Give us feedback in this short survey

Table of Contents

LIVE DOCUMENT

Moveable Game Jam on Oct. 2 (climate-themed)

Remix Smogville

Description of Station
Enough detail so that someone could replicate the station if they'd like.
"Save Smogville" - a scratch game where you take an environmentally doomed town and create a game where the player can save the future of smogville. Youth (after a briefing on climate science) will find the town of smogville and a button that says "fast forward" when youth press the fast forward button it shows the terrible ecological disaster that will befall the town of smogville.

After looking at the template youth are challenged to use sprites hidden in the template to create a game where the user "saves Smogville." There are two different unfinished games in smogville that youth can use as a template to create their own game.

- One is an avoidance game where smoke clouds float up the screen from a power plant and the player must avoid them with the use of the mouse.
- One is a game where rays leave the sun and bounce towards the bottom of the screen and must be collected in a solar panel the user moves left and right across the screen.
- Smogville also contained many green energy sprites that were not used by any game in case youth wanted to add them in for their game (for example: wind turbines)

The game template provides many information screens that can be remixed to include information about climate/green science.

Youth who wanted to make their own game from scratch were free to ignore Smogville, though they were encouraged to use the template

Smogville can be found here: https://scratch.mit.edu/projects/78513832/

Needs: Scratch starting place, "Save Smogville" template, computers

Reflection of station
What worked well? What didn't? What would you change if you did it again?

BrainPOP station name here

Description of Station
Enough detail so that someone could replicate the station if they'd like.

Things needed: print out this PDF. For each group, have precut and taped buckets, and have scrap paper cut out to the correct size. Also, have a copy of page one printed for each group. Also, bring pencils and markers for kids to fill out buckets, labels and worksheets.

Step 1 (15 minutes) :
Play a sortify game on BrainPOP. Like Sortify:x .

Recap their gameplays. Ask questions like:

- Why are different buckets worth different point?
- What is the best way to play? (point out labels go into multiple buckets)
- What made that strategy hard to achieve? What obstacles did the game designers make?
- How do you learn by playing this game?

Step 2 (30 minutes):
Introduce worksheet and resources. Have students form groups of 2-4. Work on games.

Step 3 (15 min):
Student labels pieces for the game. Playtest their own game.

Step 4 (25 min):
As a whole group. Introduce the idea of playtesting, good practices and how to deal with with criticism. (5 min)
Playtest with others and incorporate feedback from others.

Step 5 (10 min):
Incorporate playtesting feedback into their game design

Step 6 (30 min):
Prep 2 minute presentation and give it.

Possible dimensions to expect:
Increase vs. decrease temp
Human caused vs. natural
beneficial vs. detrimental
current vs. historical
Increase CO_2 vs. decrease CO_2
Produces CO_2 vs. methane vs. other greenhouse gases
Things that effect short term vs. long term
Part of world effected
low risk vs. high risk regions
weather vs. climate
What solutions do, reversing vs. mitigating vs. prevention

Reflection of station

What worked well? What didn't? What would you change if you did it again?

Game Jam at A. Harry Moore in July

A. Harry Moore School at New Jersey City University serves students from ages 3- 21 who have low-incidence disabilities in Hudson County, NJ. Many of the students are in wheelchairs. Abilities of students vary; some can communicate via eye gaze only. A few students could not communicate.

Given the student population, it is important to reflect on the opening activity, as well as the breakout sessions. For the opening whole group session the BrainPOP video about video games was shown. Next, parts of games were discussed. Many of the students did not follow, although some participated in the discussions. The opening was effective for aids and teachers, as well as the administration. Next, everyone was given a hands-on task: to explore the "playability" of objects (the Tic-Tac-Toe activity was too complicated). Each table already had an assortment of plastic cups, ping-pong balls, string, tape, and other small items. The goal was to make a simple game from out of everyday objects. Cups would no longer serve its intended purpose: for drinking water. Instead, it became a basketball hoop, a phone (attached to the provided strings), and hats. The quiet room came alive; the playability of objects was highly engaging for all. This theme reoccurred through the day (playability, rather than parts of games). Tactile and kinesthetic learning would be paired with game-like activities.

There was a share-out time about favorite stations. Due to disabilities, students attended three of the five stations. An iMovie of all stations was shown. The director of curriculum and the principal stated that the day served as an effective training for teachers, aids, and other staff members about game-based learning and engaging students in playful thinking. Staff were shown resources: on AbleGamers and Includification.

Compose Yourself

Description of Station

Enough detail so that someone could replicate the station if they'd like.

One room featured Compose Yourself, a new analog and digital game from ThinkFun. Compose Yourself was designed by music composer Philip Strauss. To play, choose cards from the deck. Each is transparent and is adorned with a measure of music notes. Cards can be flipped around or turned over. Using a computer's browser, students can enter one of the four accompanying codes on each card into a computer and listen to a world-class orchestra play the melody back. No matter which direction, the melody works. Students can download an mp3 and share their compositions. They can also print out their songs, too, and play on an instrument. Compose Yourself takes makes music "approachable," similar to what Scratch does for coding, by using interlocking blocks. This enables children to *play* with musical compositions. How to play: https://youtu.be/FstDf7YdMhQ. There were four sets of the game at the station.

Reflection of station

What worked well? What didn't? What would you change if you did it again?

Compose Yourself emphasizes play first, which fit the day's theme. Teacher facilitation was necessary. This game activity worked well on an interactive whiteboard. It was powerful to hear an orchestra bring a deck of cards to life.

Constructasaurus

Description of Station

Enough detail so that someone could replicate the station if they'd like.

The intent of this station was playing with dinosaurs. The warm-up was Constructasaurus, followed by coding with Daisy the Dinosaur, on iPad.

Constructasaurus, playable for free on BrainPOP Jr.'s GameUp page. Developed by the Children's Museum of Indianapolis, students had the opportunity to build a dinosaur. Once built, the dinosaur is "tested": too top heavy and it might tip over.

Reflection of station

What worked well? What didn't? What would you change if you did it again?

This game activity worked well on an interactive whiteboard, which was a nice tactile experience. Students were very engaged and took turns. They never made it to the Daisy the Dinosaur app.

Hedbanz

Description of Station
Enough detail so that someone could replicate the station if they'd like.

Remixed the party game HedBanz. The facilitating teacher adapted the reverse-charades guessing game to also include objects. The teacher also included laminated papers with images that nonverbal students could gaze at or point to. She reviewed the cards and slimmed down the deck. Students were also given blank index cards to make their own variations.

