

# New Game Design Curricula for Underserved Youth in Multiple Settings

Mark Chen, Pepperdine University  
Victoria Stay, Pepperdine University

**Abstract:** This Working Example documents the ongoing effort to introduce narrative-focused game creation to underserved youth across multiple settings in South and Downtown L.A. Becoming expert in playing and making games requires learning processes for recognizing patterns in initially noisy systems, leading to agency within the designed systems and hopefully life in general with the proper scaffolding. Creating games serve as creative outlets for storytelling and sharing voices, leading to empathy. Increasing these two things—agency and empathy—are at the heart of our efforts in collaboration with our partners to reach diverse learners. We introduced learners to a number of game engines, often starting with Twine, a text-based Choose-Your-Own-Adventure style game creator but also including the more advanced 3D game creation engine, Unity 5, and others. Each setting had specific goals and served a particular audience.

**Keywords:** game design, classroom implementation, game narrative, curriculum & instruction, informal learning

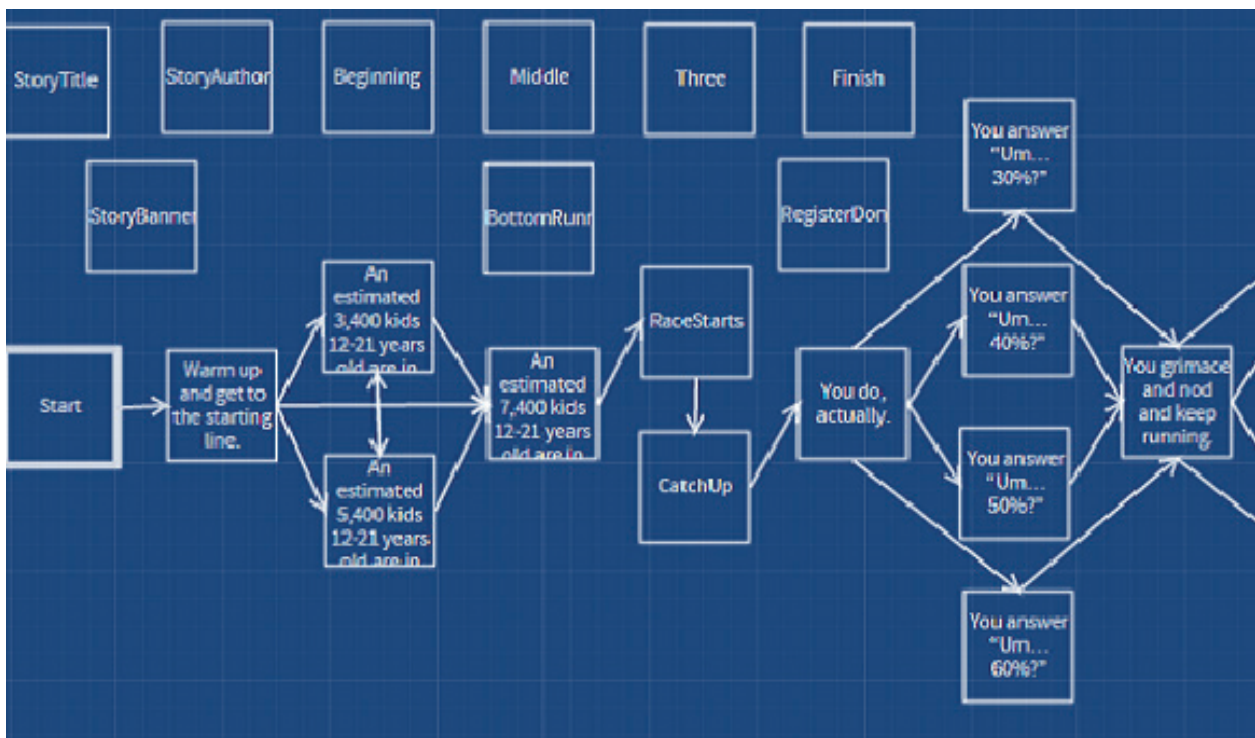


Figure 1: <http://www.workingexamples.org/example/show/703>.

This Working Example documents the processes of finding and recruiting partner schools and organizations, identifying setting-specific needs, developing new game design curricula for each setting, recruiting local game developers to help out, planning event dates, adapting to shifting schedules, reporting to higher-ups in a home institution on activities that are invisible until an event occurs, and managing all of these moving, overlapping pieces... all while relocating to and then making a conscious decision to get around by bus in L.A.

## Seed

### Tell us about your idea or project. What's your vision?

The Pepperdine Gameful Design Lab's (<http://gamefuldesignlab.com/>) mission is to increase learning and engagement by raising gaming literacy among the general populace with particular emphasis on serving those who are historically marginalized by our societal structures.

When we decided on this, our initial idea was to host a game jam weekend for underserved youth in L.A. Our task then was to determine who in L.A. to work with. After several meetings with leaders from a variety of local organizations, we decided to target homeless youth by working with a local non-profit that provides services to youth in homeless shelters. To ensure a successful event, however, we also decided to recruit local game developers to provide feedback and mentoring opportunities for participants. We also decided to work with a local charter school in designing and testing out a mini-unit on game design that we could rework as a one-day workshop for the homeless youth. One connection led to another, and we eventually snowballed into offering multiple game design curriculum support for a variety of formal and informal settings.

