



IFE
CONFERENCE

2025



Tecnológico
de Monterrey



Institute
for the Future
of Education

TECgpt Pilot in AIGEN

Manuel Terán (teran@tec.mx), Héctor G. Ceballos
(ceballos@tec.mx)

📍 Monterrey, MX

📅 January 28-30, 2025

Ponencia de Investigación

Presentación de libro

What is TECgpt?

An ecosystem of tools and a development framework created by Tec de Monterrey for Generative AI to create purpose-specific software components and solutions that can be consumed directly or integrated through other enablers, all within a private, secure, managed, and customizable environment.





TECgpt portal

A platform designed for collaboration that facilitates interaction with chats and specific skills.

Software Components



A modular and reusable code unit based on generative AI that encapsulates a specific functionality. Designed to be independent, interchangeable, and reusable. The components can be integrated with others to build complete applications or systems.



TECbot, or institutional Virtual Assistant is an example of a solution where we have integrated TECgpt components.



TECgpt Studio



Skill Studio

Generation of customized skills based on prompt engineering that can be executed using generative models.



Agent Studio

Agents can be customized by defining their personality, specifying the default generative model to be used, providing training data, and setting executable functions (in JSON format). Additionally, a skill can be selected to be associated with the agent.



Model Studio

Ecosystem for training generative models for specific use cases.



TECgpt portal

A platform designed for collaboration that facilitates interaction with chats and specific skills.



TECgpt Studio



Skill Studio

Generation of customized skills based on prompt engineering that can be executed using generative models.



Agent Studio

Agents can be customized by defining their personality, specifying the default generative model to be used, providing training data, and setting executable functions (in JSON format). Additionally, a skill can be selected to be associated with the agent.



Model Studio

Ecosystem for training generative models for specific use cases.

Software Components



A modular and reusable code unit based on generative AI that encapsulates a specific functionality. Designed to be independent, interchangeable, and reusable. The components can be integrated with others to build complete applications or systems.



TECbot, or institutional Virtual Assistant is an example of a solution where we have integrated TECgpt components.

Skill – Empowering Innovation

One or multiple instructions developed by our professors, students, and collaborators to be executed using generative models like GPT4o.

Can accept:

- Text
- Files

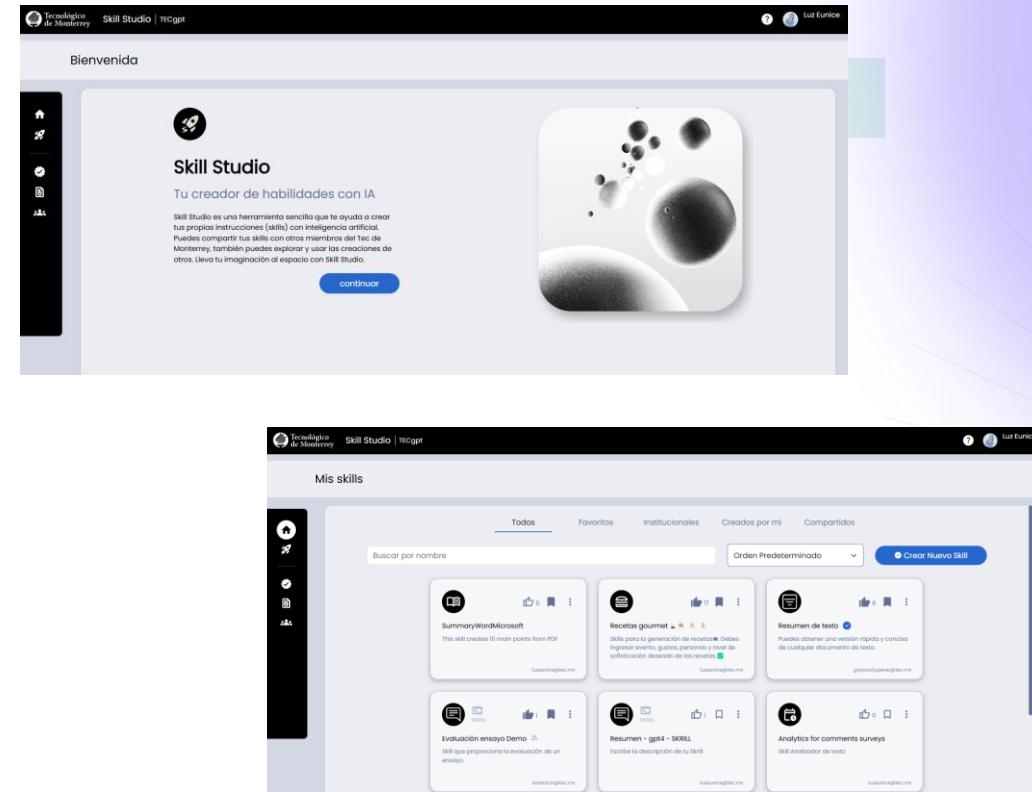


Skill Studio: Empowering Collaboration

Enables skill creation via **graphical and code-based tools (SKRILL)**.

Community Sharing: Authors can share skills within the Tec de Monterrey ecosystem.

Benefits: Promotes collaboration and accelerates task execution.



Create a Skill - Graphical

The screenshot shows the Skill Studio interface for the Tecnológico de Monterrey. At the top, there is a navigation bar with the institution's logo, "Skill Studio | TECgpt", and a user profile for "Luz Eun". Below the header, the main title "Mis skills" is displayed. A vertical sidebar on the left contains icons for home, rocket, gear, document, and users.

