A Video Game for ININ

By Rebecca Carrero Figueroa Translated by Tia Gilson

In May of 2008, a group of professors from various disciplines, from the University of Puerto Rico at Mayagüez (UPRM) presented a research proposal for assessing the retention rate of industrial engineering students. Their plan is to develop a video game that will allow students to become more familiar with the work that industrial engineers do and encourage them to complete their bachelor's degree in this field.

With this idea in mind, the project entitled, "Can Gaming Provide Enough Context to Improve Knowledge Integration and Retention in Engineering Freshmen? Developing a Computer Game for Industrial Engineering." came to life.

This proposal received a donation of \$500 thousand from The National Science Foundation, to develop at least one game, in a time period of three years. This project has been placed in the hands of Dr. Agustín Rullán (the Principal Investigator), Dr. Alexandra Medina, Dr. Noel Artiles, Dr. Cristina Pomales, and Dr. William Hernández of the Industrial Engineering Department (ININ by its Spanish acronym); Professors Miguel Figueroa, of Computer Engineering Department, and Félix Zapata, from the Humanities Department, and Dr. Sandra Dika from the Office of Institutional Research and Planning.

As explained by Rullán, this is the first project of its kind to be undertaken. The game will simulate different aspects related to industrial engineering, for example, an assembly line. By having previously familiarized themselves with tasks that are undertaken in the work world and are part of the game, researchers hope that this will cause students to be more enthusiastic when studying the same material in class.

Rullán also explained that they propose to develop programs whose access codes will be available to whomever wishes to use them, so that other universities will be able to collaborate.

"We are trying to develop a fun game that can be used in any program," he added.

The members of the team will be responsible for different phases of the project. Some will be in charge of game design and content, while others will be in charge of developing esthetic and graphic elements. After the project is complete, they will then test the results, and the games' impact on future industrial engineers. The project is set to begin in January of 2009.