



Ahead of the game

*A disenchanted high school student becomes
an educator on a mission to make learning fun and engaging*

Overview

Shaun Iles hated high school. He endured it for as long as possible then dropped out. But the experience stayed with him and over time he began to understand the source of his frustration: he had no control. He returned to his education, advancing again and again until he himself became an educator.

Now a professor at Mohawk College in Hamilton, Ontario, Iles is driven to put education in the hands of learners. When he had the opportunity to take his Sustainability course onto the Brightspace platform, he did something wonderfully unexpected: he turned it into a game.

For injecting fun into education and empowering his students to succeed on their own terms, Shaun Iles won the 2014 Desire2EXCEL Innovation Award.

AT A GLANCE

Client	Mohawk College
Students	2000+
Level	Diploma/certificate programs
Solutions	Brightspace Online and Blended Learning solution

CHALLENGE

- Drive student engagement while freeing up instructor's time
- Inject play into education
- Allow students to learn at their own pace
- Ensure academic challenges are gratifying
- Provide opportunities for students to connect with each other and the instructor

SOLUTION

- Introduce rewards and bonuses to mark achievements
- Include gated modules so students progress at their own speeds
- Provide forums for discussion and debate
- Enable the use of social media for communication
- Increase instructor-student communication
- Leverage automated tools to free-up instructor's time

RESULT¹

- Automated tools allowed scaling of classroom from 30 students to 160 online with minimal impact to instructor's workload
- Reduced course withdrawal rate by 25% since gamification
- Increase from 63% to 83% of students who pass course since gamification
- Positive student feedback
- Creation of a Unity-based 3D-simulated world for students to apply theory



Challenge

A NEED FOR DIFFERENTIATED LEARNING

The cookie-cutter approach to education didn't work for Iles. It didn't work for him when he was a student and it didn't work for him as an educator.

"Back then I was constantly being told what to learn and how to learn it. I think the massive flaw in our education system is that there's no differentiated learning," says Iles.

"Building adaptive learning strategies is something I'm working towards for my classes, and technology is making it easier," he adds. "I would like to help pilot that chapter."

SUDDENLY EDUCATION STOPS BEING FUN

Very young children learn through games and simulation. But, says Iles, "Somewhere around eleven years old, education changes."

He explains, "If you think about it, some of the biggest lessons we learn as human beings come when we're ten years old running around the schoolyard playing hide and seek and cops and robbers and kissing tag. We learn our moral obligations while having fun."

"Then someone tells us to sit down and listen, and that takes away a lot of that drive to learn. Suddenly students are forced into a one-size-fits-all rigid learning environment that doesn't take into account each student's unique learning needs. But I think we learn better when we're having fun. When we're having fun we're increasingly engaged—it reduces some of the barriers to education."

STUDENTS WHO CONNECT LEARN FROM EACH OTHER

When the Brightspace platform became available for his course and he had the opportunity to take it online, Iles' biggest concern was maintaining open lines of communication: "Students have to learn to network and make friends who have different points of view. They have to learn how to take criticism and use it as a tool to become better people and better citizens. It prepares them for real situations once they enter the working world."

He adds, "When my classroom is loud, I know that my students are learning. They might not be learning exactly what I want them to learn, but they're discussing and engaging. That needs to happen online, too."



SET YOUR OWN PACE, JUST LIKE A GAME

Iles saw the potential in the Brightspace platform and began researching gamification. He thought about what made games so much fun when he was a kid—succeeding at tasks, leveling up and collecting bonus points—and set about injecting the same thrills into his lessons.

“I use gating on Brightspace with the help of restrictions so students only see one module at a time,” says Iles. Each of six modules includes background readings, inter-activities, reflections and a quiz. “You can go as fast as you like up until the midterm. You can even play for seven hours straight and beat the game. If you can get the work done and accomplish the grades, why not? Students take their own personal learning paths to achieve the course outcomes.”

Iles explains that recorded lectures also help students learn at their own pace: “To get all the information from a lecturer in one sitting is impossible, so I post short fifteen-minute lecture videos. You can review them once or 100 times—as often as it takes until you understand.”

PRIZES, BONUS POINTS AND SILLY VIDEOS— LEARNING HAS ITS REWARDS

As students work through the modules, they’re met with surprises and rewards. Iles says, “If you get 100 percent on a quiz, you get a bonus mark along with a silly video that comes with a congratulatory message.”

He also uses the Intelligent Agents tool, an automated email tool that springs into action when students hit specific criteria or conditions, to connect students to various areas of the college. “If you get 100 percent on every quiz on your first attempt, the Sustainability Office is automatically notified and presents you with a gift. It’s all completely automated so I don’t have to monitor 160 students. The Brightspace platform is like my own personal assistant that works in the background keeping students engaged, motivated and moving toward success.”

