

## **Online school implements game-based course**

### **Florida Virtual School is offering students an American history course, based on an educational computer-game scenario**

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From staff and wire reports

The game is called Conspiracy Code, and it's the first in a series of online game-based courses created by 360Ed Inc.

Florida Virtual School (FLVS) is set to pilot what it describes as the first complete online game-based course for high school students. School officials and the game's creators hope the course will help engage students who struggle in traditional classroom settings.

The game is called Conspiracy Code, and it's the first in a series of online game-based courses created by 360Ed Inc., an educational game development company. The first Conspiracy Code course fulfills a full credit of history and is aligned with state and national standards.

The project began in 2005 when Ben Noel, chief executive of 360Ed, met Julie Young, president and CEO of FLVS. Noel had been working with the University of Central Florida to get more involved with education, and FLVS had been looking at gaming and its potential as a learning tool for a few years.

"We're always asking, 'What's next?'" said Andy Ross, vice president of global service for FLVS, in an interview with eSchool News. "We've always been thought leaders, and with Ben's help, we knew we could create something great for students."

Although FLVS had never implemented gaming into its curriculum before, Ross said school leaders recognized that "there are many different types of learners, not just one. And for those students who are not traditional classrooms learners, perhaps this could help."

Noel, his development team, and FLVS decided to form a partnership, each funding the research and development needed to create a successful educational program. 360Ed would create the game, but FLVS assigned a curriculum specialist and other personnel to guide the company in creating a game that teachers, students, and state education officials would approve of.

"Altogether, it was a 14-month development process and a four-month beta process cycle," said Noel.

In this first course, students adopt the roles of fictional characters in an espionage-themed adventure game set in the fictional metropolis of Coverton City. In the 3D game, students must build their knowledge and understanding of American history to stop a vast conspiracy that is threatening to erase and change the course of history.

"We decided to create our first game around American history, because when looking at the state standards in other subjects like math and science, we realized that the humanities are more liberal in structure and more flexible in the curriculum," said Noel.

"Plus," said Ross, "we wanted to base this on one of our most popular courses, and American History at FLVS is in the top 10."

The game is built on a foundation of challenges and missions that allow students to learn progressively, says the company. Based on each student's understanding of content and the use of clues, students self-select their path and pace through the course.

As they follow a sequential learning path, they master complex ideas before moving on to the next level, or mission.

Along with the story, Conspiracy Code also offers what the company describes as "educational technologies to improve retention and increase comprehension." These technologies include a Data Map--a 3D visual mind map, with tags and keywords for each piece of historical information collected--that students populate with associations and complex relationships, a tagging system, a note-taking system, and the ability to conduct character interrogations.

The course is a full-year course, but because FLVS is an online school, students can proceed at their own pace. However, teachers are always there to monitor students' progress and make sure they do the work, school officials said.

FLVS and 360Ed say the course offers a learning environment that promotes many 21st-century skills, such as problem solving, communication, and collaboration, through activities such as playing concept-practice games; responding to various types of questions; writing assignments and essays; completing authentic, game-based assessments; and participating in discussion-based assessments.

Certified teachers participate alongside students to encourage them, offer instant feedback (using the information and tools embedded in the web-based communication system), and challenge their comprehension of content through a variety of assessments.

Student work is tracked and documented using a web-based Student/Teacher interface. This system collects information about the amount of time a student spends on assessments and evaluations, student-to-student collaborations, and time on task with each mission.

Teachers also use written and verbal assessments embedded in the course to determine how well a student is progressing and to monitor their mastery of content and comprehension of concepts. Teachers use authentic game-based assessments to assign grades.

"We wanted this to be scalable for the future," said Noel. "That means we made sure to control the cost, and now that we have all of the content management systems ... created, it will only take about six months to develop a new course in the future."

Noel said 360Ed created the game to cater to a broad range of students. "While your PC does have to have a 3D video card, we created the game with low specs to make it more usable, and we've added many tools to help the potential student use the game," he said. "For example, before you even access the game, you can run a test to see if your computer is compatible."

So far, though the course is still in beta testing, 65 students have signed up and have completed the first part--and they'll continue with the course this fall. Two teachers, both certified in American history, are in charge of the course.

"Conspiracy Code is everything I would have liked to do in my brick-and-mortar classroom but didn't have the time or resources to accomplish. It engages kids through game play, but challenges them to interact with history in the most creative, research-based methods available," said David Wilson, FLVS American History teacher. "There is a higher level of critical thinking involved, project-based learning, student collaboration, authentic assessment, and plenty of reading and writing. At the end of the day, I know my students are becoming excited about history, and I know that this course will inspire many students."

According to Ross, participating students are learning differently, too.

"The teachers are coming back and saying that when [students] talk about history, it's not just reciting facts. They talk about history as a storyteller--like they've actually experienced the history. That's how this game is changing learning," he said.

Ross said the most common response he hears from students who have played the game is, "I wish all my other courses were like this one."

Noel said the project's next step is to look at the research after the beta test and fine-tune the game. Also, he plans to add multi-player capability in the next version, as well as other tools to help student collaboration.

"The University of Central Florida is also going to study the effects of this type of learning through gaming on the brain," said Noel. "In the near future, they will be using fMRI data ... to look at this game and its effects on students."