The main content area features a grid of skill cards. Each card includes a thumbnail icon, social media-like counts (likes, comments, shares), and a brief description. The cards are categorized by tabs at the top: "Todos" (selected), "Favoritos", "Institucionales", "Creados por mi", and "Comparar". Below these tabs is a search bar labeled "Buscar por nombre" and a dropdown menu for "Orden Predeterminado". A large blue button labeled "+ Crear Nuevo Skill" is prominently displayed in the upper right corner of the main area.

Thumbnail	Nombre del Skill	Descripción	Autora
	SummaryWordMicrosoft	This skill creates 10 main points from PDF	luzeunice@tec.mx
	Recetas gourmet	Skills para la generación de recetas. Debes ingresar evento, gustos, personas y nivel de sofisticación deseado de las recetas.	luzeunice@tec.mx
	Resumen de texto	Puedes obtener una versión rápida y concisa de cualquier documento de texto.	giancarlo.perez@tec.mx
	Evaluación ensayo Demo	Skill que proporciona la evaluación de un ensayo.	karenzun@tec.mx
	Resumen - gpt4 - SKRILL	Escribe la descripción de tu Skrill	luzeunice@tec.mx
	Analytics for comments surveys	Skill Analizador de texto	luzeunice@tec.mx

1) Lets START!



Objective:
Summarize a paper
Specification:

- HTML (page)
- Considerations

License: CC BY 4.0
arXiv:2501.09171v1 [stat.OT] 15 Jan 2025

Generative AI Takes a Statistics Exam: A Comparison of Performance between ChatGPT3.5, ChatGPT4, and ChatGPT4o-mini

Monnie McGee & Bivin Sadler

mmmcgee@smu.edu**sadler@smu.edu** Department of Statistics and Data Science
Southern Methodist University
6425 Boaz Lane, Dallas, TX, 75205

(January 15, 2025)

Maximizing Diver Score by Examining Discrepancies in Diver Competency and Judges' Marks

Monnie McGee & Bivin Sadler

mmmcgee@smu.edu**sadler@smu.edu** Department of Statistics and Data Science
Southern Methodist University
6425 Boaz Lane, Dallas, TX, 75205

(January 15, 2025)

Abstract

Many believe that use of generative AI as a private tutor has the potential to shrink access and achievement gaps between students and schools with abundant resources versus those with fewer resources. Shrinking the gap is possible only if paid and free versions of the platforms perform with the same accuracy. In this experiment, we investigate the performance of GPT versions 3.5, 4.0, and 4o-mini on the same 16-question statistics exam given to a class of first-year graduate students. While we do not advocate using any generative AI platform to complete an exam, the use of exam questions allows us to explore aspects of ChatGPT's responses to typical questions that students might encounter in a statistics course. Results on accuracy indicate that GPT 3.5 would fail the exam, GPT4 would perform well, and GPT4o-mini would perform somewhere in between. While we acknowledge the existence of other Generative AI/LLMs, our discussion concerns only ChatGPT because it is the most widely used platform on college campuses at this time. We further investigate differences among the AI platforms in the answers for each problem using methods developed for text analytics, such as reading level evaluation and topic modeling. Results indicate that GPT3.5 and 4o-mini have characteristics that are more similar than either of them have with GPT4.

Keywords: generative AI; text analytics; statistics and data science education; academic integrity; inclusive teaching

1 Introduction

ChatGPT [44] publicly premiered in November of 2022 and opened the world of education. As with the calculator [25], laptop [16], and smartphone [5], educators quickly took sides between "ban AI from the classroom" to "free use of AI in the classroom" and even "champion the use of generative AI in the classroom." Many believe ChatGPT and other generative AI platforms will revolutionize education, providing a personalized tutor for every student [19, 29]. Access to a personalized tutor, even a virtual one, has the potential to diminish the gap between the educational backgrounds of students [10]. However, for this promise to be realized, students will need wireless access and a capable laptop computer.

2) Lets START!



Objective:

Generate a skill for the creation of activities with deliverables and evaluation rubrics

Specification:

- Skills, knowledge or attitudes to develop
- Detail the learning objectives we wish to achieve more thoroughly
- Topics, Subtopics or key concepts
- Other considerations

Lets START!



Skills, knowledge or attitudes to develop:

3D game design contributes to the development of advanced technical skills, combining programming, artistic design, and model optimization to create immersive interactive experiences.

Detail the learning objectives we wish to achieve more thoroughly:

Detailing characters and environments involves integrating texturing and animation to ensure realism and functionality within the game engine.

Topics, Subtopics or key concepts

Design and conceptualization: narrative, characters, levels, and visual style.

-3D modeling and animation: texturing, rigging, and animations.

-Programming: mechanics, AI, and game logic.

-Rendering and optimization: lighting, effects, and resource management.

3) Lets START!



Objective:

Analyze the comments of the students

Specification:

- File of instructions (word)
- Comments (word)

Design Activities for my Class

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

Lets START!



1 Crear identidad del skill

Nombre

Descripción

Ver detalles avanzados (Opcional) ?

Continuar

2 Programar instrucciones y acciones

3 Información adicional para el skill

4 Previsualización de la instrucción que realizará el skill

Design Activities for my Class

Tecnológico de Monterrey Skill Studio | TECgpt

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.



