Video game learning could be the next big step in education

Jennifer Polack
NEWS STAFF • JANUARY 16, 2013

Move over, LeapFrog — the latest in video game education has students actually creating video games to help promote learning in a way that is not only engaging and educational, but genuinely fun.

The research behind it, due to the interactive nature of video games, students will be able to learn otherwise complex subjects faster and in greater depth than they would in a traditional classroom setting.

Director for the Centre for Mathematics, Science and Technology Education at the University of Alberta, Bob Ritter stumbled upon this idea with the help of Mike Carbonaro, Associate Chair and Undergraduate Coordinator of Educational Psychology, who was on sabbatical in Italy at the time.

When put into action, Ritter said the exercise not only challenged the roles of teachers and students, but completely reversed them.

"The whole idea is that teachers don’t have to be an expert on the programming," he explained.

"What’s so cool about it is that it doesn’t take long to learn programming language ... it would be like learning real estate by playing Monopoly — except by creating the game, [students] are able to learn more and think creatively about the subject matter."

The operating system Ritter and Carbonaro used is Microsoft’s XNA, which employs pictures and some basic coding to create a world and characters for video games.

"It’s really just putting pictures together. It’s [also] Boolean logic, but the students are not aware they’re using it," Ritter said.

One major advantage of learning various subjects by designing a video game around it is that this method encourages creative thought.

Using history as an example, Ritter explained that the project does not present the subject along a linear pathway, but instead explores the "what ifs" of history.

"There’s not one clear route to winning. [Students] begin to understand the problems and fears of history," he said.

When tested in two social studies classes, the method resulted in video games based on the under-ground railroad and the fur trade. But while creating these games can teach students about a wide variety of subject matter, it also exposed student behaviors that encourage teamwork, strategy and cooperation.

"[It] gave students an understanding about what was happening in the dynamics of why you collaborate, why you need to treat people properly," Ritter explained.

"The students really got that it wasn’t about wars. It wasn’t about having the biggest army. It was about alliances that you could create, and internal systems of support that actually allowed you to get ahead."

However, the project’s potential shortfalls are a cause for concern, especially since it revolutilizes the teacher-student relationship.

"There’s not one clear route to winning. [Students] begin to understand the problems and fears of history," he said.

The project is currently looking at situations aged 12 and 13 in Edmonton Catholic schools, and so far the method has been well-received by students.

"If you ask students to build a video game, it’s not a surprise that they’re motivated to do it," Ritter said.

"I’ve never seen students so engaged in all my life."

EXECUTIVE DECISION

SU touts transparency, necessity as factors in decision to file judicial review for Lister

JUDGEMENT • CONTINUED FROM PAGE 1

The judicial review means the Court of Queen’s Bench will look over the case and decide whether the U of A violated its own policies and rules in order to make the changes to Lister.

For a judicial review, the applicant — in this case, the Students’ Union — needs to prove how the public body — the university — made a mistake.

"We just wanted to make sure we were transparent about the whole situation ... We wanted to make sure the admin wasn’t given carte blanche to abuse their power or suppress students."

DARIO SUMAR
STUDENTS’ UNION POLICIES OFFICER (LAW)

SU Law Councillor Mario Babic expressed concerns in November that the SU executive had not properly presented facts to Students’ Council.

At the time, he said although there may have been justified grounds for the pursuit of a judicial review, those grounds were not elucidated to Council.

However, Babic told The Gateway in an email interview this week that, after a courtesy reading of the documents, he believes the Students’ Union has a strong argument.

"It is not a baseless claim by any means. I look forward to getting some free time to delve into the documents fully to improve my understanding of the entire situation," he said.

Up until this week, the Students’ Union has kept quiet about considering a judicial review which according to a November interview with SU President Colten Yamagishi was to protect the university and not shed a negative light on the situation.

That has changed, now that a review has been officially filed.

"We just wanted to make sure we were transparent about the whole situation ... We wanted to make sure the admin wasn’t given carte blanche to abuse their power or suppress students," Sumar explained.

"And it’s not just about Lister students ... It’s about protecting all of our students, and making sure that the university doesn’t have the ability to just say, ‘We’re making these changes — deal with it.’"

Sumar said he has heard a lot of negativity from students in Lister in the six months since the changes took place.

He also said he has been made aware of numerous situations with other students in Lister that have been handled poorly by Residence Services recently although he clarified many of these situations are hearsay.

"It’s not really a good situation there. I don’t want to use the term ‘police state’, because that has very negative connotations to it, but, you see a few underlying characteristics of that type of situation," he said.

"It just seems like what’s happening there is wrong. And I think the way in which we as the SU executive are reacting is not just necessary to what is going on in Lister, but how that could expand over the entire campus."}

Although Sumar says the SU has not heard back from the university yet in regards to the judicial review a statement obtained from U of A administration acknowledges the SU’s action.

"The university has received the SU’s application for a judicial review and is reviewing it,” the statement read.

"We will not be discussing this further publicly as the matter is in litigation."