Playing games with the economy

February 10 2015, by Bert Gambini

To help people better understand the state of their personal finances and the nature of the economy, two University at Buffalo graduates students play and design games.

Derek Curry and Jennifer Gradecki use the fundamentals of gameplay as a platform for lessons that can be applied to financial management. For them, games are serious business, a fact as obvious as the computer programming knowledge they lacked when the idea of economy-based gaming first struck them a few years ago.

"I wouldn't say we knew nothing about programming," said Curry. "But it was only slightly more than nothing."

That was in 2010, when Curry and Gradecki both received MFAs from UCLA – and a lot of debt to go along with their degrees. It was time to get to work. They shared a Los Angeles apartment meant for one, so squeezing an art studio into a space that begrudgingly accommodated the two of them was out of the question. The job market didn't present many options either, especially on the West Coast. The financial crisis that began in 2007 had sent the economy into what was possibly its worst downturn since the Great Depression.

"We first started thinking of ways to make art that didn't require a lot of space," said Curry, a doctoral candidate in the UB College of Arts and Sciences' Department of Media Study. "This led to the idea of making video games, which we could do anywhere on our computers."

Moving their art to an electronic medium gave them a perspective on two opposing trajectories that were otherwise unrelated: The economy had collapsed about the same time the online game Farmville was gaining popularity.

"We noticed that it was difficult to follow technical news stories about the financial crisis and that people had short attention spans when it came to either reading or watching stories about it," said Gradecki, who is expecting to finish her doctoral work in Visual Studies in the Department of Art in UB's College of Arts and Sciences in 2016. "But at the same time, we noticed how people had long attention spans when it came to games like Farmville."

So they began thinking of how to combine Farmville's gameplay with economic lessons. And though they weren't programmers, they realized that games could help users understand the economy and the grinding mechanisms of the financial crisis.

Entirely self-taught, the two devoured material about the genetics of computer games that are invisible and unknown to users. They had to understand the workings of games while they also learned the workings of the economy.

"We needed to find out how to build aspects into the gameplay that made abstract economic elements into something concrete," said Gradecki.

Their first attempts were "pretty bad," said Curry. But a small economic education grant from the Puffin Foundation gave them the tools needed to improve their work.

"It was $1,200," said Gradecki. "That was a lot to us. It was enough to get us started."

Equipped with the hardware to speed up their drawing, Curry and Gradecki finished a game called, "Bubble."

"That was our first complete game," said Curry. "Bubbles would float up the screen and an invisible hand would fly around and pop them. The popped bubbles would turn into houses that would bounce and turn into packages that symbolized the packaging process of mortgages."

But the game was too text heavy to be effective and Curry and Gradecki realized that users were ignoring the written animation.

Online gaming economics, meantime, provided its own ironic challenge. Just as a lack of studio space contributed to the two designing computer games, the expense of server space required by games that demand players log in would move Curry and Gradecki in yet another creative direction.

Their most successful design is a card game, a collaboration with UB graduate Devin Wilson, MFA '13. Wilson suggested a game mechanic based on rummy. From that initial inspiration, the three created "CDS Mess," a name that refers credit default swaps.

The game teaches players how the economic crisis happened by requiring them to build their own collateralized debt obligations (CDO). The game asks participants to take turns in the order of their accumulated personal debt. The result juxtaposes financial realities in the setting of the game's fantasy, while at the same time straddling past and present, providing lessons in history that help players understand their own financial present.

(CDS Mess is available online at www.thegamecrafter.com/games/cds-mess.)

"When we started thinking through the games we were making we asked if we wanted people to identify more with the bankers or with their own financial position," said Curry.

That it's played as a socially interactive game also speaks to advantages that online games lack.

"Internet players are isolated from one another," said Gradecki. "The conversation that comes out of the experience of playing together is something qualitatively different from players isolated from one another on the Internet."

Very soon, the two will complete work on a browser game that explains the securities fraud behind the Abacus mortgage-backed CDOs that resulted in the largest financial penalties ever paid by a Wall Street firm.

But the game's completion is hardly the end of their work.

"Learning about programming and economics is a continual process," said Gradecki. "We have to keep up with the economics and understand new instruments that are developing and changing."

Provided by University at Buffalo