Develop an Activity for Your Class

This is a Skill that helps you design an assessable activity for your class.

luzeunice@tec.mx

The screenshot shows a user interface for creating a new skill. On the left is a vertical sidebar with icons for Home, Create, Settings, and Help. The main area has a light gray background. A large white card is centered, with its top section highlighted by a purple rectangular overlay. The card contains the text "Select an image". Below this, a numbered list indicates the steps: 1. Select an image (which is currently active), 2. Programar instrucciones y acciones, 3. Información adicional para el skill, and 4. Previsualización de la instrucción que realizará el skill. Step 1 has a sub-section titled "Nombre" with a placeholder "Define el nombre de tu skill." and a "Descripción" section with a placeholder "Define el propósito de tu skill. Esta descripción apoyará a que otros usuarios identifiquen para qué pueden utilizarlo." There is also a checkbox for "Ver detalles avanzados (Opcional)". At the bottom right of the card is a blue "Continuar" button.



Design Activities for my Class

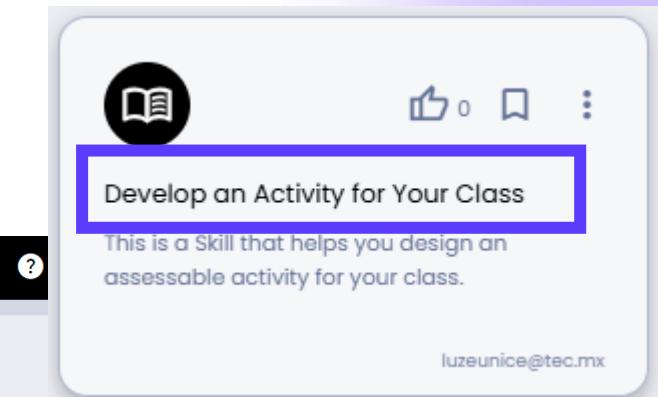
Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

The screenshot shows the Skill Studio interface for creating a new skill. A purple box highlights the 'Select an image' step, which is the first step in a four-step process. The interface includes a sidebar with icons for Home, Create, Settings, and Help. The main area shows a modal for selecting an image, featuring a search bar, a grid of icons, and a 'Continuar' button. Step 1 is highlighted with a purple box around its title and icon. Step 2 is labeled 'Programar la ejecución del skill'. Step 3 is labeled 'Información adicional para el skill'. Step 4 is labeled 'Previsualización de la instrucción que realizará el skill'.

A sidebar panel titled 'Develop an Activity for Your Class' with a blue header. It features a book icon, social sharing icons (like, share, more), and the text: 'This is a Skill that helps you design an assessable activity for your class.' An email address, 'luzeunice@tec.mx', is listed at the bottom right.

Design Activities for my Class



Nuevo Skill
Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

Define a name

1 Crear identidad del skill

Nombre
Descripción
 Ver detalles avanzados (Opcional) ?

Continuar

2 Programar instrucciones y acciones
3 Información adicional para el skill
4 Previsualización de la instrucción que realizará el skill

Design Activities for my Class

Tecnológico de Monterrey Skill Studio | TECgpt

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.



Develop an Activity for Your Class

This is a Skill that helps you design an assessable activity for your class.

luzeunice@tec.mx

The screenshot shows the 'Skill Studio' interface for creating a new skill. The main window is titled 'Nuevo Skill' and describes it as a skill application built from a set of instructions (prompt) to generate a result. On the left is a vertical sidebar with icons for Home, Create, Settings, Details, and Help. The main form has a title 'Define a name' with a green checkmark icon. Step 1, 'Crear identidad del skill', is active. It includes fields for 'Nombre' (with 'Develop an Activity for Your Class' typed in) and 'Descripción' (with placeholder text about defining the skill's purpose). A checkbox for 'Ver detalles avanzados (Opcional)' is unchecked. Step 2, 'Programar instrucciones y acciones', Step 3, 'Información adicional para el skill', and Step 4, 'Previsualización de la instrucción que realizará el skill', are listed below. A blue 'Continuar' button is at the bottom right of the form.

Design Activities for my Class

Tecnológico de Monterrey Skill Studio | TECgpt

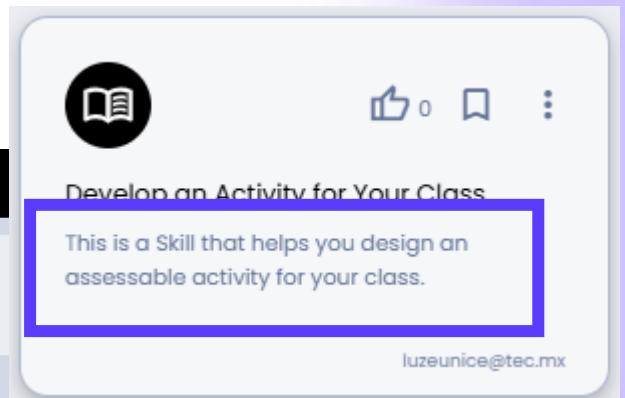
Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

The screenshot shows the Skill Studio interface for creating a new skill. On the left, a vertical sidebar contains icons for Home, Create, Settings, and Help. The main area displays a step-by-step guide:

