



Video Game Design

OBJECTIVE

After creating video game characters that look like them, students will develop their own code for character movement.

OVERARCHING QUESTION

How can we design and program diverse video game characters?

WHAT'S THE PROBLEM?

- Children between the ages of **5 and 8** play video games for an average of **42 minutes** every day.
- **Sixty-six percent** of tweens between the ages of **8 and 12** play video games for an average of **two hours per day**.¹
- Women and ethnic minorities make up **less than 20%** of video game characters.
- Studies have shown that games can promote stereotypes or bias and impact how people view others.²

In order to be more inclusive and promote bias-free perspectives, more diverse video game characters are needed. Making these characters available will allow children of all genders and backgrounds to see—and play with—characters that look like them!

COLLABORATE AND BRAINSTORM

Imagine that you are a video game designer. With a partner, design six new video game characters on the Choose Your Character sheet. Include at least one character that looks like you and one character that looks like your partner. For the remaining slots, draw characters who are representative of people from all different backgrounds. Think about gender, skin color, eye color, hair color, interests, and even clothing. Be sure to also give each character a name!

DESIGN AND CREATE

Now that your characters are developed, take your game one step farther. Pretend that when a player clicks on a character on the Choose Your Character screen, the character makes an original movement, like a dance move or hand gesture.

Did you know? Just as humans around the world speak many different languages, computers can understand hundreds of programming languages!

To make video game characters do this, every small action needs to be written in code. Code is a special computer language that tells the computer *exactly* what to do.

Follow the directions on the Animate Your Character sheet to create your own code.

MAKE IT BETTER

Share your code with a partner. Then pretend to be each other's characters and see if your partner can follow your code and make the move you were picturing!

Remember: Characters can only make the small movements included in your code. If more movements are needed, create a new symbol and edit the code.

KEEP IT GOING

In order to create diverse video game characters, the video game industry needs designers and programmers from all backgrounds. Kick off learning how to code with [Code.org](https://code.org) and work your way up to creating your own game!

K-2 CONSIDERATIONS

Work as a class to complete the first step on the Animate Your Character sheet. From there, students can use the symbols you developed together to create their own moves.

STANDARDS

ISTE Standards for Students

Knowledge Constructor

- Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.
- B. Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.

Sources

1. "Video Games." Center on Media and Child Health. Harvard Medical School Teaching Hospital. <https://cmch.tv/parents/video-games/>.
2. Richard, Gabriela T. "Video Games, Gender, Diversity, and Learning as Cultural Practice: Implications for Equitable Learning and Computing Participation Through Games." *Educational Technology*, vol. 57, no. 2, 2017, pp. 36–43. JSTOR, www.jstor.org/stable/44430522. Accessed 11 Feb. 2020.

CHOOSE YOUR CHARACTER

Think like a video game designer and create your video game characters!

The worksheet is designed for creating video game characters. It features a colorful, stylized background with purple, green, and blue tones, and a rocky landscape at the bottom. The page is divided into six character slots, each consisting of a large white square for a character portrait and a smaller white rounded rectangle below it for a name or description.

ANIMATE YOUR CHARACTER

- Now think like a video game programmer! With your partner, make a list of **specific and small movements** that your characters could make. The order is not important, and you should leave the boxes blank for now.

For example: ✗ Give a fist bump (This has too many parts!)
✓ Lift your right hand above your head.

- Next, draw a small symbol for each movement in the boxes above. Make sure each symbol is unique.
- Think about how you could combine these small movements into a bigger action. You may use some or all of the movements, and you may use each one as many times as you like.

Then draw the symbols for these small movements in order below. You may use as many boxes as needed.

1		2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	