

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

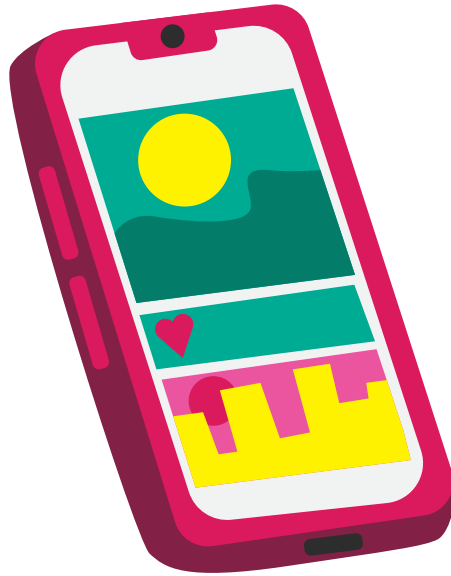
Emerging systems can predict pollution and adjust infrastructure before problems occur. Urban planners use AI simulations to design greener cities.

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

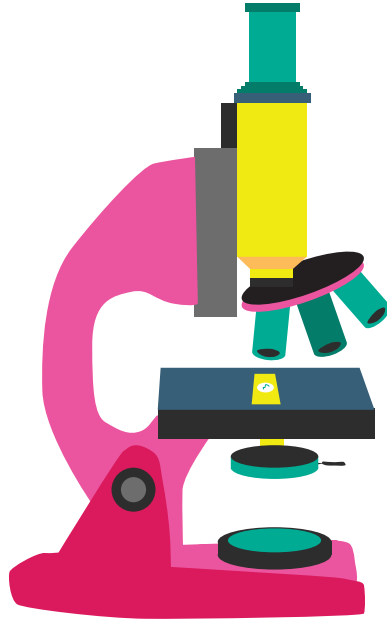
New systems analyze voice tone or text patterns to detect early signs of stress or burnout, helping people access support sooner.

2050

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

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FUTURE OF LEARNING

TODAY

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

EMERGING

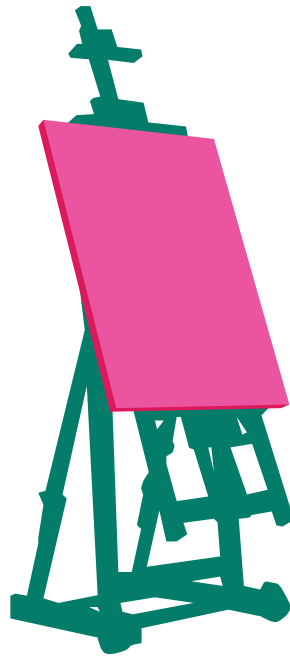
Adaptive platforms combine data from many sources to build unique learning journeys and provide real-time feedback for teachers.

2050

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

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AI IN CREATIVITY

TODAY

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

EMERGING

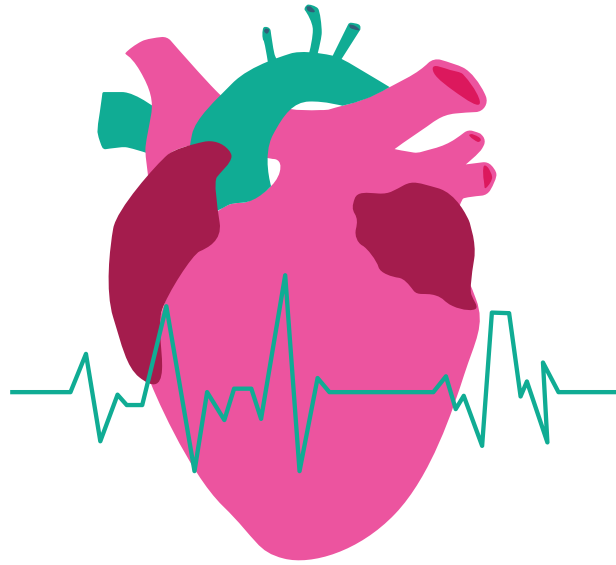
Collaborative AI tools are allowing humans and machines to co-create stories, art, and inventions that neither could make alone.

2050

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

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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.

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