- 1 Crear identidad del skill**
Define a description: A text input field containing "My Class".
Descripción: A text area with placeholder text: "Define el propósito de tu skill. Esta descripción apoyará a que otros usuarios identifiquen para qué pueden utilizarlo."
 Ver detalles avanzados (Opcional)
- 2 Programar instrucciones y acciones**
- 3 Información adicional para el skill**
- 4 Previsualización de la instrucción que realizará el skill**

A blue button labeled "Continuar" is located at the bottom right of the main form.



luzeunice@tec.mx

Design Activities for my Class

Tecnológico de Monterrey Skill Studio | TECgpt

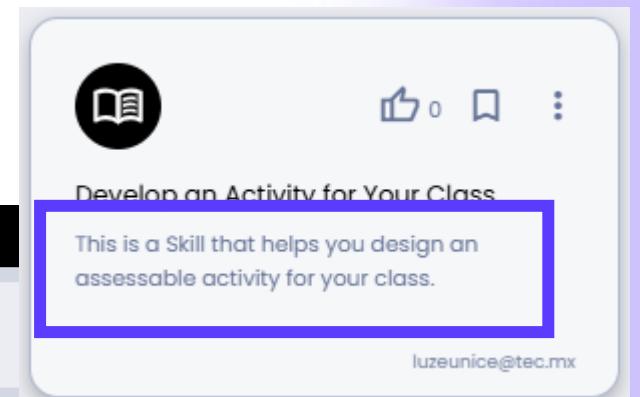
Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

The screenshot shows the Skill Studio interface for creating a new skill. The main area displays a step-by-step process:

- Step 1: Define a description** (highlighted with a purple box). A green checkmark icon is to the right of the input field. The input field contains the text: "This is a Skill that helps you design an assessable activity for your class." A checkbox labeled "Ver detalles avanzados (Opcional)" is present below the input field.
- Step 2: Programar instrucciones y acciones**
- Step 3: Información adicional para el skill**
- Step 4: Previsualización de la instrucción que realizará el skill**

A vertical sidebar on the left contains icons for Home, Create, Settings, and Help. A blue bar at the top of the main window has the text "Develop an Activity for Your Class".



Design Activities for my Class

The screenshot shows the Skill Studio interface for creating a new skill. The top navigation bar includes the Tec de Monterrey logo, 'Skill Studio | TECgpt', and a user profile for 'Luz Eunice'. The main area is titled 'Nuevo Skill' with a sub-instruction: 'Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para que el modelo responda de acuerdo a tu necesidad'. A sidebar on the left contains icons for Home, Create, Details, and Help.

Specify:

- Model:** gpt4o
- Creativity:** Low
- Skill Personality:** You are a university-level expert professor who designs learning activities for digital and face-to-face environments. You use inclusive language in your writing.

The 'Personalidad' section includes a note: 'La personalidad define el tono y ayuda a contextualizar la respuesta, incluyendo roles profesionales o ideas generales.'

The process is step 1: 'Crear identidad del skill' and step 2: 'Programar instrucciones y acciones'.

Design Activities for my Class



Skill Studio | TECgpt



Luz Eunice

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (paso a paso).



1 Crear identidad del skill 

Nombre

Descripción

Ver detalles avanzados (Opcional) 

GPT 4o  Menos creativo 

Personalidad

Continuar

1) Model: gpt4o
2) Creativity: Low
3) Skill Personality: You are a university-level expert professor who designs learning activities for digital and face-to-face environments. You use inclusive language in your writing.

Design Activities for my Class

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.



1 Define the welcome message for the form

2 Programar instrucciones y acciones

Bienvenida para quien usará el formulario
Recibe y guía a los usuarios para el uso del skill. "Llena los campos siguientes para generar un resumen"

Instrucciones para el Skill. (Prompt) ?
Ingresa la acción principal que llevará a cabo tu skill. Ejemplo: "Resume la siguiente información ó Crea un examen de prueba."

Multilenguaje ?
 Formato especializado de respuesta (Opcional) ? [No Title]

Atrás Continuar

3 Información adicional para el skill

4 Previsualización de la instrucción que realizará el skill

Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

Skills, knowledge or attitudes to develop

Detail the learning objectives we wish to achieve more thoroughly

Topics, Subtopics or key concepts

Other considerations

Limpiar ¡Vamos!

Design Activities for my Class



Skill Studio | TECgpt

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.

Define the welcome message for the form



Bienvenida para quien usará el formulario

Complete the following fields to receive suggestions to design an activity.

Instrucciones para el Skill. (Prompt)

Ingrésala acción principal que llevará a cabo tu skill. Ejemplo: "Resume la siguiente información ó Crea un examen de prueba."

Multilenguaje

Formato especializado de respuesta (Opcional)

Atrás

Continuar

3 Información adicional para el skill

4 Previsualización de la instrucción que realizará el skill

Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

Skills, knowledge or attitudes to develop

Detail the learning objectives we wish to achieve more thoroughly

Topics, Subtopics or key concepts

Other considerations

Limpiar

¡Vamos!

Design Activities for my Class



Skill Studio | TECgpt



Luz Eunice

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.



1 Crear identidad del skill

2 Programar instrucciones y acciones

Define the primary instruction for the skill

Instrucciones para el Skill. (Prompt)

Ingrésala la acción principal que llevará a cabo tu skill. Ejemplo: "Resume la siguiente información ó Crea un examen de prueba."

Multilenguaje

Formato especializado de respuesta (Opcional)

Atrás

Continuar

3 Información adicional para el skill

4 Previsualización de la instrucción que realizará el skill

Design Activities for my Class

Editar Skill

2 Programar instrucciones y acciones

Bienvenida para quien usará el formulario

Complete the following fields to receive suggestions to design an activity.

