A **DESIGN PROCESS PROJECT** in Bogota, Colombia

Last month, **9th graders at Colegio Nueva Granada** created cardboard arcade games for other classes in the school, as part of a 5-day design process project. Their teacher **Shawntel Eggers Allen** shares some notes and curriculum below.

Satisfied 'customers' at Colegio Nueva Granada in Bogota, Colombia. Photo by Shawntel Eggers Allen

The Basics:

"HI! This was a **design process project**. Students brainstormed and researched 1 day (=80 minutes), sketched and prototyped 1 day, tested and got feedback on prototypes 1 day, built final products and delivered 1 day, returned for feedback and then evaluated their process 1 day. Each group chose a **"target group"...**any grade from K-12 and made their game for that classroom (teachers offered to "host" the games in their rooms). In all, **57 games were made and delivered. All were played for at least 2 weeks in the classroom**...some are still there because kids enjoyed them so much.

Hope this helps! The students had a blast...but also realized that it's harder than it looks!!"

Notes:

"I think that this would be **adaptable and do-able with grades 4-HS**. I've taught all those grades and I would totally do it with any of them.

My students finished and then wanted to start the process again because they had ideas on how to improve their games or make new ones. The light really "clicked" on because of following all the steps in the **design process**. Plus they became really invested in people "liking" their game. They would even go hang out in the classroom that housed their game during breaks and lunches and play with the other kids and the game (mostly younger). It was a **community building** activity...and that was not an intended consequences. =)"

Lesson Plans:

TO DO - DAY 1

Open a new blog post. Title it "Design Project - Day 1". Label it "_____" AND "_____" [Choose your own title/labels]
1. Find 2 partners and put the names of everyone in the group on your blog post
2. As a class watch the video **"Caine's Arcade"** and discuss the overview of the project, listen to questions/answers of your peers
3. With your group, do the following...read carefully and follow closely. Write your group's answers for the following on your blog.

DEFINE PHASE (about 15 minutes)
1. Decide who you will make the game for (primary, elementary, middle school or high school), boys/girls/both
2. Decide on what difficulty level the game will be
3. Brainstorm ideas about what makes a game fun or successful for the target group you chose (at least 5...should be more)

RESEARCH PHASE (about 15 minutes)
1. EACH member of the group will now go to their own computer and watch 3 videos of other games that have been made at home by people.
   a. Put the LINK to each on your blog
   b. and for EACH tell what you thought was good/fun about the game
   c. and what you think can be improved.

IDEATION PHASE (about 30 minutes)
1. Get back together with your group and tell them about the games you saw, what was good/fun and what could be improved
2. Brainstorm ideas for your game-write these on your blog (make sure to keep in mind your target group and what you think makes a game fun)

3. Choose an idea you like best and lists all the things about this idea that makes it fun/good for the group who will play it.
4. Make a list of things that you think could go wrong with your idea and how you can avoid those

HOMEWORK (start this in class): Have EACH PERSON draw their model/idea of what they think the game should look like, without looking at each other's drawings. (take a picture and put it on your blog...also DO NOT LOSE that paper, bring it to class next time)

TO DO - DAY 2

Open a new blog post. Title it "Design Project - Day 2". Label it "_____" AND "_____"

PROTOTYPE phase (about 60 minutes – Steps 1 & 2, 15 minutes – Steps 3 & 4)
1. Look at the drawings from each person in your group and discuss strengths and weaknesses of each (on blog)
   -Decide which model has the most strengths (on blog)
   -Decide on the details from the other models that you will include (on blog)
   -Decide what might need to be added or taken away from the model in #1 (on blog)
2. Make a mini model of your idea that works (photo on blog)
3. Share it with the class (along with who your "users" are and why this would be fun for that group.
4. Write down feedback (on blog) that you get from classmates (if you have time, take it to target users and get their feedback as well)
   -What was good
   -What should you consider changing?

TO DO - DAY 3

Open a new blog post. Title it "Design Project - Day 3". Label it "_____" AND "_____"

CHOOSE phase (15 minutes)
1. Review your description of your user from DEFINE phase (day 1) and what makes a game fun for that group.
    -Do these descriptions match your prototype...why or why not? (on blog)
2. What are the most powerful ideas in your model that you want to keep? (on blog)
3. What are the things you can leave off to simplify the game? (on blog)

IMPLEMENT phase (10 minutes)
Make a build plan
1. What needs to be done to make the model, step by step, who will do each? (on blog)
2. What supplies do you need besides cardboard, tape, scissors? Who will bring those? (on blog)

TO DO - DAY 4

BUILD phase
Build and deliver to the classroom you chose

TO DO - DAY 5

LEARN phase
1. Go to the classroom that has your game. Take a photo of it. Then ask the students what they liked and didn't like about the game. (10 minutes)
2. Back in F19, discuss with your group what your goals were for making it fun...and did you meet those goals. Why or why not? (ON BLOG- Title it "Design Project - Day 5". Label it "_____" AND "_____"
3. On your blog, reflect on the following questions
    -What was the biggest problem you encountered? How did you solve it?
    -When did you get your biggest "AH HA" idea? What was it?
    -Who in your group resisted new ideas the most and why?
    -What doubts did YOU have about the project and how did you overcome those doubts?

-Who in your group played "devil's advocate" (a person who questions everything, even good ideas) and how did that help the process?
-What did you learn about yourself, teamwork, and the design process?