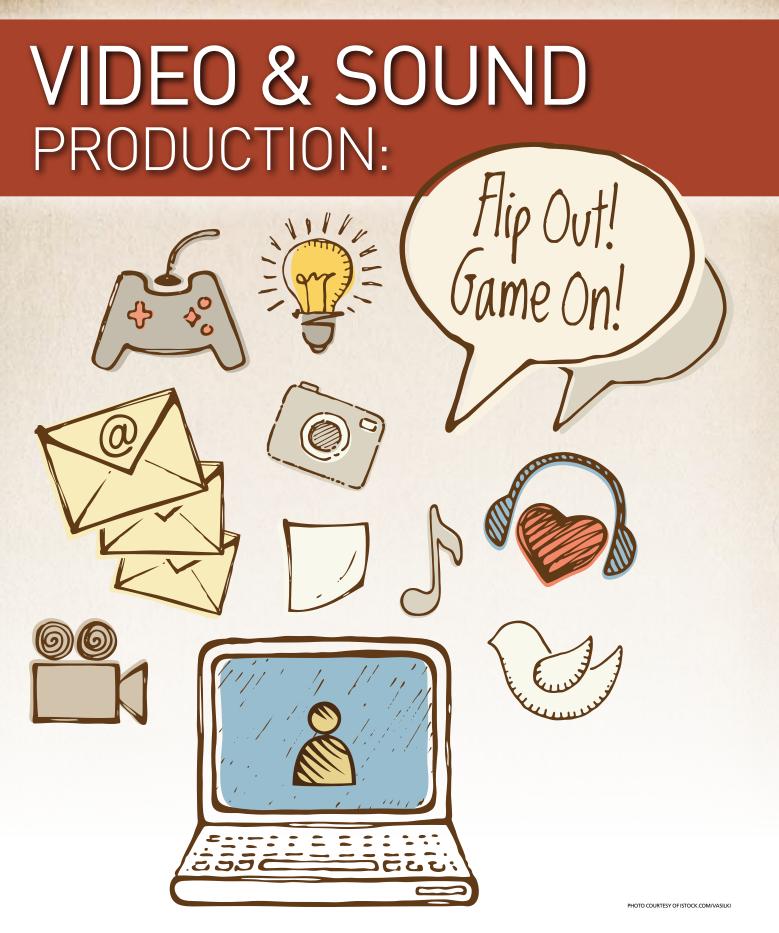
The Way We Teach Now



# How a "Flipped" and Gamebased Learning Environment Increases Motivation

### By Marc W. Hunt

started teaching TV and sound production in a career and technical education (CTE) setting six years ago. The first couple months of teaching provided a steep learning curve for me. I am highly experienced in my industry, but teaching the content presented a new set of obstacles. My students had a broad range of abilities, motivation and backgrounds. The students enrolled in my class because they were interested in video production, sound production or a mix of both.

The curriculum was intriguing to the learners, but the traditional classroom environment hindered their engagement with the curriculum. Something was needed to engage my students more deeply. I also wanted to be able to reach all the learning styles of my students while providing necessary accommodations. While completing my master's in Educational Media Design & Technology at Full Sail University, I was introduced to a "flipped" classroom. As a result of my flipped experience, I decided to replicate it in my own classroom. A flipped classroom would allow me to differentiate instruction and also meet the accommodations-such as extended time on assignments or tests, special seating and notes provided-of the learner immediately.

#### Flipped Out!

I began using an online learning management system (LMS) called Schoology in the spring of 2011. Schoology is visually close to Facebook and other social media my learners use and are familiar with, but it was created for education in a safe online environment. The learning curve for me as the instructor was minimal, and my students instantly bought into the flipped class approach.

My classroom became accessible to my learners at any time *they* wanted to engage in the class. I created videos of my lectures and demonstrations and included notes for the learners to download if they chose to do so. The LMS allowed me to post my lectures, notes and demonstration for the learner to access at any time. My student demographic is made up of learners from multiple districts, so even if students were not in attendance a particular day, they could use the LMS to stay current or to review the content if they had questions or needed further clarification.

All tests, discussions and student blogs for my class were also posted on the LMS. I was still the teacher of the curriculum, but now I became the facilitator for their learning. I created weekly online discussions that would focus on the current topic of the course. I noticed that discussions grew automatically and almost everyone participated. My students posted on the LMS even when class was not in session, including evenings and weekends. They were engaging in the class even when we were not in class. Additionally, I created assignments on the LMS and learners could go back to details of the assignment if they had questions; assignments were even accessible to those students who were physically absent. The flipped classroom was working pretty well, but I noticed I still had issues with students not completing their assignments and/or low motivation even though engagement did increase.

