

7 Things You Should Know About: 3D Game Lab

Scenario

Wesley is a junior in high school who is involved in multiple sports and many clubs on campus. For being such an active member in the social community, Wesley unfortunately finds himself struggling in class to get the grades he feels that he deserves. Often times he is forced to either get sleep after a long after school football practice, or stay up all night attempting to finish an essay with a book that is missing half of its pages (since Wesley's school gets more money fed into the all-state sports teams, and not the classrooms diminishing supplies). Wesley finds himself also getting disheartened by a barrage of Cs and Ds on his paperwork, making him feel that he will never be "above average".

This year Wesley's English and History teacher were sent to a conference on 3D GameLab and are implementing the quest-based learning system in their classrooms. Wesley finds out that these classes will be focusing on discussion in class, and assignments being turned in via the web. Moreover, he also hears his teachers explaining that grades will only be distributed at the end of each semester, and experience points will be awarded for completing the quests online. They also explain that even if you do something wrong with an assignment, there will be comments given to you so you may alter your response and receive full points with no fault. Moreover, most of "literature" or "text" they will be reading can be accessed online, or may even be in the forms of videos or blogs, different from the assignments Wesley was used to receiving.

Wesley discovers that he can do his assignments on the bus to away games, either using his own laptop, or borrowing a friend's tablet to access his account online. Fellow classmates who are in his class and on his sports teams, or in the clubs he participates in, help each other out with the assignments by commenting on the different quests to better prepare one another to figure out exactly what to do. Wesley creates an academic support system in addition to his social one, helping him balance school work and extra-curricular activities, getting the most out of his schooling experience. Furthermore, Wesley finds himself excited to finish activities to open up further quests. He no longer focuses on the grade, but discovers that the competition on the field can be just as exciting as getting the most experience points in class and trying to "beat" his friends to the top of English or History. By the time grades come out, Wesley finds himself with an A in history and an A+ in English, because the friendly classroom competition pushed him to receive as many experience points as possible.

What is it?

3D GameLab is an interactive web based quest system revolving around a specific subject matter selected by a teacher, and completed by students in order to finish a course. Dr. Chris Haskell, an associate professor at Boise State University, created this new learning environment out of a desire to look at grading in the classroom, and feedback (from both teacher and student) in a new light. 3D GameLab takes the motivations of achievements,

competition, and singular student recognition through digital awards (resulting in the unlocking of even more quests, more material, to study) found in video game environments, and applies it to the standard classroom setting to create a remix of education and technology.

Who is doing it?

3D Gamelab was designed by Chris Haskell, Ed.D. with Lisa Dawley, Ph.D. as part of his study on gamification for his Boise State dissertation. In addition to Boise State, Dawley's company GoGoLabs.com, NOAA, and the MacArthur Foundation are involved in the support or development of 3D Gamelab elements. Currently 3D Gamelab is in closed beta, so only a controlled group is using the system, but the participants have been reporting favorably. Teachers wishing to use the program during the beta phase are receiving training at periodic online "camps" (the next one will open this spring). During the training teachers are taken through a series of Gamelab quests designed to teach the desired content (how to use Gamelab). In the past, registration for the camps has been \$295 and has included the training, Continuing Education units and membership in site for the teacher with 60 student licenses.

How does it work?

Teachers create quests based on course content for students to complete. You can design quests yourself, or search the library of quests created by other using 3D GameLab teachers. Just like an in class assignment, you will give your quest a title, directions, and tell the students what to submit. Unlike the average piece of homework, you will also give the assignment a value of experience points (XP) that the students will be rewarded for completing the task, and, if you wish, link a standard to the assignment. You can also include video, pictures, or hyperlinks to use in your assignment. 3D GameLab takes the notion of an average assignment in class and turns up the volume by allowing you to use other tools of the web within your quest in order to enhance it beyond just written text.

Completed assignments are sent to the teacher for approval and to receive XP. The teacher view shows assignments that are completed and awaiting approval, and when the quest was turned in, so the teacher knows who has been awaiting approval the longest. The teacher can approve the quest or send it back to the student asking them to improve something. 3D GameLab encourages teachers and students to communicate on the completion of assignments, allowing students always receive full XP if they put in the effort.