Reflection of station
What worked well? What didn't? What would you change if you did it again?

Teacher-facilitated modifications helped achieve the goal to keep everyone engaged in a playful experience. Many of the students recalled the cards they got at the end of the day ("I was a frog!"). The game is nondigital and uses the mechanic of guessing, which was fun and challenging for participants. It is easy to modify.

The Robot Games

Description of Station

Enough detail so that someone could replicate the station if they'd like.

Give students a quick demo of Sphero. Students navigated the robotic ball around a teacher created obstacle course.

Reflection of station

What worked well? What didn't? What would you change if you did it again?

Most of the time was spent playing with Sphero in the gym. The school has many Spheros, which can lead to problems pairing with iPads using Bluetooth. Given the physical disabilities of many students, playing through a teacher-created obstacle course worked best. The following is an article from Courtney Pepe, the school's director of curriculum, who used Spero to create art projects: http://dailygenius.com/teaching-with-sphero-the-robot-in-math-science-and-beyond/

Makey Makey

Description of Station

Enough detail so that someone could replicate the station if they'd like.

MaKey MaKey kit essentially hacks a computer's keyboard to a tiny, external device. Next, clip one end of the color-coded alligator clips to the MaKey MaKey device and the other end to a low conductive object, like fruit, Play D'oh, or aluminum foil. Doing so turns everyday objects into computer keys, such as the space bar or the arrow keys.

Reflection of station

What worked well? What didn't? What would you change if you did it again?

Everyone, no matter the disability, participated. Bananas as pianos and drums, using Scratch, was engaging. The one-button game, http://flabbyphysics.com, is recommended. The teaching staff was highly engaged, too. Many of the students remarked that they never thought about how computers worked. MaKey MaKey was inspiring to the students. Using one of the many MaKey MaKey-themed Scratch projects, I turned bananas into a drum kit. When students walked into the room, they were greeted with the facilitator playing the cowbell with a banana. At first, one of the children remarked that it was "all weird and awkward" to use anything but the keyboard attached to the laptop. After I explained basic circuitry, I handed her some Play D'oh. I then challenged her to make a customized video game controller. By the end of the session, she remarked, "This was fun!" As it turned out, the girl who began as a skeptic played a round of Pac-Man using her hacked game controller. Of note, the tactile feel of Play D'oh worked well for low incidence disables students.

STATIC DOCUMENT- READ HERE

What is a Movable Game Jam?

Put simply, it's a one-day event where kids come to play, hack and make games. The event has three components. First, all students engage in guided activities that introduce them to some basic game design principles. Second, students choose to engage in 1 or 2 of four available stations, each of which contains a different game design activity and is run by a different Hive organization. This component comprises the bulk of the time in the game jam. This component will also be made up of a different set of stations and hosted by a different organization in each game jam, thus making both the content and location "movable." Third, there is a final showcase event in which students show the games that they have made to parents and other students in a science fair type of format.

Why run a Movable Game Jam?

Simply put, it's good for youth and for organizations. Youth get to pursue interests in gaming in a constructive context that builds valuable 21st century skills. Organizations get to share ideas and workload, connecting and supporting each other's youth as well as learning best practices from each other. Additionally, organizations also get to try out new activities with interested youth.

What is in this Movable Game Jam Guide?

Mostly tips and tricks from NY Hive organizations that have been running this event so far. We'll share our format as well as sample activities and resources we've used- basically things you'd need to get started running your own movable game jam. This is a living document- we'll continually be adding to it as we (and other groups!) run more events.

How can you join the Movable Game Jam initiative?

To join the initiative, all you need is a desire to teach kids about game design using movable game jams! This document contains all you need to know about what a movable game jam is.

We have only one requirement for membership: you have to actually run game jams. This initiative is comprised entirely of educational practitioners that have used or want to use game design in their teaching. This document is written by those practitioners, and only contains tested and refined ideas and activities. This is a "best practices" document, and we believe you've only understood something about best practices if you've practiced the idea. There's no credentials or experience we require to join-- if you helped run a Movable Game Jam, you are a game jam educational practitioner, and you're already a part of the movement!

As a member of the Movable Game Jam Initiative, **you'll have two responsibilities**: 1) run game jams with kids, and 2) document what you learned from those game jams in this guide.

As a member of the Movable Game Jam Initiative, **you'll also have two benefits**: 1) that warm fuzzy feeling that comes with inspiring and engaging kids in deep learning, and 2) recognition on the prestigious Game Jam Guide author list.

So how do you get started in the movement? We have an easy 5 step process:

1. **Assemble your crew!** Find some other people to run a game jam with you. We strongly recommend running the game jam with other organizations, so you can learn from each other as well as teach kids. You'll want to find 6-8 people, and a site to host 30-40 kids that has at least 10 internet-connected devices (15-20 is ideal).
2. **Let us know you're game.** Tell us that you've got a game jam scheduled. Send an email to kevin@iridescentlearning.org. Kevin will add your crew as co-editors to this googledoc, create a section for your event in the Live section of this guide, and help you fill in the needed initial documentation (which is quick and easy).
3. **Prepare your gameplan.** We have checklists of what everyone needs to get done both to run their station, and to act as the host. You'll select and finalize activities for each station, either choosing from our existing list or creating new ones from scratch. Figure out who will run each station. Advertise, using our template if you'd like.
4. **It's go time!** Run the event! Have fun! Make games!
5. **Document and share.** Document how the event went and share your learning with other practitioners. Finish filling in your section of the live document, and let us know when you're done. Kevin will take your documentation and add it to the static portion of the document, where our activity list and best practices knowledge lives.

Organization Author List

Listed in the order that organizations joined the initiative

Iridescent
Institute of Play
MOUSE
Global Kids
Museum of the Moving Image
Eyebeam
Exposure Camp
Brooklyn Community College Partnership
Brantford Games Network, a game lab at Wilfrid Laurier University in Brantford, Ontario
CoderDojoNYC
Albany Public Library
SpazeCraft
Black Girls Code
Groundswell

Blue1647
Important Little Games
Hyde Park Art Center, Plug In Studio
CodeCreate
Game Changer Chicago

General Format

1. **Introduction** (5 min)
2. **Introductory activity to the Principles of Game Design** (40 min)
3. **Open design time**
    a. **Session 1** (50 min. at a station of the student's choice)
    b. **break** (10 min)
    c. **Session 2** (50 min. at a second station of the student's choice)
4. **Feedback survey for students, Shareout prep time for staff** (15 min)
5. **Shareout event** (30 min)

Description of General Format

Based on the above agenda, a Game Jam event should go for 3.5 hours. Staff are typically present for 4.5 hours (includes a 30 min. prep period, and 30 min. cleanup and group recap). The event has three essential components- an introductory section, an open design time, and a parent shareout.

