

Section 2

Chapter 7 - Videogames as educational tools

Exemplary case 3

Title: **Portal 2**

Description:

[Portal 2](#) is a very popular first-person puzzle-platform COTS videogame developed by Valve Corporation. Like the original *Portal*, players are put into a series of test-chambers and must figure out their exit. To this aim they solve puzzles by placing portals into otherwise disconnected surfaces, and teleporting between them. *Portal 2* includes additional features like tractor beams, lasers, light bridges, and paint-like gels that alter player's movement or allow portals to be placed on any surface.

In the single-player mode, players control Chell, who navigates the dilapidated Aperture Science Enrichment Center during its reconstruction by the supercomputer GLaDOS. In the new cooperative mode, players solve puzzles together as robots Atlas and P-Body. This mode allows for split-screen play, that is two people can play together on the same computer.

The game requires extensive spatial acuity and has been proposed as a tool for learning physics and maths, problem solving, critical and spatial thinking. Beyond the structured game, players can also design their own test chambers, which is what most educators have used with their students.

Teachers can start discussions about gameplay strategies, regarding other ways a room could be solved, students' predictions based on clues on the evolution of the story, etc.

Valve Corporation has created [a website](#) to support teachers who use the game for educational reasons. The site offers teachers various lesson plans which include *Portal 2*. All of the content is publicly available.

Portal 2 is purchasable and available for Windows, MacOS X, Linux, PlayStation 3, and Xbox 360.