Badges, achievements, and awards can be earned and are shown inside the student's "player card." Badges are awarded for completing a collection of quests and showing competence in knowledge in a specific area. Achievements are motivators you may often associate with video games and are system related (ie: motivate to make progress by completing 5 quests in 5 days). Awards, on the other hand, are special icons you choose to give to a

student for exemplary performance (the equivalent of a gold star). Students can share their player card with other students, or keep it to themselves, but teachers can always access information about each student via their username on the 3D GameLab system. Students can also see items they have not received, and see how they can earn them so they develop long-term goals.

In addition to completing quests and sharing player cards, students can see their XP in relation to other class members. The teacher decides how much XP is needed to finish the class, or “get the A” in standard schooling, but students can determine their ranking by completing more quests.. Students can comment on and rate any quest other students can use this information to decide which quest to do when and teachers can use this information to alter the quests making them more accessible to future students. Everyone is a valuable contributor in the quest to better the 3D GameLab experience.

What are the implications for teaching and learning?

One of the most important ideas behind 3D Gamelab is that of feedback. The feedback an educator would be accustomed to (giving advice to a student) is still accessible, but received in a new way. Teachers can look at an assignment that is pending approval, and send it back to a student if changes need to be made. Submitting an assignment no longer has to be the end of the process; students see a new norm, the chance to still gain full experience on an assignment. That’s important, that this is the norm. Students come to expect that a teacher will give them full experience points and it’s not a burden on the teacher’s time to re-grade an assignment. This is how 3D Gamelab works, and this is how teachers are expected to respond to student work.

Another extremely important change that 3D Gamelab brings to the learning environment is a replacement of the standard grading system. The student doesn’t see a “C” on an assignment, something that might make them nervous or parents distraught. To pass a class, students earn experience points for each assignment, and these points go toward a total needed to pass the class (The summary of what a student has accomplished toward that goal being found in their “Player Card”). At the end of a 3D Gamelab experience a student will receive a letter grade for the course, but that is the only grade they need to achieve. There is no longer the agony of papers being passed back and students comparing grades. Each student who does the assignment satisfactorily receives the same amount of experience. The focus of this tool is to change the atmosphere of grading among teachers, and to stress that as long as students are learning, that’s what is important. Each quest can be given a tag that shows which standard it is following, so 3D Gamelab does not dismiss the educational system that is in place. What it does do is ask teachers to reevaluate the motivations behind learning in their classrooms and see if there is a way to usher out an age of pure

competition, and let students decide if they would like to battle to the top of their experience bar, or if they want to focus on learning in a less aggressive manner.

Why is it significant?

Quests parallel units of study, but are more “user friendly” and familiar to students. They can be used as a supplement to classroom instruction, as a self-paced unit that either supports classroom material or enhances/replaces material that would otherwise not be covered due to time or budget restrictions. By harnessing the power of play, using trial and error, and allowing repetition to mastery and self-paced differentiation, quest based learning allow students to interact with curriculum on their terms and their turf. It takes teacher content and presents it in a game-like format. Small quests are assembled into the desired course material and by building more than the required number of points to “win” the class into the available quests, students have some autonomy in determining how and, to a certain extent, what they learn. Furthermore, data shows that students continue to quest even after they have “won” the class (complete the required points for an A); in order to earn additional incentives or stay on top of the leader board, students are voluntarily completing additional coursework.

ISTE standards?

One of the progress bars visible in the teacher mode track the ISTE standards, so to a certain extent this is built into the system for you (it will at least remind you to think about it as you plan quests). but some specifics are shown below:

Factors that Support ISTE Standards

- Student directed
- Variety of digital products possible
- Student communicate via f2f and digital means
- Group quests and class wide goals can be built into quests
- Students use print and digital media to complete quests
- Students learn to operate in a digital environment and access global resources best suited to desired learning objectives
- Teachers (even/especially if unfamiliar with virtual worlds) can model learning to navigate a new learning environment or discuss attending online training for program
- Students and teachers work collaboratively to improve quests

References

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