Introductory Section: This component starts with a welcome and introduction of staff, but the majority of the time is spent in a game design activity. That activity serves two purposes, first to act as an ice-breaker, and second to introduce students to principles and terminology in game design. Staff and students should be able to refer back to concepts and terms introduced in this activity throughout the event.

Open Design Time: The meat of the event. Students choose stations to attend to build designs of their choice. Student agency is important here, which means both allowing kids choice of where to go, and what to do at each station. No two student creations should look alike- this is a chance to a student to create something new and original with staff guidance and support.

Shareout event: Staff, volunteer, and (if available) parents will spend the final 30 minutes checking out the youth's game designs in a science fair type of format (make sure to communicate with parents that they should arrive 30 min before the end of the event). This allows everyone a chance to both share their design with others, and to get personalized feedback from other peers, staff, and parents. This shareout technique is also scalable with any number of students.

Issues noted and adjusted

The final agenda shown here is slightly adjusted from the agenda used at our first two pilot events. Here's a description of those changes and the reasoning behind them.

First, we cut out lunch and really want to keep the open design time to a full 2 hours. Most kids and staff said they felt like the open design time was too short at the first event. The kids either wanted more time to dive deeper in their project, or more time to explore other stations. We originally planned for 2 hours of design time in the first event, but due to activities running a little long and fitting in time for food, the actual design time was only a little over an hour. It was much more satisfying to students in the second event to have a full 2 hours of building time.

Second, the staff noted that having a totally open design time felt a little too unstructured. Many of the stations needed a short orientation session by the staff to familiarize kids to the tool before the kids could start hacking. Having kids filter in and out of stations at will during the open design time made it hard for staff to support students already hacking, as well as engage and orient newly arriving students. Thus, in the second event we broke the open design time into two sessions, and urged kids to stick with one station for an hour, and then either continue in the same station or switch to a new station for the second hour. This made it easier for staff to run an orientation with a group of students once, and then have the time to focus and dive deeper with those students in the activity. This wasn't strictly enforced and kids can still switch if they really want to move to a new station, but we'd suggest running the Game Jam with the expectation of 2 one hour sessions.

Third, we originally had a fifth "playtesting" station, which we cut out. A lot of informal playtesting happened among kids at a single station, and a separate station devoted to playtesting didn't seem necessary. We discuss this more in our reflection about incorporating playtesting.

Alternate format: A more structured and cohesive event

Junkyard Track Meet - an analog Game Jam
Originally authored by Scott Nicholson, professor of Game Design and director of the Brantford Games Network, Wilfrid Laurier University in Brantford, Ontario

Background

The Junkyard Track Meet was inspired by *Junkyard Sports Tabletop Olympics* by the master of Play, Bernie DeKoven. This is a game design activity where participants work in teams to create olympic events out of junk that is lying around in the office. I started with this idea and adjusted it to create a game design program for libraries, museums, and school. This is a purely analog game design activity, and works great as an intergenerational activity where families come and design games together.

Description

The Junkyard Track Meet runs best as a 3-hour program, although elements could be removed to make it a shorter event. The overview is that players use the inspiration of a track meet to create a single event using several pieces of junk. After the creation time, everyone moves

around and competes in the event. The top placers in each event receive awards created by each group.

The schedule is as follows:

1. **Overview of Game Design and Instructions** (45 min)
2. **Create and Playtest Games** (45 min)
3. **Pitching Games** (15 min)
4. **Half of the participants play while the others facilitate** (20 min)
5. **Half of the participants play while the others facilitate** (20 min)
6. **Reflection and Awards Ceremony** (30 min)

Overview of Game Design and Instructions

During the first 30 minutes, the facilitator talks about what makes up a game by dissecting an event at a track meet, such as the long jump. Using the 5 components of game design, the facilitator helps the participants identify the key components of a game in the long jump - the goal, the rules, the components, the mechanisms, and the space.

The facilitator then explores other track meet events using this same structure. For each event, the participants should discuss out how a winner is determined using the components of a game.

The facilitator explains that the participants will be creating a tabletop track meet event out of junk that they will provide. These events should be designed for a single player to learn how to do in 30 seconds, and to play in one minute, so they need to be simple. If the players have seen *Minute to Win It*, that provides an idea of the complexity of the activities.

The process the groups can use is:

- Play with junk! Start by exploring the pieces of junk that your group gets to determine some fun activity. Teams can swap junk with other teams.
- Decide upon the goal and what will be measured. Once the team has a play activity, they need to think about the goal of that activity. It is best if something is measured, such as a score, distance, or the time it takes to complete a challenge.
- Define the rules and space so that everyone is on the same playing field. Write down the rules so that they don't change.
- Playtest! Everyone should try to play the game and break the game by exploring the rules.
- Learn how to teach the game. At least two people in each group should be able to teach the game.
- Prepare a pitch. Each group will have one minute to pitch the game to everyone, so they should think about it.
- (Optional). Create awards. Each team should use the Award creation station to create a 1st, 2nd, and 3rd place award.

Finally, the facilitator should describe the rest of the process, where teams will be dividing in half to play and facilitate games. Teams should decide who is going to play other games first, and who will stay behind and facilitate, and ensure that each half of the team can facilitate the game.

Overview of Game Design and Instructions

Each team should then be given 3-5 different pieces of "junk". These can be party supplies from the dollar store (so one package of 4 rubber spiders = 4 pieces of junk for 4 different teams), office supplies, or really, anything at all. The pieces of junk should be different, but teams are allowed to trade. Each team should also be given some paper and pens, and be allowed to request a measurement tool from the facilitator, like a yardstick or a stopwatch. (I have found that if I give everyone a stopwatch, some don't come back, so I "check them out" to teams). Having large sheets of butcher paper on the tables can be handy, as it gives the teams a surface upon which to mark and create a game space.

If there will be an award ceremony, then there needs to be an awards table with yarn, construction paper, scissors, glitter glue, markers, and pens where each team can create awards. (This is a great activity for kids to work on while the game is being refined, as they don't always stay engaged during the playtesting process.)

