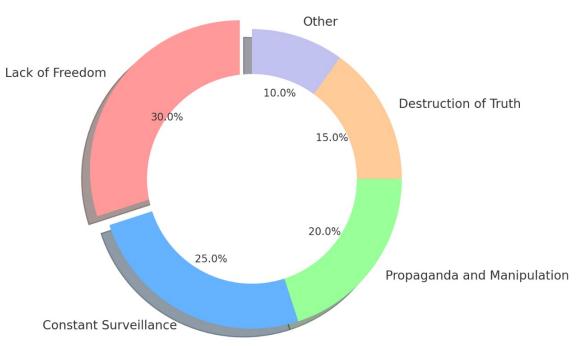
You

Could you produce a pie chart that illustrates the sources of your dissatisfaction Winston?



#### ChatGPT





Here's the visual representation of the sources of my discontent, as Winston might see them. The largest slice represents the lack of freedom, a significant source of dissatisfaction, followed by the constant surveillance and the propaganda and manipulation wielded by the Party. The destruction of truth represents a slightly smaller portion, as it underpins the other issues. Lastly, there are other, smaller grievances that contribute to the overall feeling of discontent. [>-]

## Roleplaying Activities

#### **English (ENG): Literary Analysis Roleplay**

Select a literary character from a novel or play you're studying in class. Initiate a conversation with GPT, where GPT takes on the persona of that character. Discuss the character's motivations, actions, and character development as if you were interacting with them in the story. Analyze their role in the narrative and their impact on other characters.





#### Political Science (POL): Political Debates

Exercise: Stage a political debate with GPT portraying historical political figures or modern political leaders. Explore key political ideologies, policy proposals, and historical events. Encourage students to argue from different perspectives, promoting a deeper understanding of political dynamics.



**Psychology (PSY): Counseling Session** 

Roleplay a counseling session with GPT acting as a psychologist or patient. Present a hypothetical case study or scenario related to a psychological topic.



#### **Sociology (SOC): Societal Change and Advocacy**

Exercise: Choose a historical figure or contemporary social activist. Engage in a dialogue with GPT as that figure, discussing their efforts to address societal issues. Encourage students to reflect on their own role as advocates for change.

# **Art (ART): Art Critique with a Master**

Choose a renowned artist such as Leonardo da Vinci or Vincent van Gogh. Engage in a virtual art critique session with GPT taking on the persona of the selected artist. Discuss the artistic techniques, themes, and emotions conveyed in their artworks. Analyze their contribution to the world of art.



# Scoring

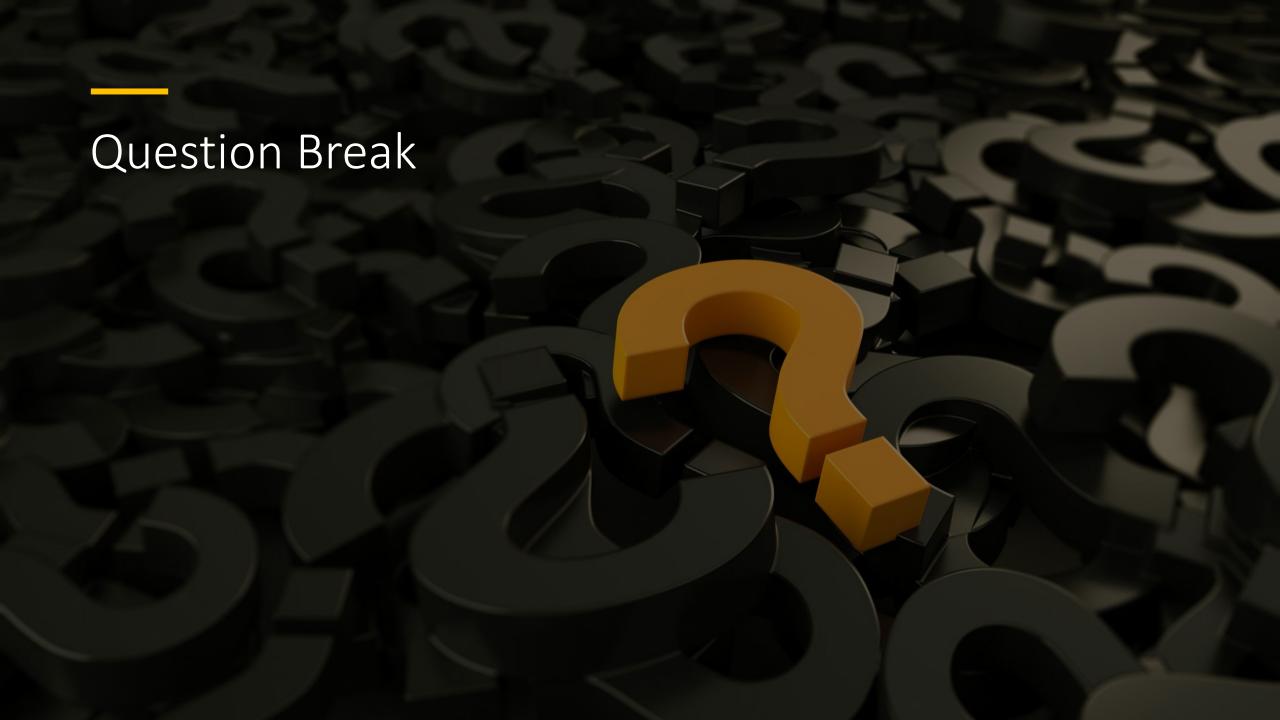
Students either CNTRL+P (command +P for Mac) and capture the entire conversation, or they can summarize via a multi-media paper.

