

OUR DISTRICT'S QUEST: MIX GAMES AND LEARNING

“Your Mission, should you choose to accept it, is to activate student agency and defeat the forces of Ignorance and Indifference...”

This was the charge given by Dr. Robert Pletka, Superintendent of the Fullerton School District (FSD), last summer to 14 volunteer teachers and a team of support personnel, and as a result, *iPersonalize* was born.

Education is experiencing an engagement crisis where students are increasingly tuning out in traditional educational systems. Statistics show that 50 percent of junior high school students are disengaged, and dropout rates continue to climb. The focus on proficiency rather than mastery has also taken a toll on passion and desire for learning. One might argue that it's just this generation, but when we look at statistics in other areas, we see that these same students are spending on average 14 hours a week in gaming environments, sacrificing time and energy on systems that seemingly have no real value—and yet they are engaged and passionate about learning in these environments.

Our challenge, therefore, and the one handed down from Dr. Pletka, was to build a bridge between the educational and the gaming world using key elements from both, and relying heavily on many of the concepts that Jane McGonigal lays out in her book, “Reality is Broken.” We decided to use digital storytelling to create an epic environment that is bigger than the student, class, or school, and one which focused on mastery and real world applications of the California State Standards, while also

building in key Marzano Scales and strategies. Our end goal was to provide personalized learning environments where students have direct choice and voice over the trajectory of learning key standards needed to be successful in today's society.

Meet *iPersonalize*

So what exactly is *iPersonalize*? Essentially it is a type of **Alternate** Reality Game (ARG)—or “an interactive networked narrative that uses the real world as a platform and uses transmedia storytelling to deliver a story that may be altered by players' ideas,” according to the ARG Wikipedia page.

“Subsequently, it is shaped by characters who are actively controlled by the game's designers, rather than artificial intelligence as in a computer or console video game.”

The journey from concept to implementation in educational reforms often lasts years, or is never realized, but the FSD team was committed to making this shift a reality starting this school year. Staff attended conferences, researched gamification and personalized learning, and helped create a game concept that would be constantly refined with direct feedback from players—both teachers and students. This philosophy required the FSD team to quickly identify a partner who could provide an online, instant “game board” that would enable the scoring and tracking of progress. For that, we turned to 3D GameLab, a customizable, game-based learning platform that works with schools around the world.

In *iPersonalize*, considered a next-generation ARG, students are guided by a narrative storyline in a blended—that is to say, computer-driven and real-world—learning environment. Students access content, via iPad or other iOS device, from a learning management system, which houses the artifacts, story, artwork, assessments, and missions they are being asked to undertake. So when a student logs on to the LMS, they are informed of their quest or mission through interaction with prerecorded videos or animation sequences from a character in the *iPersonalize* story.

Mission Possible

The missions that students take on are meant to engage them in the purpose of what they are about to learn. The mission or quest that the student undertakes will ultimately help her or him learn state standards in a direct instruction and/or an applied context. While teachers might do direct instruction with students sometimes, the role of the teacher in the *iPersonalize* model is largely one of a facilitator.

Students participate in a learning sequence connected to Marzano’s research-based instructional design. As part of this design, students have an opportunity to create and develop learning artifacts by which they will be able to contribute to the body of knowledge in the community. As students acquire skills, they have opportunities to apply their learning in project-based learning quests by which students develop products for authentic audiences in their broader community. For example, students might write an essay for their local newspaper or develop a PSA persuading people to vote. These project-based learning opportunities are laden with “choice and voice” for students so that students experience a sense of agency.

A key principle in quest-based learning is offering students non-linear learning pathways. Thus, students choose from a pool of quests in order to personalize their education. When offered choice, typically students will start by choosing quests that are short and easy to complete. Quick completion can reinforce initial feelings of success, encouraging ongoing engagement with the curriculum. A quest can be as short as one minute (“watch this video and click done when you’re finished”), or take up to 90 minutes to complete. So “quest attractiveness” becomes important at this point in the learning cycle. Students are offered a variety of quests, not only in the types of activities they can complete to get credit, but also in the time requirement. Students might also choose a quest based on an intriguing title, a short description, or its star rating (that is, how other students have rated the quest).