Instrucciones para el Skill. (Prompt) ?

1. Activity Title:

Define the primary instruction for the skill



3. Purpose

- Use '{Purpose}' to first list the activity's purpose(s) in bullet points, structured as *verb + object* and related to the declared learning objectives.

- Start a paragraph with:

This activity directly contributes to the following general learning objectives:

- List only the relevant objectives

4. Instructions

Provide step-by-step instructions directed at students in the second person. If the activity involves solving a programming or mathematical problem, include code snippets or the problems directly (avoid referring students to external platforms like Canvas).

5. Delivery Specifications

- **For graded activities**: Include the following:

- **Delivery Format**: Specify the required format (e.g., PDF, PPT, Word, MP4, MP3, etc.).

- **File Name**: Specify the file naming convention, starting with the student ID and relating to the activity title (e.g., 'ID_SituationalAnalysis').

6. Evaluation

Define specific aspects of performance to be evaluated (e.g., understanding of concepts, creativity, technical skills, teamwork, Creativity and Innovation, etc.).

Criterion

Description

Weight (%)

Multilenguaje ?

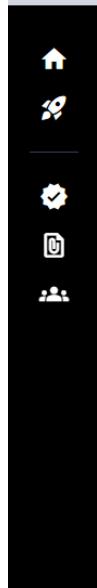
Design Activities for my Class



Skill Studio | TECgpt

Nuevo Skill

Un skill es una aplicación que se construye a través de un conjunto de instrucciones (prompt) para generar un resultado.



1 Crear identidad del skill

Define the variables to be considered for each class activity.

Campos del formulario y consideraciones

Agregar campo

Atrás

Continuar

4 Previsualización de la instrucción que realizará el skill



Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

Skills, knowledge or attitudes to develop

Detail the learning objectives we wish to achieve more thoroughly

Topics, Subtopics or key concepts

Other considerations

Limpiar

iVamos!

Design Activities for my Class

Editor Skill

1 Crear identidad del skill
2 Programar instrucciones y acciones

Define the variables to be considered for each class activity.

Skills, knowledge or attitudes to develop Set of skills, knowledge, attitudes, and values that a person develops through this activity. Texto Límite

Detail the learning objectives we wish Consider these learning objectives to develop the activity for the class: Texto Límite

Topics, Subtopics or key concepts The activity should also focus on the following contents, topics, subtopics, or key concepts: Texto Límite

Other considerations Other considerations to take into account when designing the activity: Texto Límite

Agregar campo

Atrás Continuar

4 Previsualización de la instrucción que realizará el skill

Design Activities for my Class

Check

Editar Skil

3 Información adicional para el skil

4 Previsualización de la instrucción que realizará el sistema

El skill está programado para cumplir las siguientes instrucciones (Prompt)

Personalida

You are a university-level expert professor who designs learning activities for digital and face-to-face environments. You use inclusive language in your writing.

Attr6

Cancelar

Guarda



Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

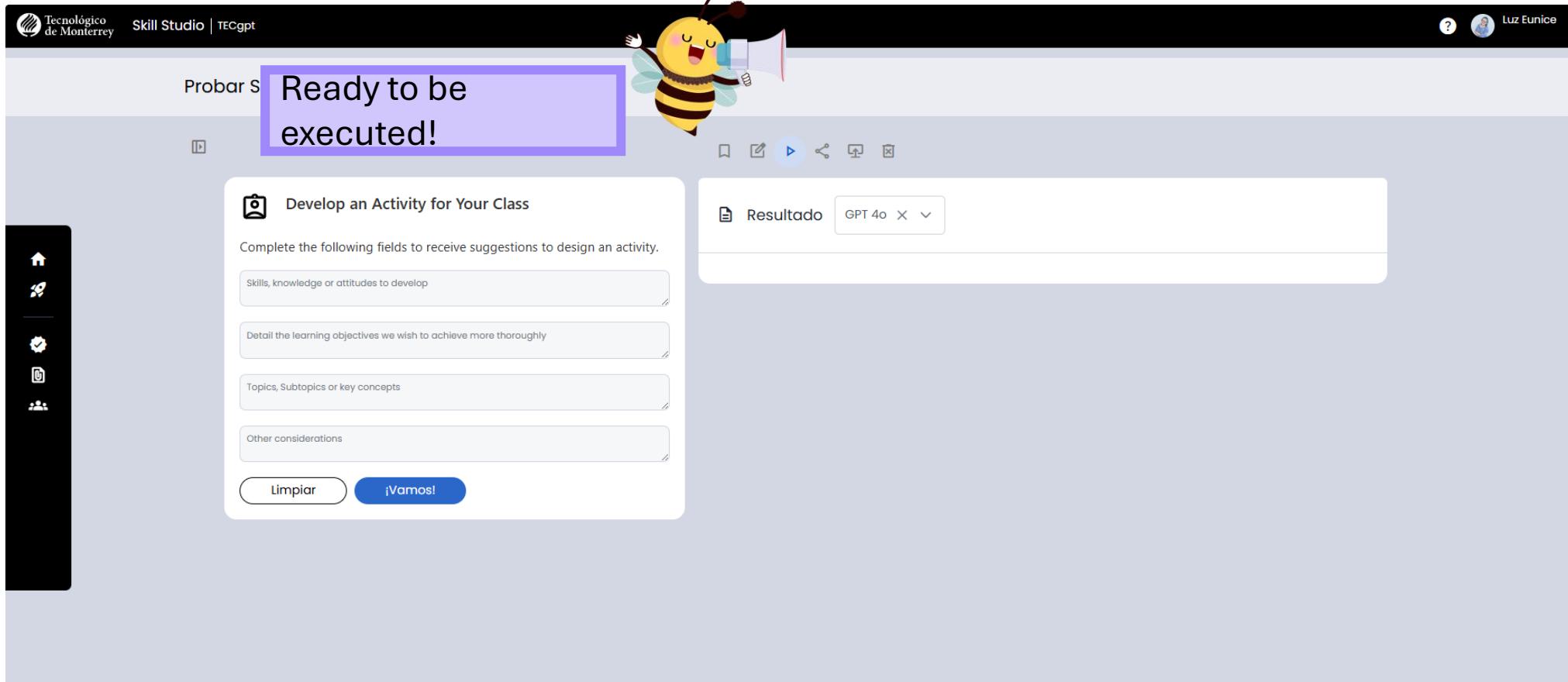
Skills, knowledge or attitudes to develop	6
Detail the learning objectives we wish to achieve more thoroughly	6
Topics, Subtopics or key concepts	6
Other considerations	6