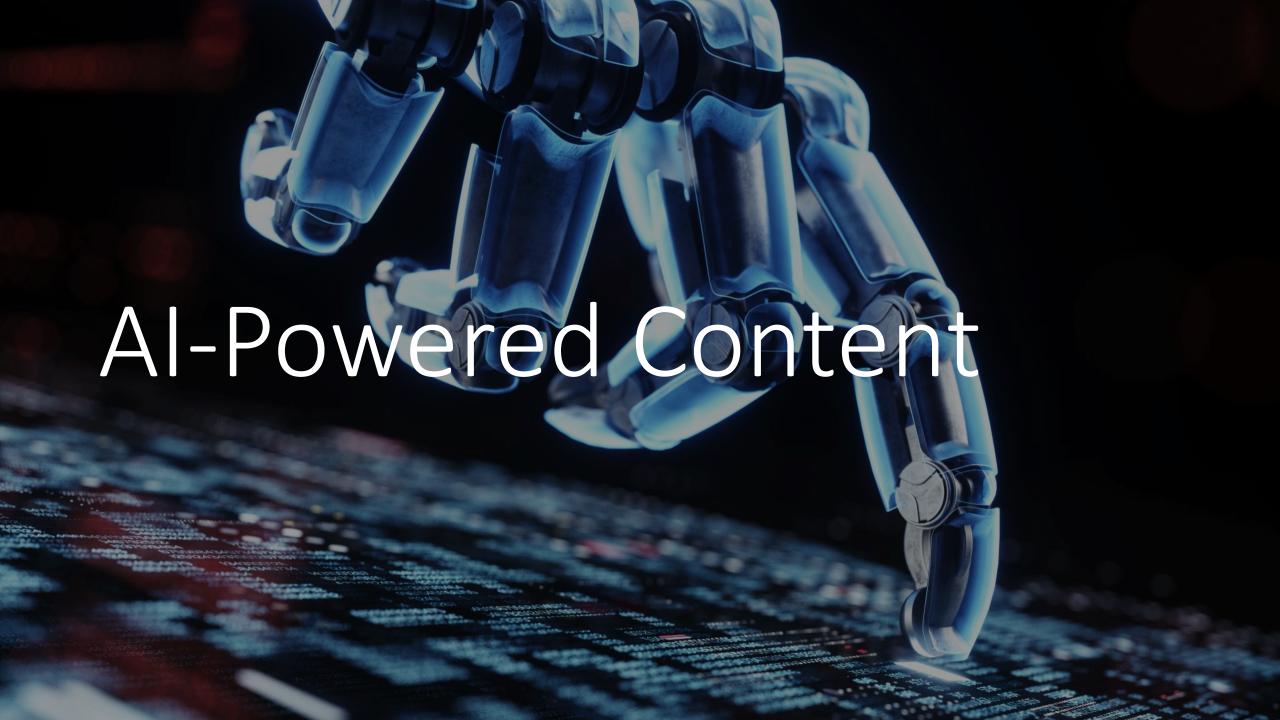
## Gamified Rubric

Criteria	Points	Achieved	<b>Instructor Comments</b>
Engagement and Interaction			
Regular interaction with AI	5		
Use of game mechanics and AI capabilities	5		
Effective communication with AI	5		
Responsiveness to AI's suggestions	5		
Problem-solving and decision-making	5		
Critical Thinking and Strategy			
Identification of key issues	5		
Development of strategies	5		
Application of concepts/theories	5		
Evaluation of AI feedback	5		
Adaptability in game	5		
Reflection and Insight			
Articulation of experience and learning	5		
Critical reflection on AI interaction	5		
Insight into AI's role	5		
Reflection on personal growth	5		
Identifying real-world applications	5		
Presentation and Communication			
Clarity and organization	5		
Coherence and logical flow	5		
Use of appropriate language	5		
Creativity in presentation	5		
Adherence to format	5		

# <u>Download</u>

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Our first section looked at ways to use gamification while engaging with the peripheries of academic philosophy.

For GPT ideation, we need to understand the core tenets of gamification to properly use it as a brainstorming machine.

# **Clear Goals and Objectives:**

Gamification should have clearly defined learning objectives or goals. Students should understand what they are expected to achieve and how their actions contribute to those objectives.

## **Progression and Achievement:**

Create a sense of progression and achievement by implementing levels, milestones, or badges. Students should feel a sense of accomplishment as they advance through the gamified experience.

## **Competition and Collaboration:**

Introduce elements of competition, such as leaderboards or rankings, to motivate students to perform better. Additionally, foster collaboration by allowing students to work together to achieve goals.

### **Rewards and Incentives:**

Offer rewards, points, or incentives for completing tasks, achieving goals, or demonstrating mastery. These rewards can be both intrinsic (satisfaction, recognition) and extrinsic (prizes, certificates).

## **Challenges and Obstacles:**

Include challenges, puzzles, or obstacles that require problemsolving and critical thinking. These challenges should be appropriately challenging but not overly frustrating.

# **Choice and Autonomy:**

Allow students to make choices that affect their path or outcomes within the gamified experience. This promotes autonomy and a sense of control over their learning journey.

### **Personalization:**

Tailor the gamified experience to individual students' preferences, skill levels, and progress. Personalization enhances engagement by making the experience relevant to each learner.

