

Former Student Creates Game That Teaches Physics Concepts

Michael Flaherty recently attended the Computer-Human Interaction (CHI) in Play conference so that he could debut the Trial of Galileo, which is a game that places concepts relating to physics squarely at its core.

Specifically the game aims to teach players about motion graphs the likes of which are often used in early physics classes. Such graphs include position over time and velocity over time, with the game aiming to demonstrate what these types of graphs represent and how they can be used by the student.

Flaherty initially started the game as a class project with a few friends, with the concept slowly beginning to take form over the course of a semester. He commented: "You control this game by basically drawing on a graph, you just draw your own graph and Galileo - which is moved through this obstacle course basically - tries to get from the start to the end of it."

These obstacle courses are the key to understanding the various physics concepts introduced by the game, with the player being tasked with determining the reasons behind Galileo's various motions in relation to the graph.

The title has been lauded for showing that games can be used in an educational capacity, with Professor Brent Dingle adding "It also shows the game design and development program is more than just games. It teaches the students how to do research, conduct business and work successfully as a team of individuals from different fields of interest and specialization.

"How people interface with games is, or can be, important to education and such opportunities should not be overlooked."

Perhaps most impressive is that Flaherty and company produced the game while still in high school, whereas many of the other titles introduced at the show had been developed by graduate students.

While there is little indication that the title will ever actually see a full release, it is encouraging that more games attempt to demonstrate the various uses for the platform beyond entertainment.

Flaherty has high hopes for the concept though, stating: "We gave it to the professor to implement, but it hasn't happened yet. I think he's actually going to start assigning the game next semester." Perhaps with a little bit more information about how effective the title is in practice we may see more games like this being used to help students learn about subjects in a similar manner to textbooks and video.