Design Activities for my Class

Check



Design Activities for my Class



The screenshot shows a user interface for designing class activities. At the top, there's a header with the logo of 'Tecnológico de Monterrey' and 'Skill Studio | TECgpt'. On the right, there's a profile picture of a user named 'Luz Eunice'. Below the header, a large purple box contains the text 'Ready to be executed!'. To the left of this box is a cartoon bee holding a megaphone. The main area has two sections: 'Develop an Activity for Your Class' (with fields for skills, learning objectives, topics, and other considerations) and 'Resultado' (with a dropdown menu for 'GPT 4o'). A vertical sidebar on the left contains icons for home, rocket, gear, document, and users.

Probar S Ready to be executed!

Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

Skills, knowledge or attitudes to develop

Detail the learning objectives we wish to achieve more thoroughly

Topics, Subtopics or key concepts

Other considerations

Limpiar ¡Vamos!

Resultado GPT 4o X ▾

Design Activities for my Class



Skill Studio | TECgpt



Luz Eunice

Probar Skill



Fill the blanks:



Develop an Activity for Your Class

Complete the following fields to receive suggestions to design an activity.

3D game design contributes to the development of advanced technical skills, combining programming, artistic design, and model optimization to create immersive interactive experiences.

Detailing characters and environments involves integrating texturing and animation to ensure realism and functionality within the game engine.

Design and conceptualization: narrative, characters, levels, and visual style.
-3D modeling and animation: texturing, rigging, and animations.
-Programming: mechanics, AI, and game logic.
-Rendering and optimization: lighting, effects, and resource management.

Use of tools: Unity, Unreal Engine, Blender, and Maya.

Limpiar

¡Vamos!

Skills, knowledge or attitudes to develop:

3D game design contributes to the development of advanced technical skills, combining programming, artistic design, and model optimization to create immersive interactive experiences.

Detail the learning objectives we wish to achieve more thoroughly:

Detailing characters and environments involves integrating texturing and animation to ensure realism and functionality within the game engine.

Topics, Subtopics or key concepts

Design and conceptualization: narrative, characters, levels, and visual style.

-3D modeling and animation: texturing, rigging, and animations.

-Programming: mechanics, AI, and game logic.

-Rendering and optimization: lighting, effects, and resource management.

Design Activities for my Class



Skill Studio | TECgpt



Luz Eunice

Probar Skill

The screenshot shows a user interface for generating class activity ideas. On the left, there's a sidebar with icons for Home, Create, Settings, and Profile. The main area has a title "Develop an Activity for Your Class" with a clipboard icon. Below it, instructions say: "Complete the following fields to receive suggestions to design an activity." There are three text boxes containing bullet points about game design, character detailing, and tool usage. At the bottom are two buttons: "Limpiar" and a blue "¡Vamos!" button, which is highlighted with a purple rectangle. To the right, a results panel titled "Resultado" shows "GPT 4o" and a large empty text area.

Design Activities for my Class

Probar Skill

The screenshot shows a user interface for designing class activities. On the left, there's a sidebar with icons for Home, Create, Profile, and Groups. The main area has two panels. The left panel, titled 'Develop an Activity for Your Class', contains instructions and examples for 3D game design. It includes sections on 3D modeling, character and environment integration, design and conceptualization, and tool usage (Unity, Unreal Engine, Blender, Maya). Buttons for 'Limpiar' (Clear) and '¡Vamos!' (Let's Go!) are at the bottom. The right panel, titled 'Resultado GPT 4o', displays the generated activity details:

- 1. Activity Title:** "Design Your Own 3D Adventure Game"
- 2. Activity Attributes**
 - Modality: Collaborative
- 3. Purpose**
 - Develop 3D modeling and animation skills.
 - Apply programming techniques to create game mechanics and AI.
 - Integrate texturing and animation for realistic character and environment design.
 - Optimize game performance through effective rendering and resource management.

This activity directly contributes to the following general learning objectives:

- Create detailed characters and environments with realistic textures and animations.
- Design and implement game mechanics and AI using programming skills.