## **Accessibility and Inclusivity:**

Ensure that the gamified experience is accessible to all students, including those with diverse learning needs and abilities.

Offer a few possibilities to gamify an essay on the Russo-Japanese War.



### ChatGPT

Hey Jerry, it's great to be discussing this with you. Gamifying an essay on the Russo-Japanese War can be an engaging way to teach and learn about this historical event. Here are a few possibilities:

- Choose Your Side: Divide your students into two groups, one representing Russia and
  the other Japan. Have them research and present their arguments as if they were
  strategists during the war. This encourages critical thinking and empathy for different
  perspectives.
- Timeline Race: Create a timeline with key events of the war and turn it into a race.
   Students can compete to place events in the correct chronological order. You can add challenges like explaining the significance of each event as they go along.
- War Simulation: Use a historical wargame, such as "Axis & Allies," but adapt it to focus
  on the Russo-Japanese War. Students can learn about strategy, diplomacy, and the
  consequences of different decisions as they play through the conflict.
- Documentary Creation: Have students work in groups to create short documentaries
  about different aspects of the war. They can use multimedia elements like video,
  images, and narration to present their findings creatively.
- Historical Debate: Organize a debate where students take on the roles of key figures
  from the war, such as Admiral Togo and General Kuropatkin. They can argue their
  strategies and decisions as if they were those historical figures.
- Interactive Maps: Provide maps of the regions involved in the war and ask students to
  mark important locations, battles, and troop movements. You can use digital tools to
  make it interactive, allowing them to explore the map and learn as they go.
- Trivia Quiz Show: Host a quiz show-style competition with questions related to the Russo-Japanese War. Include multiple-choice questions, true/false, and open-ended questions to challenge students' knowledge.
- 8. **Escape Room Challenge**: Create an escape room experience with puzzles and clues related to the war. Students must solve the puzzles by applying their knowledge of

# Building From That

Divide the students into two groups, Russia and Japan. These groups will meet three times (representing key points in the war) during the class period for a 5 minute debate, followed by 20 minutes of research in the team. 90min total.

