

Purpose

To show different pedagogical uses of GenAI.

How do I use these?

To be used to support design thinking about how GenAI could be used within learning.

Source

The roles and descriptions were created by Mike Sharples (Professor Emeritus of Educational Technology, Open University, UK)

Description:

AI generates alternative ways of expressing an idea.

Example of implementation:

Students write queries in GenAI and use the regenerate response function to examine alternative responses.

Possibility Engine

Description:

AI acts as a guide to navigate physical and conceptual spaces.

Example of implementation:

Educators use GenAI to generate content for classes/courses (e.g., discussion questions) and advice on how to support students in learning specific concepts.

Guide on the side

Description:

AI helps groups to research and solve problems together.

Example of implementation:

Working in groups, students use GenAI to find out information to complete tasks and assignments.

Collaboration coach

Description:

AI tutors each student and gives immediate feedback on progress.

Example of implementation:

GenAI provides personalised feedback to students based on information provided by students or educators (e.g., test scores).

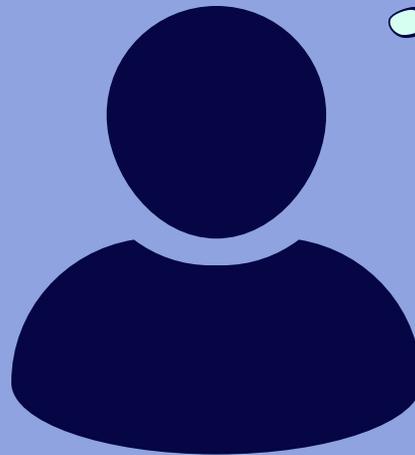
Personal tutor

Description:

AI acts as an opponent to develop and argument.

Example of implementation:

Students enter prompts into GenAI following the structure of a conversation or debate. Educators can direct students to use GenAI to prepare for discussions.



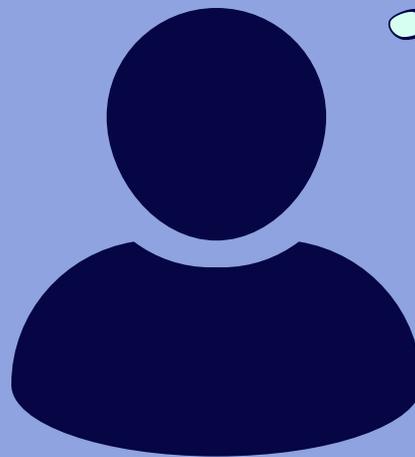
Socratic opponent

Description:

AI assists throughout the design process.

Example of implementation:

Educators ask GenAI for ideas about designing or updating a curriculum (e.g., rubrics for assessment) and/or focus on specific goals (e.g., how to make the curriculum more accessible).



Co-designer

Description:

AI provides tools to play with, explore and interpret data.

Example of implementation:

Educators provide basic information to students who write different queries in GenAI to find out more. GenAI can be used to support language learning.

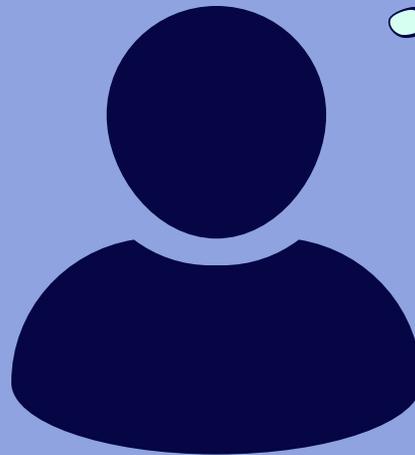
Exploratorium

Description:

AI helps the student reflect on learning material.

Example of implementation:

Students explain their current level of understanding to GenAI and ask for ways to help them study the material. GenAI could also be used to help students prepare for other tasks (e.g., job interviews).



Study buddy

Description:

AI offers games and challenges to extend learning.

Example of implementation:

Educators or students ask GenAI for ideas about how to extend students' learning after providing a summary of the current level of knowledge (e.g., quizzes, exercises).

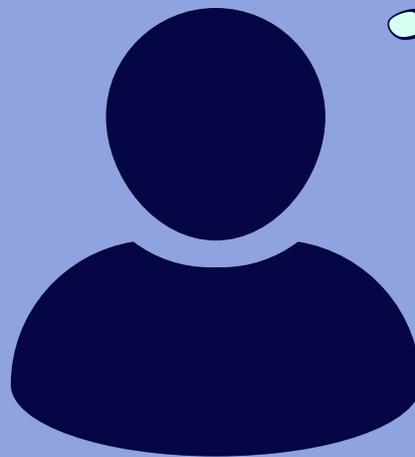
Motivator

Description:

AI provides educators with a profile of each student's current knowledge.

Example of implementation:

Students interact with ChatGPT in a tutorial-type dialogue and then ask ChatGPT to produce a summary of their current state of knowledge to share with their teacher/for assessment.



Dynamic assessor