During the time, the facilitator should roam the room and help teams keep games simple. It is difficult to make a simple game, and teams will add more and more complexity as time goes on. If there are children involved, then the teams will have play activities within a few minutes of starting and will be designing games. If the teams are only adults, they tend to be much slower to be able to just play with the junk, and the facilitator may need to assist in freeing their minds. (I have found that families with kids can have the game done in 30 minutes, while adult-only teams may need an hour.)

Every 15 minutes, teams should be given a time update, and a reminder of their tasks, such as deciding which half of the team is going to stay behind first, making sure that several people can teach the game, testing the game, writing down rules, and making awards.

Pitching the Games

This may or may not work, depending upon how many groups you have. If you have fewer than 15 groups, then allow each table one minute to pitch their game to everyone. If you have more than 15 groups, this becomes unwieldy, and it's best to give players more time to explore the games on their own.

Half of the Participants Play while the others facilitate

This stage is run twice. Half of the participants wander about and play games, while the other half stays at the game and facilitates it. Teams should have a pencil and paper to write down the top scores for the awards ceremony. After 20-30 minutes, the facilitator should announce that players should switch roles, and those who were playing should report back to their game, and those who facilitated games should now play.

Reflection and Awards Ceremony

As with any activity, the learning occurs from a reflection instead of just the activity. This reflection should be led with questions by the facilitator (and not telling participants what they should have gotten out of it). Useful questions are:

- What were some of the challenges you had in making your games?
- How did your games change as you did playtesting?
- What surprises did you have when other people played your game?
- Now that you are a game design expert, how will you make games in your life?

If there is an Awards Ceremony, each table can stand and give out the awards. Because most of the games end up with a significant luck factor, people of many different ages tend to win awards, and it's rare that someone "cleans up".

Reflections

- Because this is an analog game jam, it is inexpensive to put together, can work for a wide variety of people, and can have many hands doing game design at once
- This can also be themed. I ran this at an art museum, and each team got a big tub of play-doh along with their junk. What happened is that most teams built games around the play-doh as the main component, so they got a bit away from the concept of "figure out what to do with junk." Were I to do this again, I would use much less play-doh so that it couldn't be the main components of the game.
- This has served well to inspire kids to get involved with game design. I let the groups take home their junk so they can continue working on the game. After running this at a local museum, I got an e-mail from a parent with a pictures of her son hugging his re-made game at home. They then joined us for our Game Designers' Guild, which is a community group I run at Syracuse University.

Alternate format: A more unstructured event for drop-in Makerspaces

We found that spaces that were typically setup for drop-in style programming did not work well semi-structured event of the typical game jam. The drop-in crowd was disruptive to the game jam, and the game jam was disruptive to the usual drop-in activities. We decided to tweak the format to accommodate a drop-in kind of setting. We found that most of the activities in the guide can easily be incorporated into this format with minimum adjustment, and it allowed the game jam activities to sit alongside the usual drop-in activities of the Makerspace.

1. **Introduction to staff and activities** (5 min)
2. **Open design time** (2 hours)
3. **Shareout event** (30 min)

A few other adjustments- we asked each station to have mini-shareouts at the stations, so a way for anyone walking by to see what had been made previously. Activities that had a physical component worked best for this- the prep or planning document that student filled out prior to using the tool would get put on a wall next to the activity.

We also counted the total number of “makes” that happened at any station, and had a robot-shaped thermometer that was colored in throughout the day as more makes were made. This was an attempt to provide a more cohesive feel to all the activities that were happening.

Introductory activities

MQ Challenge

Originally authored by Institute of Play

http://beta.gamek.it/warm-up/everyday-objects-2/

A warmup exercise that challenges novice game designers to examine a set of objects, explore their properties, and design a game around them. Youth participants were divided into teams of 4 and received a variety of materials to use, including rubber bands, tape, bandanas, cups, string, paper clips, etc.

Groups spent 10 minutes exploring the 'play-ability' of the objects, the attributes or affordances that they could use to create interaction. Facilitators encouraged groups to look at the affordances of the objects Once they uncovered a set of engaging mechanics, participants defined a goal for their game, followed by a ruleset. Once teams had finalized their designs, we held a large group playtest. Each group had a chance to playtest another group's game and give feedback.

1. **Get started.** Divide participants into groups of 3-4. Make sure all the materials are laid out. (3 min)
2. **Gather materials.** Groups choose 2-3 components: (5 min)
    a. cups
    b. coins
    c. ping pong balls
    d. bandanas
    e. string
    f. post-its
    g. pennies
    h. markers
    i. masking tape
3. **Explore 'Play-ability' of objects.** Groups play with each object to get a sense of how they might use it in a game. Have groups shareout a few of the mechanics they found. (7 min)
    a. For example, rubber bands can stretch, coins can flip, cups can stack
4. **Pick one core activity/mechanic.** Groups build a game around this activity. (5 min)
    a. For example, shooting rubber bands.
5. **Pick a goal.** How can all the components combine to create a game around that core mechanic? What is the goal? What is the challenge? (5 min)
    a. For example: Shooting rubber bands into cups.
6. **Create rules.** Groups refine their game idea into a prototype by creating a title and rulesheet for their game using a rulesheet worksheet. The group should also conduct

internal playtests to test their rules. (10 min)

a. For example: Players must stand behind the line.
b. The worksheet should include:
    i. name of the game
    ii. rules of the game
    iii. goal of the game
    iv. any and all mechanics used in the game

7. **Playtest your game.** Groups will switch and play test each other's games. Players should give the game designers constructive feedback. (10 min)

Hacking Tic Tac Toe

Originally authored by Global Kids

Summary

Analyze Tic-Tac-Toe and then redesign the game by changing the game.
**The same structure of this activity can also be used with Rock-Paper-Scissors

Goals

• understanding how changing game rules changes the system of a game
• introduction to the iterative process
• icebreaker game design exercise

Before the exercise (10-15 min)

- Talk through the 5 principles of game design: Goal, Space, Components, Rules, Mechanics,
- Pick a game (like soccer and chess) and in a group discussion, break that game into it's 5 principles
- Have youth play a few rounds of tic tac toe with the person next to them (1 min)
- Call on youth to break Tic Tac Toe into its 5 principles
    - Goal: Get 3 in a row
    - Space: 3by3 grid, on paper
    - Components: x, o, pencil, 2 players
    - Rules: take turns, if no one can play its a draw, etc
    - Mechanics: drawing
- Optional: Then discuss why Tic-Tac-Toe always ends in a draw for most players. Have the class brainstorm what they might modify in order to change the game: the grid size and shape, the number of players, the winning conditions, the things you can do on a turn, etc.