Students will self-elect roles, from team researchers to team documentarians and group speakers.

# Scoring



At the end of the class period the scribes will turn in a paper on the proceedings. Or we make it end of week and encourage whole-group multimedia collaboration.



Students will fill out a reflection paper in the last few minutes of the course. This grade will be combined with the group's grade.



Tues: Lecture



Thurs: Activity & Debriefing



#### You

How can I bring leaderboards or rankings from gamification into a college-level ENG Composition I course?



### ChatGPT

Integrating leaderboards or rankings into a college-level ENG Composition I course can be a great way to gamify the learning experience and motivate students. Here are some ideas on how to do this effectively:

### 1. Assignment Points System:

- Mechanism: Assign points for various writing assignments, in-class activities, or participation.
- Leaderboard: Display a regularly updated leaderboard showing students' points.
- Balancing: Ensure that the system is balanced so that all students, regardless of skill level, have the opportunity to earn points through effort and improvement.

### 2. Peer Review Rankings:

- Activity: Students participate in peer reviews of each other's work.
- Ranking Criteria: Develop a set of criteria for effective feedback (constructive, detailed, helpful).
- Points for Quality Feedback: Students earn points based on the quality of their feedback, as rated by peers and the instructor.

### 3. Writing Challenges:

- **Challenge Examples**: Short story contests, poetry writing, persuasive essays on current topics.
- **Points and Recognition**: Award points for participation and extra for top places as judged by peers, a panel, or the instructor.

### 4. Progress Badges:

- Earning Badges: Create badges for achieving certain milestones (e.g., submitting all assignments on time, showing improvement, exceptional creativity).
- Display: Showcase badges on a class leaderboard or a digital class platform.

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### You

Help me develop a peer review quality survey students can use to gauge how helpful feedback was.

Peer Review Quality Survey			
Reviewer's Name: []			
Your Name: []			
Date: []			
Please rate the following aspects of the feedback you received:			
1. Clarity of Feedback			
<ul> <li>Very clear and easy to understand</li> </ul>			
• Somewhat clear			
<ul> <li>Unclear and hard to understand</li> </ul>			
<ul> <li>Not applicable/Did not receive feedback in this area</li> </ul>			
2. Relevance to Assignment Criteria			
<ul> <li>Highly relevant and on-topic</li> </ul>			
• Somewhat relevant			
<ul> <li>Off-topic or not relevant</li> </ul>			
<ul> <li>Not applicable/Did not receive feedback in this area</li> </ul>			
3. Constructiveness			
<ul> <li>Very constructive; offered clear ways to improve</li> </ul>			
<ul> <li>Somewhat constructive</li> </ul>			
$^{\bullet} \ \ \square$ Not constructive or overly critical without suggestions for improvement			
<ul> <li>Not applicable/Did not receive feedback in this area</li> </ul>			
4. Detail and Specificity			
<ul> <li>Very detailed and specific</li> </ul>			
<ul> <li>Somewhat detailed and specific</li> </ul>			
• 🗌 Vague and general			
<ul> <li>Not applicable/Did not receive feedback in this area</li> </ul>			
5. Respectfulness and Professionalism			
<ul> <li>Highly respectful and professional</li> </ul>			
<ul> <li>Generally respectful and professional</li> </ul>			
<ul> <li>Disrespectful or unprofessional</li> </ul>			
<ul> <li>Not applicable/Did not receive feedback in this area</li> </ul>			

# Awarding Points

Very clear and easy to understand: 3 points

Somewhat clear: 2 points

Unclear and hard to understand: 1 point

Not applicable/Did not receive feedback in this area: **0 points** 

Quality Leaderboards published weekly via announcement

# End of Semester Scoring

- 1st Place Letter Grade Bump
- 2<sup>nd</sup> Place Half Letter Grade Bump
- 3<sup>rd</sup> Place Digital Certificate

VS.

Everybody who achieves a certain point threshold gets a letter/half grade bump



How might we introduce levels into this concept?

