

# How teachers can use video games to motivate students

May 31 2021, by Jean-François Sénéchal

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If you ask your teens to do their homework they'll find a thousand other things to do. But put them in front of a video game, and they'll focus on it for hours. How exactly do game designers create this kind of

engagement? And what would happen if we applied these principles to teaching?

I am a teacher, a father of teenagers and an occasional [video game](#) player myself. I know that university professors decry, with reason, the [violence](#) some of these games promote. Others point to the [issue of video game addiction](#).

Yet these criticisms ignore the strengths and potential of the video game world, including its ability to engage young people in complex and [challenging tasks](#).

Watching my teens play video games for hours on end tells me that video [game designers](#) understand something that my fellow teachers and I had not!

In my teaching duties, this question has taken on a more concrete form: I wonder if it is possible to make distance learning courses more dynamic by incorporating some elements of video game culture into them.

## **The era of gamification**

Others have asked the same question. [Gamification](#) is an established research area in university pedagogy. In general, it refers to a set of teaching approaches and tools that use both the mechanisms of video games and their ability to stimulate [student engagement](#).

These pedagogical approaches use "[game-based mechanics, esthetics and game thinking to engage people, motivate action, promote learning and solve problems](#)."

We might assume that [university students](#) are more naturally engaged and passionate about the subject matter to begin with. After all, they

each chose their area of study. But my answer to that is: it depends on the course.

When I first started teaching, I taught a course in ethics and professionalism. It was a mandatory course in the engineering program, and far from being a popular one.

To begin with, lecturers assigned to this task, all trained in philosophy, struggled to teach a course in applied ethics targeted to the concrete difficulties of science and engineering professionals (engineers, land surveyors, chemists, agronomists).

The students were resistant to content that seemed too theoretical, even cut off from the reality of their future profession. So what does it take to create an exciting course that engages these students?

I didn't know much about my students, other than the fact that they belonged to an [age group \(19-23\) that regularly plays video games](#). What if the key to engaging them was hidden in the gaming consoles they spent their evenings with?

## **Games as a tool for engagement**

Engagement is a concept that has been present in academic literature for over 70 years. It has become a policy anchor for many educational institutions. Student engagement is associated with several benefits: increased student satisfaction, perseverance and academic performance.

Some researchers use engagement to evaluate instructor performance, or even institutional excellence. Over the years, I have gradually adopted new tools to make the course more interesting, engaging and stimulating, for both students and their teacher.

## **Trophies, badges and rewards**

One of these tools has shown itself to be particularly exciting and helped increase my students' engagement: a system of trophies, badges and rewards inspired by the world of video games.

Designed with the help of the "Center de services en technologies de l'information et en pédagogie (CSTIP)" at Laval University, the system is presented in the form of an application. The mechanics and style are similar to the "achievements" and "trophies" systems typically found on the two most popular video game consoles (Xbox and PlayStation).

This reward system encourages behaviors such as active participation, attendance, humor, creativity, helpfulness, team spirit, leadership and curiosity. While our educational institutions promote these behaviors in their rhetoric and policies, in practice, these behaviors are difficult to recognize through traditional assessments and grading systems.

## **Completing 'levels'**

Trophies and achievements are used in video games to reward the player's efforts, and to track and measure progress. For example, when the player completes a level, discovers a new power or eliminates an enemy, they receive a trophy. These systems also encourage players to explore elements of the game they might otherwise ignore or overlook.

For example, exploring all the nuclear shelters in Fallout, visiting all the brothels in Grand Theft Auto, or buying paintings in Florence and Venice in the Assassin's Creed universe all require a lot of time, patience and effort. Each of these exploits is rewarded with a trophy or an achievement, depending on the console being used.

The sum of these rewards also allows the players to compare themselves to other players. All of these tasks and mechanics can be transposed into a teaching context: exploring new content, succeeding in a difficult task, actively participating, completing a series of specific tasks and so on.

In order to systematize and categorize the trophies and rewards associated with my students' engagement, I drew on the following five categories identified in a [study on the subject](#):

1. Express (create, build, embellish)
2. Explore (try, experiment, research)
3. Compete (excel, succeed, distinguish)
4. Collaborate (share, help, cooperate)
5. Identify (recognize oneself, know oneself, associate with a group)

When a student demonstrates any of the first four categories of commitment through his or her actions or attitude, they earn a trophy. Each trophy is accompanied by a short note from the teacher congratulating the student on his or her "achievement" with a promise they'll get bonus marks at the end of the course.

The last category (identify) is presented as a table of leaders and winners in each category. The chart shows students their most successful category of engagement and their profile. There are four profiles in the game: expression profile; explorer profile; competition profile and collaboration profile.

Here are a few examples of trophies. A [student](#) who attends 90 percent of their classes receives the "My body was there" trophy. Students who participate more than 20 times in the discussion board receive the "Forum Addict" trophy.

Some trophies target peer support and team spirit, such as the "Medical Assistance—Medic" trophy. Trophies are obviously provided for academic performance as well, including the "Captain America" [trophy](#) (for an A+ grade). My course offers several dozen trophies, badges and rewards. Top students win about 30 of them. And they do this all for a maximum of five bonus marks!

The effort these students are willing to put in for a few trophies is impressive. While the average number of visits to a course site is about 100 per semester, some students make over 1,000 visits to this course site. On discussion boards many students admit to being hooked on winning trophies. Others write to me asking for a list of all the trophies, badges and rewards. Not all of the students strive to win trophies, but the students on the whole are having a little more fun. And so is their teacher!

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