What the students really like, according to Iles, is that they don’t know which assignments come with bonus marks. He says, “And I think that really drives them. They also like the funny videos, which I change all the time to keep students motivated.”



“Rather than a learning management system, I like to think of Brightspace as a learning enhancement system. A management system can lock you in. Brightspace comes with a hundred great tools but it can connect you to external tools as well. So I think it’s a really strong enhancing platform that makes your pedagogical approach to your specialty a hundred times stronger than it would be without it.”

Shaun Iles, Professor, Mohawk College

Solution continued



THE BRIGHTSPACE PLATFORM CREATES OPPORTUNITIES FOR CONNECTIONS

As it turns out, a great benefit of the Brightspace platform is the multiple possibilities for student interactions. “They use the built-in group collaboration tools, the Locker tool and the Discussions tools so they can collaborate on a project from anywhere as long as there’s an Internet connection,” says Iles. “We encourage them to comment on presentations and strike up discussions so they can learn to give and receive criticism.”

With the help of a Skype™ widget and Twitter feed embedded in the Brightspace platform, Iles can deliver important information, answer questions or troubleshoot assignments. He says, “These are the tools students use every day so they’re comfortable with them. I’m meeting them on their own turf, so to speak.”

EASY TO SCALE, EASY TO HELP STUDENTS

As gamification increased the popularity of the Sustainability course, Iles was able to scale it with minimal effort and even be of more assistance to his growing student cohort. “Using the tools we have integrated into the Brightspace platform, I was able to create a course that addresses many potential student questions. Embedding “quick info” Kaltura videos and the Intelligent Agents tool help to redirect students to resources so the course is easy to navigate and the content is much easier to understand.”

GAMIFICATION IMPROVES STUDENT ENGAGEMENT

According to Iles, the Sustainability course suffered a 50 percent student withdrawal rate before gamification. That number’s been reduced by 25 percent.² Iles believes it’s because students are more engaged now. “They really take to the game elements, like the hidden unlockable rewards that lead to larger rewards later in the course. It’s really amazing what they’ll do for that funny video.”

He adds, “Since adding the game elements to the course, I find that students ask for more information. They’re just more involved now.”

STUDENTS ARE FLOCKING TO IT— AND SAYING GREAT THINGS

Since taking the course online, the average class size has skyrocketed from 30 students to 160. It’s not just attracting students from across the college—it’s teaching them a thing or two. Iles says that before gamification the success rate was 63 percent and now it’s 83 percent.³ “It’s a dramatic increase,” says Iles.

Result continued

What's more, student feedback on both Iles and his course is very positive. Anonymous comments provided in student evaluations reflect the goals of the course. They include:⁴

"The teacher was great...He did video updates instead of just typing it out so it was easier to understand what he was saying."

"I like how we can go at our own pace and we have adequate time to complete assignments."

"I liked a lot about this course. It made me have a more open mind...thinking a lot more and supporting my ideas better."



TAKING GAMIFICATION TO THE NEXT LEVEL

Iles continues to push the limits of gamification. At the moment, he's building a Unity-based 3D simulator with the help of some former students. Soon students will be able to take what they learn in his virtual classroom and apply it in a simulated world.

"Students will be asked to choose a location to build a city," he says. "They will conduct sampling of the area and make choices about how to build, then see how their choices affect sustainable development. As they play the simulator they will feed information back into the Brightspace platform through journal and blog posts and use chat to discuss their failures and successes. They will leave this course with a better understanding of the difficulty of balancing people, planet and profit."

AND THEN THERE'S THE EFFECT ON THE PLANET

It's not all about fun and games. The point of the course is to demonstrate the complexity and ambivalence of sustainability. "Whether they recycle or turn the water off when they brush their teeth, students learn the international connectedness of what they do. Once they realize it their heads start spinning and they begin asking more questions, which is great."

Many times students leave Iles course inspired to make a difference: "I've had students end up in placements with different sustainable businesses in Hamilton and Toronto. Just seeing how this one class can drive them to do something better for their communities and Canada in general is a big deal."

About D2L

D2L is the software leader that makes the learning experience better. The company's cloud-based platform—Brightspace—is not a common one-size-fits-all learning management system (LMS). It's easier to use, more flexible, and smart. With Brightspace, you can personalize the experience for every learner to deliver real results. The company is also a world leader in learning analytics: its platform predicts learner performance so that you can take action in real time to keep them on track. Brightspace is used by learners in higher education, K-12, and the enterprise sector, including the Fortune 1000. D2L has operations in the United States, Canada, Europe, Australia, Brazil, and Singapore. | www.brightspace.com

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