### **ChatGPT**

Introducing levels into the gamified peer review system can add an extra layer of motivation and recognition for students. Levels can be based on the cumulative points earned from providing quality feedback. Here's how you might structure it:

#### **Level Structure for Peer Review Gamification**

#### 1. Level Names and Point Ranges:

Novice Reviewer: 0-20 points

Competent Reviewer: 21-50 points

• Skilled Reviewer: 51-90 points

• Expert Reviewer: 91-140 points

• Master Reviewer: 141+ points

#### 2. Level Advancement:

- · Students advance to the next level once they accumulate the required number of points.
- Advancement reflects improvement and consistency in providing quality feedback.

#### 3. Level-Specific Rewards:

- Badge/Icon: Each level has a unique badge or icon that students can display.
- Privileges: Higher levels might come with special privileges, like leading a peer review session, choosing their peer review partners first, or a bonus on their next assignment.
- Recognition: Public recognition in class or on the course platform for reaching new levels.

#### 4. Feedback for Advancement:

- Provide students with specific feedback on how to improve their reviews to advance to the next level.
- This can be based on the areas outlined in the survey (clarity, relevance, constructiveness, etc.).

#### 5. Additional Challenges for Higher Levels:

• Introduce more challenging or complex tasks for higher-level reviewers, like providing feedback on more advanced writing or leading a workshop.

### 6. Reflective Component:

 Encourage students at each level to reflect on their growth as a reviewer and set goals for further improvement.

## 1. Novice Reviewer (0-20 points)

Reward: Acknowledgment as a "Novice Reviewer."

**Benefit**: Access to additional resources and tips on how to provide effective feedback.

## 2. Competent Reviewer (21-50 points)

Reward: Recognition as a "Competent Reviewer."

Benefit: Eligibility to participate in a workshop focused on advanced writing skills and feedback techniques.

### **3. Skilled Reviewer** (51-90 points)

**Reward**: Title of "Skilled Reviewer."

Benefit:

- 1. Priority in selecting peer review partners.
- 2. Invitation to a special discussion session with the instructor for deeper insights into writing and critical analysis.

### **4. Expert Reviewer** (91-140 points)

- 1. Reward: Status as an "Expert Reviewer."
- 2. Benefit:
  - 1. Opportunity to lead a peer review session, sharing expertise with others.
  - 2. A bonus on an upcoming assignment to acknowledge the high level of engagement and skill.

## **5. Master Reviewer** (141+ points)

- 1. Reward: Prestigious recognition as a "Master Reviewer."
- 2. Benefit:
  - 1. A one-on-one mentorship session with the instructor to discuss personal writing goals or academic/career aspirations.
  - 2. The chance to collaborate with the instructor in designing a peer review session or a creative writing exercise for the class.

# Those aren't prizes Jerry.

Neither are Carnival or Arcade game prizes, but folks still spend money.

We primarily compete for the joy of challenge, external recognition, and internal satisfaction.