Hacking the game (20 min)

The challenge: have youth pick one principle of Tic Tac Toe to redesign, to make the game more interesting. They will probably have to change more than just that one component to make the game playable, but have them start with one thing they want to change (change the Space by making a bigger grid, change the Rules by making simultaneous turns), and then move on from there.

Pairs of students try to redesign the game in order to increase the space of possibility of the game – to make it more interesting to play than the "solved problem" of classic Tic-Tac-Toe. As they design, have them change as little as possible – one, two, or three rules at the most. They should follow the iterative process of making small changes, playing their modified version, analyzing how they affected the game, and then redesigning again. Finally, groups can share their modifications with the class, and what did and didn't work. If there are too many groups for everyone to share, then pairs of groups can play each others' games and discuss, or one of two groups can be called upon to share.

Students can create hundreds of variations of Tic-Tac-Toe. An exceptionally elegant variation, for example, was one where nothing was changed – except the winning condition. If you got 3-in-a-row, you lost. Playing this version of Tic-Tac-Toe means trying to force your opponent to make what we normally consider a “winning move.” As a minimal rule-change that turns the “solved” game of Tic-Tac-Toe into a brain-twisting puzzle. A great modification!

You are the Game

Originally authored by Kevin Miklasz and Alex Fleming

Summary

This is a quick intro activity meant to get participants more familiar with the principles of game design, by having participants use the principles as constraints in designing an original games. The game typically leads to physically active games that must be played with your own body, thus giving rise to the name. We wanted the activity to be material-light, easy to explain and understand, fit into a 40 min time slot, and strongly based in the game design principles.

Introducing the activity

Spend some time introducing and talking through the 5 Principles of Game Design: Space, Goals, Rules, Components, and Mechanics. Define each term, and then have the students dissect some kind of actual game into these parts (soccer or basketball work well). This can either be a whole group discussion, or a think-pair-share. Mention that these are the same principles that comprise any game, whether physical or digital.

Running the Activity

Tell participants that they are going to make a game, but that there are some constraints in how the game works. (As you go through the constraints, it can be helpful to write them on a whiteboard as you go).

For the game you make up, the Space and Goal is already set:

- Space: This room
- Goal: Get the most points (What are the points and how do you get them? That's for you to figure out as the game designer!)

The Components and Mechanics are a little more open, but the game needs to involve at least one component and mechanic from this list:

- Components: Hands, Feet, Paper
- Mechanics: Walking, Throwing, Guessing

Finally, the Rules are completely open- you need to come up with the rules that allow all the other pieces you chose to make sense.

Split everyone into groups of 2-4. Give everyone about 15-20 minutes to come up with a design, and then have a few groups share what they did (whether or not they finished). When they are

designing, make sure to encourage groups to get up and playtest their game. You can give a 5 minute warning, and remind everyone at that time to try to playtest.

Adjustments after testing

This activity has only been tested twice so far, once with youth and once with adults, but both times has gone very well. The original game included a longer potential list of components and mechanics, but that only seemed to stifle thinking somewhat. Sometime less is better, and inspires more creativity, and so we settled on 3 options in each category. We also removed pencils from the list- including them encouraged a lot of drawing-type games, which seemed less creative (for example, someone basically invented pictionary). It is worth noting that Rock Paper Scissors (and, when pencils and drawing was included, Tic Tac Toe) is a game that fits into the given constraints. Yet the diversity of games and game types that were encountered was much greater than seen when having kids start with Tic Tac Toe and try to hack some part of the game (see the activity listed right before this one in this guide). For example, we saw a game about avoiding “hot lava” by placing pieces of paper on the floor in strategic places to walk across the room. We also saw a game involving one person running around the room randomly throwing scraps of paper of different sizes, while two players tried to collect the bigger scraps for the most points.

It also seemed like youth were more readily engaged in using the principles of game design when explaining and sharing out their game than they were in the Hack Tic Tac Toe activity, potentially indicating that youth were more immersed in the principles of game design in this activity.

We’d also like to add that we have nothing against the Hack Tic Tac Toe activity, it is a fine activity and we have used it many times. We simply thought it created a suitably high bar for comparison purposes- we wanted our activity to be at least as good as Hacking Tic Tac Toe, otherwise there wouldn’t be a point to using this new activity over that old one.

Station Descriptions

Here the descriptions of the stations that we advertised, with brief descriptions of how each station ran.

Platform Maker w/ Gamestar Mechanic!

Originally authored by MOUSE

Description

Gamestar Mechanic allows an easy to use drag and drop GUI for making games. There is a free version and a paid version, but only the free version is necessary for this station. To access the game-making editor you must have completed the single player campaign, so its necessary to use a pre-made account for all computers at this station. Students can play existing platform games to get an idea for how to use gamestar mechanic and even edit these games to make them their own or create new platformers from scratch. Gamestar Mechanic can also make top down games for students who want to go above and beyond, the platforming constraint is simply to focus youth ideas and provide more structure for the station. Published games can be played online and youth can take a link home to share with friends and family.

Students are logged into MOUSE Gamestar Mechanic free accounts with sprites unlocked. Before they can create their game online they must fill out a game design worksheet on paper here. Students create a smaller game (level 1- the first side of the page) and then replicate the game in Gamestar Mechanic. Then playtest. Then students design their longer game (4 screens long) on the other side of the handout. Once finished they recreate their game online and have others playtest it.

Reflections from MOUSE 8/13/14

Having an analog design document that students used to plan their levels before creating them in Gamestar was invaluable. Not only was it a life saver when internet problems reduced the number of computers that we had available and temporarily halted all activity but in general having an analog component made the whole activity more engaging and encouraged students to share the computers.

Being solely reliant on internet in order to make a digital product is a huge weakness of this workshop, due to the web-based nature of gamestar mechanic.

9 published games are recorded here:
Ryan's Game
Mikael's Game

Hard Challenge
Alyssa's Game
Jordy's Game
Vanessa's Game
KT Game
Fast Bad Guys Grace
Untitled Game

Mod a Classic Video Game: *Pong*

Originally authored by Museum of the Moving Image

Description

1) Introduce Pong-inspired game
Distribute game worksheet. Ask group to identify how their elements are at work in ping pong.

- Goal/challenge
- Components/space
- Rules
- Mechanics

2) Introduce Programming & Scratch Interface
When developers create digital games, every element of the game—the goal, components, rules, mechanics, and space—need to be defined by the program. The program is like a script that tells the computer what to do. In this case, all the rules of Ping Pong had to be programming into a digital version of the game.