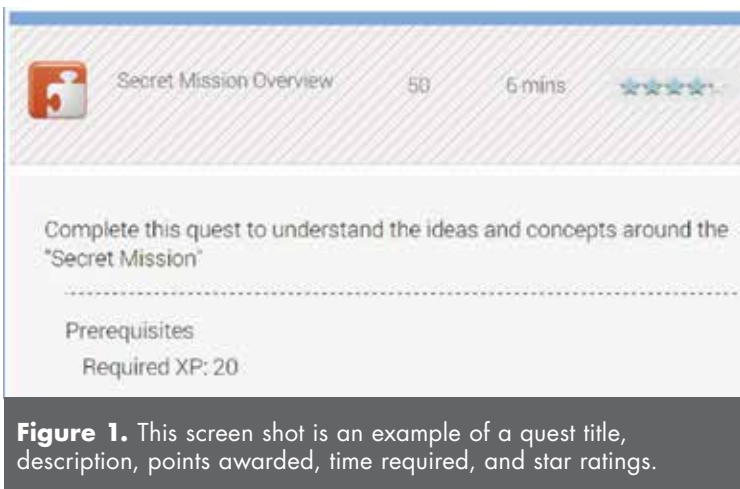


Figure 1. This screen shot is an example of a quest title, description, points awarded, time required, and star ratings.

As a student gets deeper into a quest-based learning course, and closer to the course or unit deadline, she will often take on more complex quests as a means to achieve greater experience points toward her overall grade. Since she’s been completing smaller tasks all along, she’s also built the prerequisite knowledge necessary to complete the more complex ones.



Tools for Teachers

A very unique feature of the 3D GameLab platform is aggregated teacher reports that not only provide data on student progress, but also how the students are responding to and engaging with the quest curriculum. Teachers or instructional designers can get feedback in real-time from their students as they play the quests, both in the form of star ratings, as well as comments that students can leave on the quests themselves. They can also identify how many students are working on a particular quest.

| Quest Name | XP | Avg. Time | Rating | Category | Active | Completed |
|-------------------------------|----|-----------|--------|----------|--------|-----------|
| Recensione Video 2 Ingus | 25 | 9 | 3.19 | EQZ2 | 3 | 41 |
| Recensione Esame 2 Ingus | 25 | 3 | 3.2 | EQZ2+ | 2 | 15 |
| Recensione Screencast 2 Ingus | 10 | 45 | 3.5 | EQZ2+ | 19 | 22 |
| Scopo 1 Ingus | 25 | 3 | 4.05 | EQZ1 | 0 | 49 |
| Approfondire Khan 1 Ingus | 25 | 4 | 4.11 | EQZ1 | 15 | 22 |
| Panimula 1 Ingus | 25 | 2 | 4.32 | EQZ1 | 0 | 65 |

Figure 2. Example of a report showing data on quest activity.


Figure 2 on this page, for example, shows a report of quest activity. The columns can be sorted to find the highest and lowest rated quests. The teacher, if a quest is scoring below 4.0, can make modifications to the task based on student input.

Teachers are also able to sort students to monitor who is “active” on any one quest at a time. From a pedagogical perspective, this lets students influence teaching plans for the day. In the above example, 19 students are currently in-progress on quest “Recensione Screencast 2 Ingus” (part of a Latin language class, perhaps). The teacher may intervene to host a *class raid* for the day to *power-level* through this quest. In this way, the teacher can decide when to facilitate a collaborative learning experience through what might otherwise be an individual learning activity.

FSD currently has over a thousand students who are learning within *iPersonalize* or have completed Agents of Change (for ELA) and or Mercenaries of Change (for Math). Our success stems from three main achievements: a 1:1 initiative in place at Grades 5-8 using iPads and/or laptops, the infrastructure required for Internet

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access that laid the foundation for students to access iPersonalize, a strong emphasis on students as creators of content rather than just consumers, and a long-term strategic plan to provide authentic 21st century learning experiences for our students. Above all, FSD deeply understands that this is an iterative process that will continue to improve and grow in years to come.

Your Mission, should you choose to accept it, is to join us in activating agency and defeating the forces of Ignorance and Indifference! This message will self-destruct in 5 seconds. 



Jay McPhail is Chief Technology Officer at Fullerton School District. He previously served as Director of Innovation and Learner Engagement for Riverside Unified School District.