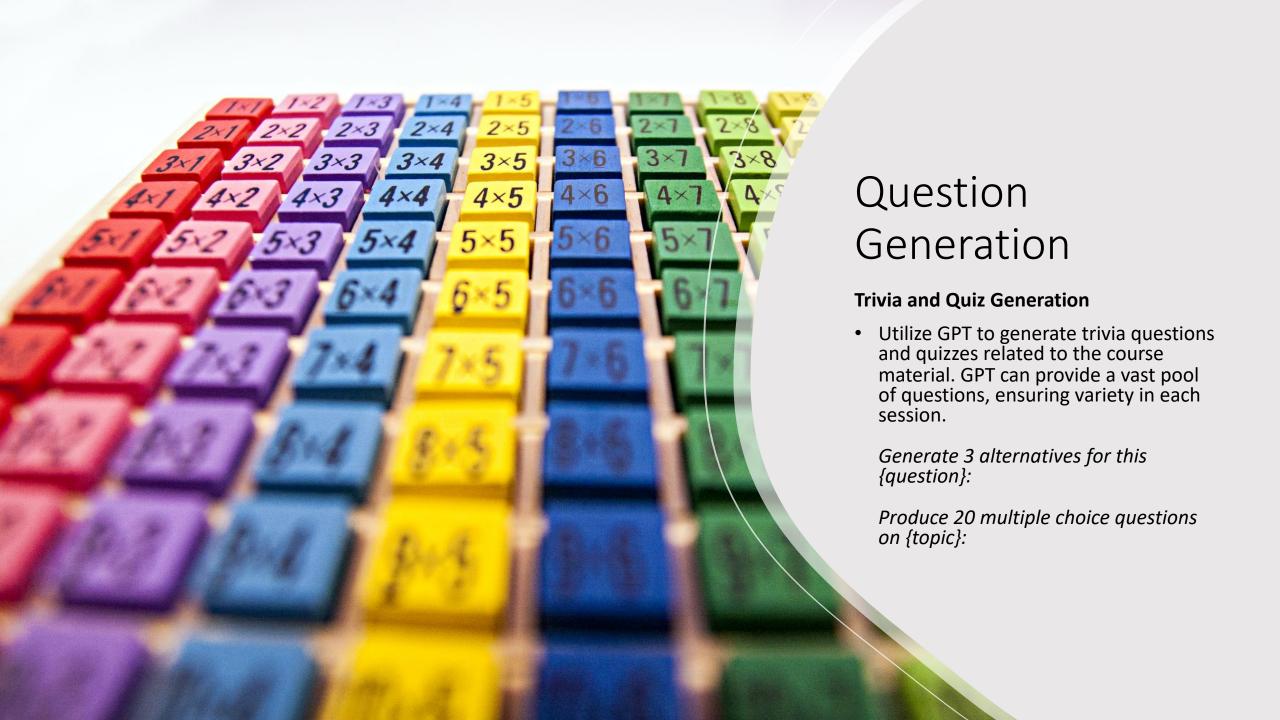
- We've produced a gamified incentive for students to provide quality feedback to each other.
- We've introduced master levels for whole semester engagement
- We've taken what is often a perfunctory process and made it dynamic
- We're directly using competition to incentivize empathy

# Prompts

# **AI-Powered Prompts**

Instructors can use GPT to generate creative storytelling challenges or academic prompts.

Create a more open-ended prompt for college students using this (course objective/topic):





# Informational Fun

• Puzzle and Riddle Challenges

Incorporate GPT-generated puzzles, riddles, or brain teasers into the curriculum. Students can solve these challenges individually or in groups.

Develop a brain teaser on the subject of {topic}...

```
modifier_ob
 mirror object to mirror
mirror_object
peration == "MIRROR_X":
irror_mod.use_x = True
mirror_mod.use_y = False
irror_mod.use_z = False
 _operation == "MIRROR_Y"
irror_mod.use_x = False
 !Tror_mod.use_y = True
 lrror_mod.use_z = False
 _operation == "MIRROR_Z"
  rror_mod.use_x = False
  rror_mod.use_y = False
  rror_mod.use_z = True
 melection at the end -add
   ob.select= 1
   er ob.select=1
   ntext.scene.objects.action
   "Selected" + str(modified
   rror_ob.select = 0
  bpy.context.selected_obj
  lata.objects[one.name].sel
  int("please select exaction
  --- OPERATOR CLASSES ----
     mirror to the selected
    ject.mirror_mirror_x"
  ext.active_object is not
```

# Coding

### **Coding Challenges and Competitions**

 For programming or computer science courses, GPT can generate coding challenges and competitions. Students can write code to solve problems, and GPT can evaluate their solutions, awarding points for correctness and efficiency.

# Upcoming Lectures with FDP



January Rethinking
Multiple Choice: From
Theory to Practice with Al



February Educational Imagery: Engineering Al for Visual and Infographic Materials

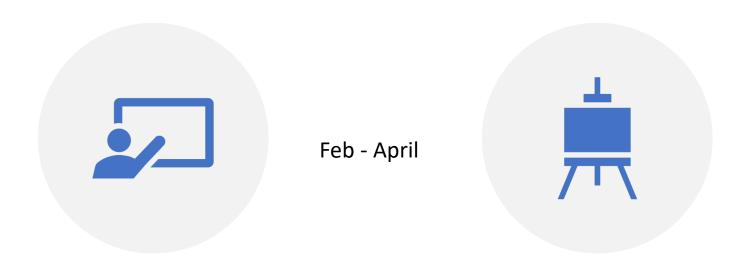


March Accessibility: Beyond the LMS



**April** The New Essay: Active Learning and Al-Resilient Techniques

# Canvas Sessions



TEACHING IN CANVAS BASICS 2 – 4 TEACHING IN CANVAS ADVANCED 2 - 4