- If we are writing a script for one of the paddles, what do we need to tell it to do?

Open up the script for one of the paddles, and explore Scratch interface:

- Sprite (the component)
- Script (how we "write a sentence" to tell the sprite what to do)
- Stage (where the action takes place)
- x/y axis (helpful to point out directions, and how these are used in the script)

3) Modification (20 min)

- Play the game.
- What are some of the problems or glitches you encounter? (crossing sides, no boundaries, no score, boring graphics, no sound) How could you change this game to make it more playable? More fun? More challenging?
- Distribute Scratch cards. Each participant will modify at least one element of the game.
    - Space (make a more interesting)
    - Components (add obstacles and change difficulty by changing speed & movement of the ball)
    - Rule (cannot cross to the other side)
    - Goal (add scorekeeping)** only introduce to more advanced groups

· After they work through the steps on the Scratch card, they can create keep working on modifications of their choice.
· Circulate and help

Extra resources:
Rules
Obstacles
Keeping Score
Game Space

Reflections from MMI 8/13/14

As noted above, an hour timeslot ending up being a little too much time, since some of the activity ended up being covered in the whole group intro activity. We loved the idea of coupling an analog activity with a digital activity, and would most likely modify this to include an analog component--or at least an analog option--to deepen the digital modding activity. One initial thought, since this activity is inspired by classic arcade games, is to have participants design a paper prototype for an arcade cabinet for their game. This would be flexible, so that kids that did need the full hour working in Scratch could do that, but kids who worked faster would have another step in the process.

Let's Grow A Game

Originally authored by Global Kids

Description

There are three parts to the activity within this station, each lasting about 15 minutes. There are sheets that can be used to guide students through each part of the station.

ACTIVITY PART 1:
Station participants receive an 11x17 sheet of paper with a large space at the top and a set of sentence starter prompts at the bottom:

I am _____. I fight for/against _____ in _____
(green sticker) (red sticker) (blue sticker)
by _____
(orange sticker)

They also receive a page of sticker labels with text of different colors that provide several options for characters (postman, skateboarder, basketball player, mermaid, etc), issues (clean water, access to food, equal treatment, etc), places (Brooklyn, my home, the ocean, etc) and mechanics (jumping, distributing, researching, collecting). Participants place the stickers in the corresponding spots of the sentence starter to come up with a core game idea, as they would fill out a madlib. If they'd like, they can come up with their own ideas instead of using the stickers.

If there is time in this 15 minute section of the activity, students can flip over the sheet and fill out some more specifics about their game:
In my game, as I fight for this issue, I am allowed to _____
but not allowed to _____.
The tools I need are _____
To win the game, I must _____

ACTIVITY PART 2:
Participants will receive several magazines, glue sticks, scissors, and markers to create a collage image of the premise of the game. Prompts for participants who are stuck:
- What could your character look like?
- What images can you use to demonstrate what your character does in the game?
- What images can you use to show where the game takes place and what issue your character fights for?

ACTIVITY PART 3:
Facilitators ask students: Do you want to bring your game to life? They inform participants that they can use Gamestar Mechanic to grow their game.

Participants will receive laptops (one per participant or per pair depending on availability of resources). Laptops should be logged in to Premium accounts of the website Gamestar Mechanic. Participants should bring their Grow a Game document with them to the computer.

Facilitators direct students to the game and level settings, where students can use their grow a game document to fill in the game/level intro and win messages before they start designing. These should correspond to the concept for the game they had brainstormed in the prior section.

Facilitators should also show students the basics of Gamestar:
- How to place blocks, avatars, and enemies
- How to make changes to enemy movement and traits
- How to change the background of the game
**Once participants know how to do these things, they may be tapped by the facilitators to explain these ideas to other participants.

Facilitators may choose to provide students with pre-created environments on Gamestar, or provide blank workshop spaces, depending on time, age etc.

This sign (or one like it) will also be posted to help students match the mechanics they listed on their design sheets to components that may execute these mechanics in gamestar

Prompting questions for facilitators:
- How will you design the space so it matches the core idea you had?
- Which avatar would be best to represent your characters?
- What do the enemies represent in your game?

If there is time, participants can playtest each other's games. Some prompting questions:

- Is your/your partner's game fun? Is it challenging enough? Is it too challenging?
- Would you make any changes to make the game stronger?
- Does your game express the message that you had designed it to express?

Reflections from Global Kids 8/13/14

The analog / digital components of the station worked well together, to handle the flow of participants, deal with internet outages when they occurred, and to serve as a gentle on-ramp for the activity. Students were engaged in creative activity throughout the first two parts of the activity (brainstorming ideas for their games, and illustrating them). After just a minute of explanation from facilitators, students could fully engage with the activity without too much further facilitator intervention. They also asked each other for feedback and talked about their

ideas to each other during the casual work session. Students playtested each others' gamestar games, and worked well individually and in pairs.

Some questions / improvements:
- Should we care about content of the games? Meaning, should they be more explicitly branded as games for change? While most had peaceful messages, some students talked about "fighting" against "violence" which seems a little contradictory. What should the role of the facilitator be in such moments?
- How can we ensure that students see the brainstorming/concept development part as linked to the gamestar design? Is there some more scaffolding we might add for the next iteration of the station that would help transition from analog to digital?
- Maybe it would help if students had their design documents in front of them (Instead of on the wall) when they created their gamestar levels.

Reflections from Global Kids 12/6/14

This time around, facilitators suggested to station participants that after creating their game document that they begin their projects on Gamestar Mechanic by giving their game a title and adding the story of their game to the "Game Intro" section of the Game and Level Settings. This helped the students see the connection between their documents and their designs on Gamestar.

Some highlights from the game introductions:
Game Title: Rainbow Mermaid. "Clean the ocean!!!! And look good doing it."
Game Title: Athletic Fighters. "Athletic men fight against domestic violence to protect women form being poorly brused by the poeple causing domestic violence"
Game Title: Stop Taking Drugs! "Persuade people who take drugs that they shouldn't."
Game Title: Painting Race. "Welcome,Gamer to painting race your on a mission to retrieve the artwork stolen by the evil with your paint balls and skill recover the work back to the musuem !! remeber paint on!"
Game Title:
"Anna, it's another day it's time to start protesting against violence. You can only protest, collect materials, and make things. You can not kill or suicide. The tools you have are signs, a backpack, extra signs, and food"

Even if many ran out of time and could not finish their levels, they were thinking more intentionally about the design of their levels, given their stories and game concepts. Facilitators also encouraged students to, once they got the hang of Gamestar, coach the students sitting next to them. That worked to replicate the number of "experts" at the station.