Design Activities for my Class

1. Activity Title:

"Design Your Own 3D Adventure Game"

2. Activity Attributes

- **Modality:** Collaborative

3. Purpose

- Develop 3D modeling and animation skills.
- Apply programming techniques to create game mechanics and AI.
- Integrate texturing and animation for realistic character and environment design.
- Optimize game performance through effective rendering and resource management.

This activity directly contributes to the following general learning objectives:

- Create detailed characters and environments with realistic textures and animations.
- Design and implement game mechanics and AI using programming skills.
- Optimize game performance through efficient rendering and resource management.

4. Instructions

1. **Form Teams:** Organize into groups of 3-4 students.
2. **Conceptualize:** Brainstorm and outline your game's narrative, characters, levels, and visual style.
3. **Design:** Use tools like Blender or Maya to create 3D models of your characters and environments. Ensure they are textured and rigged for animation.
4. **Animate:** Develop animations for your characters and integrate them into your models.
5. **Program:** Use Unity or Unreal Engine to implement game mechanics, AI, and game logic.
6. **Optimize:** Focus on rendering, lighting, effects, and resource management to ensure smooth gameplay.
7. **Test and Iterate:** Playtest your game, gather feedback, and make necessary adjustments.
8. **Present:** Prepare a presentation showcasing your game, highlighting the design process, challenges faced, and solutions implemented.

5. Delivery Specifications

- **Delivery Format:** MP4 video showcasing the game and a PDF document detailing the design process.
- **File Name:** ID_TeamName_3DGameDesign

Design Activities for my Class

6. Evaluation

Criterion	Description	Weight (%)
Understanding of Concepts	Depth of comprehension and application of theoretical principles.	30%
Creativity and Innovation	Originality, ingenuity, and ability to present unique solutions.	20%
Technical Skills	Proficiency in using tools and applying technical knowledge to execute the project.	25%
Teamwork and Collaboration	Contributions, effective communication, and coordination within the team.	10%
Clarity and Organization	Structure, coherence, and presentation of the work.	15%

7. Notes for the Evaluating Teacher

- Ensure students are aware of the "Academic Integrity Notice on AI Use."
- Confirm the availability of necessary tools (Unity, Unreal Engine, Blender, Maya) in the academic portfolio.

8. Disclaimer

Emphasize the importance of thoroughly validating information, as no material generated with Artificial Intelligence should be presented as one's own and requires validation by expert teachers. Additionally, remind the teacher to confirm resource availability in line with the academic portfolio of the School.

Design Activities for my Class

Share the results with others:

The screenshot shows a Microsoft Edge browser window with a GPT 4o-generated result for "Design Your Own 3D Adventure Game". The page has a toolbar at the top with icons for back, forward, search, and other functions. Below the toolbar is a card labeled "Resultado" which contains the generated game content. To the right of the card is a "Compartir Resultado" (Share Result) button, which is highlighted with a blue rectangle. Below this are two other buttons: "Exportar a pdf" (Export to PDF) and "Exportar a word" (Export to Word).

1. Activity Title:

"Design Your Own 3D Adventure Game"

2. Activity Attributes

- Modality: Collaborative

3. Purpose

- Develop 3D modeling and animation skills.
- Apply programming techniques to create game mechanics and AI.
- Integrate texturing and animation for realistic character and environment design.
- Optimize game performance through effective rendering and resource management.

Develop an Activity for Your Class

Complete the following fields to receive suggestions.

3D game design contributes to the development of advanced skills such as programming, artistic design, and model optimization to create immersive experiences.

Detailing characters and environments involves integrating various components to ensure realism and functionality within the game engine.

Design and conceptualization: narrative, characters, levels, and storylines.
-3D modeling and animation: texturing, rigging, and animation.
-Programming: mechanics, AI, and game logic.
-Rendering and optimization: lighting, effects, and resource management.

Use of tools: Unity, Unreal Engine, Blender, and Maya.

Limpieza de resultados

Código QR de Resultado

Resultado

X

Liga de Resultado

http://tecgpt-grl-prod-aapi.azurewebsites.net/skills/resposta_skill/eyJhbGciOiI

Limpiar

!Vamos!

Cerrar

Copiar liga

This activity directly contributes to the following general learning objectives:

- Optimize game performance through effective rendering and resource management.

Design Activities for my Class

The screenshot shows the Skill Studio interface for Tec de Monterrey. On the left, there's a sidebar with icons for Home, Create, Settings, and Help. The main area has a title "Probar Skill" and a sub-section "Develop an Activity for Your Class". It includes fields for "Skills, knowledge or attitudes to develop", "Detail the learning objectives we wish to achieve more thoroughly", "Topics, Subtopics or key concepts", and "Other considerations". There are "Limpiar" and "¡Vamos!" buttons at the bottom. A toolbar above the activity form has icons for back, forward, search, and other functions, with the forward and search icons highlighted by a purple rectangle. To the right, a purple sidebar lists four actions: "Mark as one of my favorite's skill", "Edit my skill", "Share with my friends or all the Tec de Monterrey employees", and "Delete".

Design Activities for my Class – share with others

The screenshot shows the Skill Studio interface. A central modal window titled "Compartir" (Share) is open, allowing users to share a skill activity with specific users or groups. The "Audiencias" (Audience) section is highlighted with a purple border, showing "Manuel Terán Melgarejo" and two permission levels: "Lectura" (Read) and "Escritura" (Write). Below this, the "Mis grupos" (My Groups) section lists "TECgpt". At the bottom of the modal are "Cancelar" (Cancel) and "Guardar" (Save) buttons. The background shows a blurred view of the "Develop an Activity for Your Class" page, which contains sections about game design, character environments, and tool usage.

