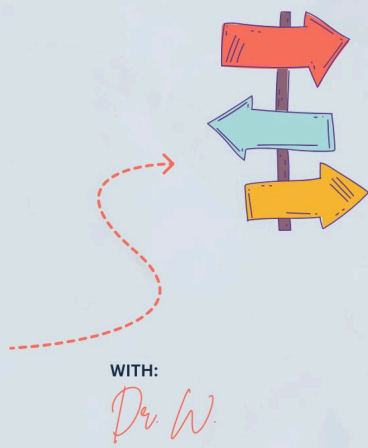




CURIOUS CAREER COMPANION GUIDE

DISCOVER A WORLD OF CAREERS YOU DIDN'T KNOW EXISTED

COMPANION GUIDE: The Medical Game
Designer (S2 E3)

RUN TIME: 14 minutes 10 seconds

GRADE LEVEL: 8-12

Episode Summary

In this episode:

- The Medical Game Designer creates video games and interactive experiences that help people learn about health, practice medical procedures, manage illnesses, or improve patient outcomes.
- Discover how their work combines science, medicine, psychology, storytelling, art, and technology to make healthcare more engaging and effective.
- Students are challenged to think critically about the role games can play in helping patients understand medical conditions, encouraging healthy behaviors, and training healthcare professionals in a safe virtual environment.
- Students are exposed to the notion that careers often emerge at the intersection of multiple interests. In this case: medicine, game design, storytelling, and technology.

Vocabulary Spotlight

Gamification

The use of game elements such as points, challenges, rewards, and achievements to motivate learning or behavior change.

Simulation

A realistic virtual environment that allows users to practice skills, test decisions, or experience situations without real-world consequences.

NEXT GENERATION SCIENCE STANDARDS (NGSS) ALIGNMENTS



Middle School Standards	High School Standards
MS-ETS1-1: Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution. MS-ETS1-2: Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. MS-ETS1-3: Analyze data from tests to identify strengths of different solutions and combine the best features into an improved design MS-ETS1-4: Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process.	HS-ETS1-1: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions. HS-ETS1-2: Design a solution to a complex real-world problem by breaking it down into smaller, manageable problems. HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs. HS-ETS1-4: Use a computer simulation or model to evaluate solutions to a problem.

Discussion Questions



1. Why might a game be more effective than a textbook or lecture for teaching certain health concepts?
2. What challenges might a Medical Game Designer face when trying to make a game both fun and medically accurate?
3. How could video games be used to improve public health or help solve healthcare problems in the future?

Extension Activity



Design a Medical Game That Makes a Difference (Time 20–30 min)

Experience how Medical Game Designers combine science, healthcare and creativity to solve real-world problems through game design.

Scenario: Imagine a local hospital has hired your design team to create a game that helps teenagers improve their health knowledge or habits. Your mission is to design the concept for a game that teaches players something important about health.

Step 1: Choose a Health Challenge. Select one topic:

- Healthy eating/Exercise and fitness
- Mental health awareness
- Sleep habits
- First aid and emergency response
- Medication safety
- Public health and pandemics

Step 2: Design Your Game. Complete the following:

Game Title: What is the name of your game?

Target Audience: Who is the game designed for?

Mission: What is the player's goal?

Challenge: What obstacles or problems must players overcome?

Learning Objective: What health concept will players learn?

Rewards: How will players earn points, badges, levels or achievements?

Step 3: Create a Quick Pitch. Their pitch should answer:

- What problems does the game solve?
- How does it help players learn?
- What makes it fun?
- Why would someone want to play it?

Teacher Debrief Questions

After presentations, discuss:

1. Which game would be most effective at teaching a health concept?
2. What was harder, making the game educational or making it fun?
3. How can technology help improve healthcare and health education?
4. What professions would need to work together to create these games?

Extension Challenge:

For advanced students or additional class time:

Prototype a Level:

Have students sketch:

- A game screen
- A player character
- A challenge or mission
- A reward system
- A health lesson integrated into gameplay

Students can present their prototype as if they are pitching it to a hospital, healthcare company, or game development studio.

Career Connection



Medical Game Designers often collaborate with: doctors, nurses, psychologists, software developers, graphic designers, animators, educators, researchers.

This activity demonstrates how careers increasingly blend multiple fields together to solve real-world problems. Students practice engineering design, communication, creativity, and problem-solving. These are examples of skills used by professionals in this emerging career.

Helpful High School Classes



- Biology
- Anatomy & Physiology
- Health Science
- Psychology
- Computer Science
- Web design or App Development
- Coding/Programming
- Digital Media
- Graphic Design
- Digital Art
- English Language Arts
- Creative Writing
- Public Speaking
- Statistics
- Advanced Math

Episode Reflections



1. What surprised you most about the role of a Medical Game Designer, and why?
2. Which of your current interests or strengths could help you succeed in a career like this?
3. If you could design a game to solve one real-world health problem, what problem would you choose and how would your game help?

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*This resource is an educational guide and does not guarantee college admission or career placement.