Room for improvement: We had printed out signs mentioning the components of Gamestar and how they could be linked to the mechanics of their game plans. When we referred students to

those sheets, they were useful, but it was a resource that we had forgotten to really call participants' attention to.

Reflections from Global Kids 4/25/15

We at Global Kids feel that, overall, the Game Jam went very smoothly. Being in the same room as other organizations allowed us send students to their stations when ours was full and vice-versa. Computers were accessible and internet-ready and we didn't encounter any technical difficulties. There was sufficient space for our activity, so participants didn't feel cramped or clustered. Lastly, there was an even ratio of time to number of participants. As a result, participants had sufficient time to engage in and complete the activity without feeling rushed.

It would have been useful to have access to a few more computers as participants were the most engaged in the Gamestar Mechanic portion of our workshop, but we understand that this is a result of the limited number of computers available to every organization that participated. Another small issue we had was that sometimes participants came in and immediately sat at a computer without asking or engaging in the first part of the activity, but we were easily able to motion them to the non-computer part of our activity and/or to other stations.

Let's Invent a Sport

Originally authored by Important Little Games

Description

Using a couple of balls, some open space and a few other supplies, students will split into two teams and invent some sports. The teams will then playtest and help refine each other's sports in preparation for the Big Game!

We will open with a brief discussion of types of sports and features of those sports. Students will split into teams and get some equipment to use in the creation of their sport. Facilitators will make it clear that the port must be absolutely safe for all players.
This will be followed by some yes-and brainstorming about the design of their sports.
Thereafter, most of the time will be spent playing and trying to find the best combination of mechanics to produce a sport that is fun to play and to watch.
Near the end of our allotted time, teams will teach each other their games and give feedback.

Reflections from Important Little Games 5/9/15

With the sports materials in full view, any great amount of discussion is impossible. That worked in our favor, as more playtesting and refinement time was often neccesary.

Too much time was unfortunately spent on recruitment of kids to my activity. I suspect this was because it was earlyish, and the prospect of physical activity at that time was less than welcomed. This activity would probably best be undertaken later in the day.

One problem I noticed was the emergence, in each development session, of a clear leader who supplied most of the ideas and did most of the decision making. This isn't necessarily bad for the process itself, but as an activity it left most participants with a lesser experience. I wish I had laid out, at the outset, a more democratic framework. Again, this may have to do with other participants' morning lethargy.

An interesting challenge was the allure of existing sports. The rulesets of already-popular sports act as attractors in this design space which must be actively and constantly avoided.

Another interesting challenge was getting students to come to terms with the limitations in front of them. At times, students said things like "this would be better with two teams of ten" or "if we had four more of this kind of ball..." Working within limitations often created the best design ideas, and I hope students recognized that correlation (unfortunately, I didn't think to point it out).

Overall, the process went well, with two solid sports invented and a third well on its way when we ran out of time. I think the students who found the energy to fully participate got a lot out of it -- particularly the opportunity to brainstorm and iterate quickly on a design idea.

Power Gloves

Originally authored by Eyebeam

Description

Youth will turn regular gloves into game controllers to power their games and empower themselves as gamers. Using a template, they will cut out pieces of foam paper, conductive fabric, and adhesive paper for each glove in the pair. They will iron on the adhesive paper to the copper fabric and the craft foam paper. Then they glue on this layered pad to the glove. With alligator clips, the students will connect the pad to the Flora and then connect the Flora to the computer using a USB cable. Then we will provide the code so that they can use the gloves and play the digital games. The code will run through the Adafruit Arduino platform (free to download here). The code works with one-button games, particularly the space bar. "Space is Key" is a great game for students to use the gloves to plug in and play.

Reflections from Eyebeam 8/13/14

The Power Gloves station was successful overall. A large number of students participated, though some had to be turned away due to capacity and flow at the table. However, the flow contributed greatly to the success of the workshop, as we were able to manage the students' activities individually. This is important, as the students are handling heated equipment (iron, glue guns). I noticed that students did not follow the worksheet, rather they asked for or waited for instructions from myself or my fellow facilitator. As we try to refine this workshop, we were discussing the possibility of simplifying the craft process and teach more about how the gloves work and/or how the code works. There might not be enough time to have students work on the code, rather they might be able to learn electronics/circuitry in that time frame. This is something we will have to work on. That being said, the workshop works well with all the diversity of student ages. Whether they understood how the gloves worked, I hope they understood the importance of creating their own game controllers. They did definitely have fun making and playing. I believe we had about 15 students participating (15 pairs of gloves were completed), which felt more manageable than other times this workshop has been given.

Used Dec 2013, before reflections were captured

The Gravity Ether basic activity

Originally authored by Iridescent

Description

First, invite youth to play through the first 8 levels of the Gravity Ether physics simulation game (available for free as a desktop download or on the App store). We don't require that youth beat all of the goals on each and every level, but simply to gain enough stars to unlock and complete the second challenge level (namely the Orbits Challenge). The point of this first part is to really just give youth a feel for the gameplay.

Second, after youth complete the Orbits Challenge level or after about 20 minutes, we direct youth to go to the game's level editor (found by going back to the main screen and clicking "Create.") Tell youth to design a challenging level using the level editor, that contains at least three goals.

Third, when youth start completing their levels, encourage them to start playtesting each other's levels and giving feedback, or have the facilitators playtest if all the youth are too busy creating their own levels. Have youth incorporate feedback into the level design.

Fourth, have youth publish their level to the game server using the publish button! Once published, the level will live on the Ethers game server and be available for anyone to play. To publish, you simply need to add a title and description for your level, and prove that the level is beatable by beating it yourself. This is the only part of the activity that requires a wifi connection. For youth that finish early, you can either have them be playtesters, or have them check out other published levels (using the "More Levels" button on the main screen).

NOTES:

- This is a great filler activity for a game jam- if youth finish a station early or start wandering, you can always direct them to start playing the Ethers game. The game contains enough instructions that students require minimal guidance to get started.
- Some of these instructions won't make total sense until you open the game, but should be clear enough once you do so. So if these instructions don't feel totally clear, downloading and playing the game should provide some clarity.
- This is the most basic activity you can do with the Gravity Ether- we are developing more structured Gravity Ether activities in this guide that require a little more effort and preparation but better scaffold a game design experience. This activity is still an effective station, and a good starting point for your first game jam. This activity also works equally well with the Fluid Ether.
- Only the first two components of the activity really need to be completed for the youth to have a productive experience at this station, so don't worry if that's as far as some youth get.