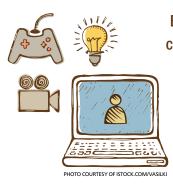
Last summer, I took some time to reflect on the previous school year, and I decided it was time to investigate what else could be done to improve the LMS and the students' experiences. The idea of "gamification"-the concept of approaching a class environment as a game-excited me and intrigued my students. I had been introduced to gamification during my graduate studies and had been reading about other classes using this approach to teaching and class environment. The summer gave me time to plan how to transform my class and create the game my students would begin playing in September. I hoped this approach would improve the completion rate and motivation that some of the learners displayed in the "flipped" class model. I was not able to find any CTE classes using this approach, so I had to really look at how my class could be transformed into a game.

#### Game On!

While unmotivated in a traditional school environment, my learners are highly motivated by certain aspects of their life—one of which is video games. As mentioned previously, I was familiar with gamification, but I did not know how or even where to start. Researching the topic, I found "The Multiplayer Classroom" by Lee Sheldon. Sheldon's book was the template I used to change my class to model a game, while still using the same LMS and the "flipped" approach.

At the beginning of the school year I was ready to incorporate gamification into my course. My learners accepted the mission of the game: to rise through the ranks of a video/sound production business. Beginning as interns, my learners would work to achieve different skills and opportunities in order to become production assistants, engineers and other job

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roles of the industry. I created a story that would replace the course description I had used in previous years. This is an excerpt of the backstory I provided:

"The famous HarkNESS Monster Productions, a well-known production company, has been expanding its operations and looking for interns to possibly hire for future projects. This is a huge opportunity for you to get your start in the industry, showcase your talents and learn from the best as you get closer to becoming the most requested person in the video and audio industries."

The class underwent a major transformation when I added gamification. Grading became point-based using experience points (XPs), which is a common game term. Previously, I would have assignments worth a percentage of their grades. For example: projects were 60 percent, the weekly grade was 10 percent, written assignments were worth 20 percent and tests or homework were both 5 percent, totaling 100 percent. With gamification, even attending class earned points for the students. As a result, attendance improved because they realized that being in class helped their grade. Learners also began contacting me to let me know if they would be absent, which had never happened before.

Additionally, I decided to let my students attempt assignments and tests as many times as they wanted, similar to that of a game. My learners not only completed assignments in a timely manner, but they also frequently reworked them in order to improve their grade or XP. One example of an assignment was review questions based on textbook readings. The learners would read the assigned pages and then answer multiple-choice questions online. The results would be seen immediately after they completed the questions and entered into the gradebook. If, however, learners were not happy with the grade, they could attempt the questions as many times as they wanted until they received the score they wanted. I found that over 50 percent of my learners would do the assignments over until they reached a high score.

Each week my students participated in a "level boss" that contains review questions about the topic, skills or learner outcome from that week. The term "boss" is used in most games as a final challenge before you move to the next level. Now, not only do my students complete the review, but they go back multiple times and attempt to gain higher XP or points.

The learners are also rewarded with extra credit (XP) if they turn in their assignments early, but they have XP deducted by turning in their assignments late. I have found that most of the learners indeed complete their work early or go back and rework the assignments if they did not earn the points they wanted to.

#### Results

The first quarter ended with successful results using the game model in the flipped class. Student engagement and motivation increased. At the end of the first quarter for the 2011–12 school year, 45 percent of my students earned an 80 percent or higher, while 55 percent earned a 79 percent or lower, some with failing grades. The class I have this year showed that 72 percent of students earned an 80 percent or higher average, and the remaining 18 percent of students scored somewhere in the 70–79 percent range without any failing grades for the quarter.

Using the flipped classroom came with some small challenges, but this approach has also generated much interest from other CTE instructors from my district. I have been asked to facilitate workshops on the LMS. Other teachers have flipped their classes with positive response from their learners, regardless of the technical skills of the instructor. Instructors who were normally fearful of their ability to use technology became excited about using it.

Both the gamification technique and the flipped class have helped to increase the motivation and engagement of my students to produce higher quality work that I am able to measure by comparing to previous years, and also with the analytics tool located within the LMS, and through my own observations. I believe that any CTE instructor can use these techniques in their classes to improve motivation and engagement as long as the instructor plans realistically how the LMS and game will work with the resources they have. Game on!

Marc Hunt teaches TV & sound production for Erie 1 Boards of Cooperative Educational Services (BOCES) in Cheektowaga, New York. Marc was recently inducted into the Buffalo Music Hall of Fame as part of the class of 2012. He can be reached at mhunt@e1b.org.



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