### **What problem are you trying to solve and why does it matter?**

The Gameful Design Lab focuses on helping players develop a playful attitude towards lifelong learning. This includes instilling an attitude of bravery, a willingness to try and try again, and the wherewithal to be reflective and critical about their own and others' actions and situations. When we play, we are constantly thinking of how things *should* be and trying things out over and over again for continual improvement. When we play, we aren't afraid to fail because we know it's the fastest way to learn. When we play, we are always pushing ourselves to try on new roles and see the world from a different perspective. When we play, we understand. I.e., we see games as leading to agency in life's systems and as good vehicles for sharing one's voice. Thus we want to help those most in need to gain gaming literacy.

### **Who will your work impact? What do you know about them?**

We are currently working with four different organizations:

- a local nonprofit that provides school services to youth at homeless shelters;
- a local charter school with an emphasis on communications and serving part-time home-schooled youth;
- a local nonprofit that hosts an after-school hackerspace for South L.A. high school students;
- a relatively big charter school network in Southern California.

Each of these settings poses different challenges for introducing game design to the students they serve.

### **What challenges might pop up?**

Due to our initial plan on working with homeless, we opted for an easy-to-use text-based game creation tool called Twine. This allows us to concentrate on getting youth stories and voices heard and allow them early successes by minimizing the chances of getting bogged down with coding. The students could concentrate on the structure of their stories and implement ideas rapidly without worrying too much about programming syntax, etc.

Twine, of course, introduces other requirements of its designers. It can be just as intimidating to write prose as it is to program a game object. Thus we decided to work closely with teachers and other educators in each of these settings to provide custom curricula to meet the needs of their particular students.

### **Addendum**

The above submission was written in the beginning of 2015. This addendum is a status report and summary of events as of late June 2015, half a year later.

This is the new list of collaborators:

- a local charter school with an emphasis on communications and serving part-time home-schooled youth;
- a local nonprofit that hosts an after-school hackerspace for South L.A. high school students;
- a new group that plans on hosting tabletop game jams in L.A.;
- a relatively big charter school network in Southern California (to follow up on);
- a nonprofit that serves homeless shelters in Santa Monica.

We were all set to work with a local L.A. nonprofit that serves homeless shelters in providing schooling to homeless youth. They were to be our coordinator and conduit for scheduling game jams at South and Downtown L.A. shelters. Unfortunately, the realities of nonprofits often being over capacity and understaffed hit us hard, and we could not schedule any game jams before the school year ended. We did, however, sort of serendipitously manage to connect and collaborate with multiple other institutions and settings during the spring.

In preparation for the game jams for homeless students, we decided that we wanted mentors for the youth and thus reached out to a local indie game collective and several game companies in the area to volunteer. This was relatively successful, and those connections should be stable enough should we eventually hold events that need mentors from industry.

We also partnered up with a local charter school, working with 9th and 10th grade teachers on new game design curricula. The intent was to also recruit from their students peer mentors for the homeless students, who we thought would be middle schoolers. As it happens, the high school had some curricular needs that the teachers were actively seeking to satisfy when we met, and it became clear that new game design units across all of the concurrent 10th grade courses could help address many of their issues.

The English teacher was able to extend a previous short story writing unit with one that had her students create optional scenes and alternate endings for their stories. These were then put together during their CS course using Twine, a text-based game medium. Even the students' chemistry course overlapped, as the teacher introduced students to flowcharts and procedures for conducting experiments, and Twine's main interface is akin to a flowchart or map of game states. All of this helped reinforce and complement planned curricula. For English and chemistry, the game design built upon concepts covered in the previous units, and, in CS, Twine served as a good introduction to logic, HTML, stylesheets, variable manipulation, etc.

It was obvious that this was something larger than initially planned, that introducing game design to this high school was not just a way to cultivate mentors for the future game jams. We now plan a multi-year study, refining and evaluating game design as integral parts of their existing curricula.

In addition to working with this local high school, the Gameful Design Lab also collaborated with another local nonprofit to bring Unity 5 into its afterschool hacker space. A 12-week summer studio is under way where urban high school boys are engaged in app creation and game creation using Unity with intent to publish online and submit games to official distribution platforms.

Right as things were falling apart with the homeless shelters, a new opportunity came up with a new group to hold the L.A. Board Game Jam during a game convention near LAX for convention goers. While not specifically targeted towards the same intended audience, we were able to help sponsor the jam and make connections for future collaborations and mentorships.

Furthermore, during the L.A. Board Game Jam, we met up with someone who works at another nonprofit that happens to serve homeless shelters in Santa Monica! This person has a shared affinity for games, so hopefully this relationship will be a little more stable. We are now planning game jams and game design projects to increase awareness and empathy.

Throughout the spring, probably the most notable lesson we learned is how much time it takes to cultivate relationships and form connections with other groups, Coordinating between groups and trying to serve as the bridge between them is time consuming! (This is magnified by L.A.'s infrastructure as a very unfriendly city for someone who doesn't own a car.) Also, it pays to cast a wide net and then follow up with anyone that indicates even a modicum of interest, though maybe we felt the power of this more acutely because the Gameful Design Lab was in its inaugural year.

The time it takes to build a network was unfortunately invisible to the Gameful Design Lab's home institution, and as a consequence we felt a lot of pressure to have something tangible during the year to showcase our efforts. Whether we accomplished this (we participated in a multiple other projects besides the game design for underserved youth one) to the satisfaction of higher ups is yet to be seen, but it'd be a shame to be unsupported in continuing our current projects and capitalizing on all the work that's gone into making broad network connections.

A copy of the presentation slides is archived at <https://goo.gl/u5v2G8>.