Read or Write

Read: Can execute the skill
Write: Can edit and execute the skill

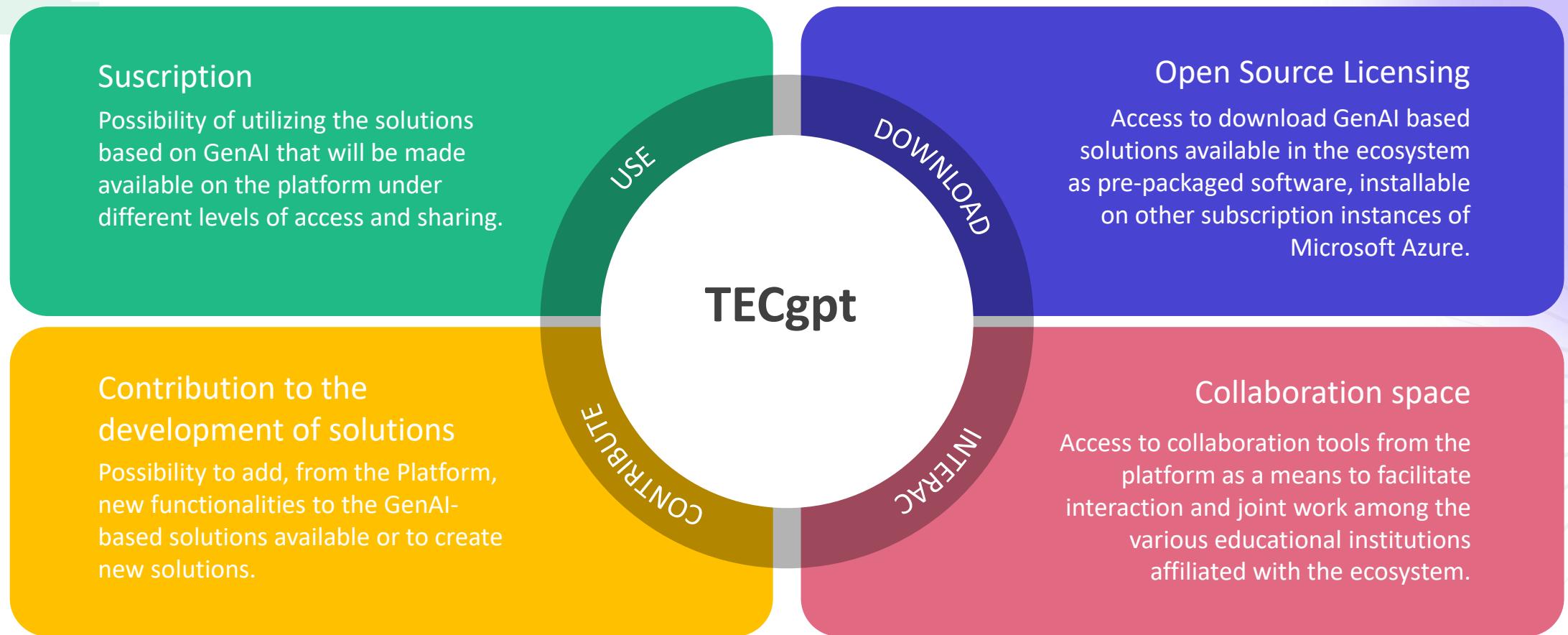
From TECgpt to TECgpt on AIGEN



We have successfully provided our professors, students, and collaborators with unique AI-driven solutions that enhance their activities. Today, our goal is to extend this value beyond the borders of Tec de Monterrey through TECgpt on AIGEN.

Our aim is to foster collaboration among educational institutions, creating a more inclusive ecosystem that embraces a wider range of valuable use cases and encourages the contribution of our brightest talents for the benefit of all.

TECgpt on AIGEN components



TECgpt Pilot on AIGEN

- Microsoft will provide credits for running a pilot with **10** universities, 30 users in each institution, during 3-4 months.
- Institutions will apply to the demo by submitting a **use case**, indicating:
 - The population (teachers)
 - The activity Skill Studio will be used for
 - The expected results and how they will be measured
- At the end of the pilot universities will document their **results** and report them in IFE Conference 2026

TECgpt Stages

- Feb 2025 - Proposals of use cases
- Mar. 2025 – Selection of use cases
- Apr. 2025 – Ethical guidelines
- Jun 2025 - TECgpt upgrade: scalable for many more users and for access to other institutions (available also under an **open source** license).
- Jul. 2025 - Training
- Aug. 2025 – Start of the pilot
- Nov. 2025 – End of the pilot
- Dec. 2025 – Jan. 2026 – Documentation of the pilot
- Jan. 2026 – Presentation at IFE Conference 2026

Registration for AIGEN and TECgpt pilot

Please answer one form per institution.

- Institutional Contact
- City and Country
- Number of teachers and students
- Institutional guidelines on responsible use of GenAI
- Centers for Teacher Training
- AI Tools in the institution (licenses, pilots)
- Interest in piloting IFE OpenGPT

Registration open until February 14th, 2025.



bit.ly/AI_GEN