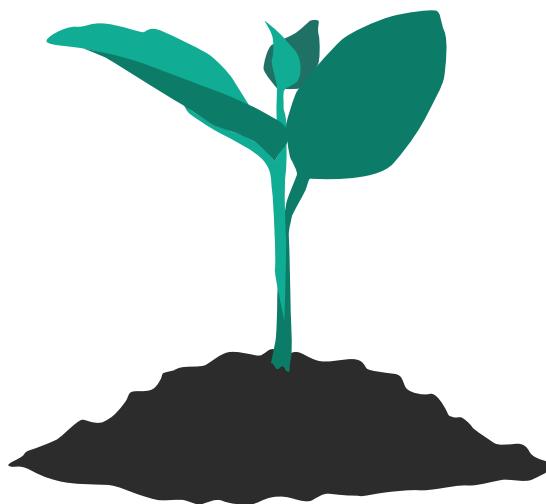


## WELCOME TO 2050

Case Study Carousel

Use these short case studies  
in Lesson 3 to inspire students  
before they create their own  
2050 visions.



## AI IN GREEN CITIES

### TODAY

Today, AI helps cities monitor traffic and reduce energy waste. Smart sensors adjust streetlights and optimize bus routes.

### EMERGING

Emerging systems can predict pollution and adjust infrastructure before problems occur. Urban planners use AI simulations to design greener cities.

### 2050

By 2050, AI might manage entire city ecosystems—balancing human, plant, and wildlife needs for cleaner air and happier communities.

#### DISCUSSION PROMPTS:

- ★ What challenge is being solved?
- ★ Who benefits most from this technology?
- ★ How could this evolve by 2050?



## AI IN MENTAL HEALTH

### TODAY

AI chatbots and apps support people with anxiety or depression by offering coping strategies and crisis help.

### EMERGING

New systems analyze voice tone or text patterns to detect early signs of stress or burnout, helping people access support sooner.

### 2050

By 2050, AI companions and networks could promote wellbeing by fostering empathy, social connection, and mental resilience in every community.

#### DISCUSSION PROMPTS:

- ★ What challenge is being solved?
- ★ Who benefits most from this technology?
- ★ How could this evolve by 2050?



## FUTURE OF LEARNING

### TODAY

AI tools personalize learning by suggesting exercises or quizzes based on students' progress.

### EMERGING

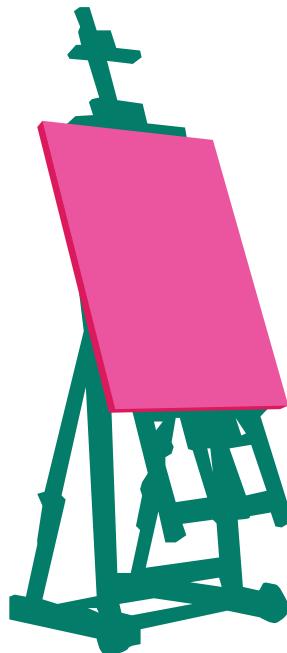
Adaptive platforms combine data from many sources to build unique learning journeys and provide real-time feedback for teachers.

### 2050

By 2050, every learner could have a digital learning partner—an AI mentor that supports creativity, curiosity, and lifelong growth.

#### DISCUSSION PROMPTS:

- ★ What challenge is being solved?
- ★ Who benefits most from this technology?
- ★ How could this evolve by 2050?



## AI IN CREATIVITY

### TODAY

AI can generate images, music, and text to help artists experiment and express ideas faster.

### EMERGING

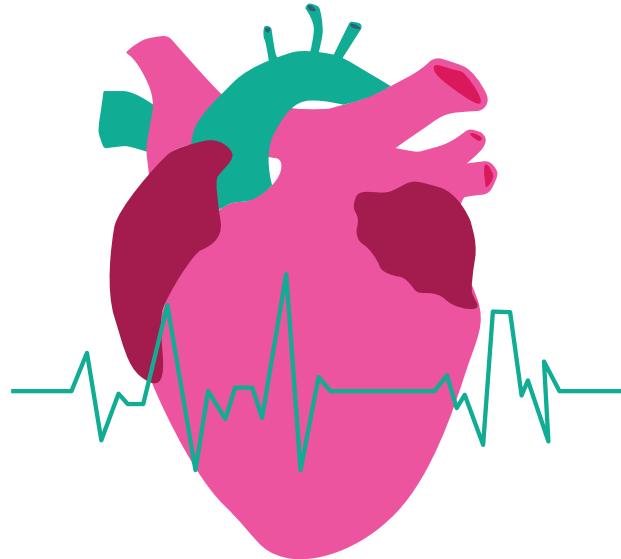
Collaborative AI tools are allowing humans and machines to co-create stories, art, and inventions that neither could make alone.

### 2050

By 2050, creative AI might act as a cultural bridge—helping people share art across languages, abilities, and experiences worldwide.

#### DISCUSSION PROMPTS:

- ★ What challenge is being solved?
- ★ Who benefits most from this technology?
- ★ How could this evolve by 2050?



## AI IN HEALTHCARE

### TODAY

AI scans medical images to detect diseases earlier and assist doctors with diagnosis.

### EMERGING

Predictive models are helping prevent illness by identifying risks based on lifestyle and genetics.

### 2050

By 2050, AI may support global health systems that ensure personalized, accessible care for everyone—no matter where they live.

#### DISCUSSION PROMPTS:

- ★ What challenge is being solved?
- ★ Who benefits most from this technology?
- ★ How could this evolve by 2050?