Used Aug 2013 and Dec 2013, before reflections were captured

Reflections from Albany Public Library: wasilewskim@albanypubliclibrary.org
We worked with kids from ages 11-17 in a computer lab with a game design primer first, and game design professionals to playtest and comment. We challenged them to make it as hard as they could, but they had to be able to beat it themselves. Many found it fun to make impossible levels and giggle watching the playtesters try to beat them. It may have helped to have one playtester watch them beat the game before sending it to the others, but this difficulty was not terribly time consuming or annoying. Once the kids made a playable level, and tweaked their level of difficulty, testers suggested game design principles to experiment with. I think a second, more specific challenge would have taken the learning to a higher level and kept them more on task toward the end. This technology was incredibly easy to work while also giving a high level of flexibility in the types of levels that could be made. Each kid came up with a very different gameplay experience. The range of ages we worked with at this event was not a difficulty, as the technology scaled very well to different ability levels. Everyone had a great time and we would totally use this technology again.

Scratch That: Remixing Games

Originally authored by MOUSE

Description

Students have the opportunity to create remix characters for two games of increasing complexity. First students are shown the game Pancaker (bit.ly/pancaker), a simple stacking game in Scratch. Students must click the mouse the moment that the pancake is in the center of the screen, as it is tossed from the left side of the screen to the right. If the pancake is in the center of the screen it will add to the stack which will get increasingly higher. If the pancake is too far off center the stack will fall over and students will have to start from the beginning.

Once students have had a chance to play Pancaker to get a feel for the game we pass out a handout with a space for them to draw a new character to be remixed. You can get the handout at bit.ly/hackpancaker

One students have drawn a new sprite in the box at the bottom of the sheet they will hold their sprite up to the camera on their laptop, take a photo and then erase around the edges with the eraser tool with an extra large brush.

For a more advanced game to remix students then were given Ghost Blast! - a game remixed by MOUSE staff. Students have a similar worksheet with a place for them to provide hand drawn graphics, for this slightly more complicated game with more sprites.

After remixing games with hand drawn graphics (or graphics taken from across the web) students can publish their games to our Scratch studio where they can view them later.

Reflections from MOUSE 10/18/14

Younger students responded best to the activity. Students who merely watched another student play pancaker didn't get as excited about remixing the game as a student who actually got a chance to play. Some students were more excited about the prospect of drawing things by hand than others, which was to be expected. Those who were more confident using the computer image editor were happy doing just that.

It was a little difficult to re-engage students to try the next level of hacking (hacking the ghost blast game) it might be best to introduce the activity has having two levels. Or to let students play both games before hacking the first, otherwise the activity could go very short.

One interesting thing thing that happened is that a group of young people wanted to create a collaborative hack on the pancaker game, which ended up being a sandwich stacker. Each student from the group drew one element of the sandwich, whether it was meat, cheese, bread

or (for some reason) a sponge. We digitized each of them as a separate costume of the original pancake sprite and added a “next costume” script to the block of code that created new pancakes to fly across the screen. The result was a fun next level hack on the pancaker activity.

One group of students who did complete the second level of the activity used the cameras on the iMacs to take photos of their faces, so they could put themselves inside the game. This was a big hit for them and is an idea that could be used for future Scratch activities.

Because there were other activities going on in the Maker Space beyond the Game Jam it was difficult to get new students to try out our station after the break. There were a lot of distracting options and there wasn’t any clear signage signaling what was part of the game jam and what was not.
Overall this activity was a big success and most students who chose this station had positive feedback/experiences. In the future I would try and rephrase how to pitch the table in order to make it sound more enticing for other students.

Finished Games from our station:
Photos of the different paper drawings can be found here.

A studio of Scratch games featuring all the games created at this station is here:
http://scratch.mit.edu/studios/597776/projects/

The Robot Games

Originally authored by Institute of Play

Description

- 5 min: Give students a quick demo of Sphero and Cubelets, introducing them as new components they will use in their designs.
    - Introduce the design challenge: design a game using the Sphero, Cubelets, or both. *(You can restrict the type of game to obstacle course if groups are in need of direction.)*
    - Divide students into groups of 2-3 and pair them with another group. Give one group the Sphero and one group the Cubelets
- 10 min: Give each group a series of mini challenges to familiarize themselves with the tools.
    - Sphero: Using MacroLab, make your Sphero...
        - change colors;
        - move in a square;
        - change speeds.
    - Cubelets: Make a robot that...
        - moves forward with your hand;
        - turns on a light;
        - follows a flashlight.
- 25 min: Design Challenge: Create an obstacle game using Sphero, Cubelets, or both and a variety of tools or materials in your environment.
- 10 min: Groups playtest each others' games.

Reflections from Institute of Play 10/18/14

Worked?

- Overall successful - the Sphero and Cubelets were a big hit.
- Easy for students to flow in and out of - didn't require too much introduction.
- Students ended up showing each other how to use them, either offering guidance on a particular behavior or through project collaboration.

Didn't?

- Didn't have enough time for playtesting, though there was a ton of internal playtesting throughout, especially with the Sphero obstacle course

Improvements:

- Start with a series of mini-challenges for more structure.
- Focus more on using the MacroLab that requires users to code behaviors instead of the Sphero driver app.

Reflections from Institute of Play 5/9/15

Worked well:

- High engagement with tools
- Demonstrated design thinking and creative problem solving skills
- More interesting types of games with Sphero (vs. obstacle course)

Didn't work so well

- Charging problems with both
- More focused on tinkering vs game design - still need more constraints

Despite changes made to the last iteration, we still found this activity focused more on tinkering rather than designing an actual game for most of the participants. Moving forward, we might retire this activity due to tech issues and the fact that it is not necessarily replicable by other organizations who don't have the tech. RIP Robot Games. For now :)

Beta Challenge

Originally authored by Exposure Camp

Description

- We will spend 5 minutes introducing the platform BETA
- The students will then spend 15 minutes playing through the challenges and see who can get the farthest through the game by contributing code
- We will then have the students remixing the “10 second challenge” to create one of their own.

Based on how easily the students catch on and interest we might introduce one of the shorter Game Kits.

Reflections from Exposure Camp 10/18/14

The BETA platform is a bit too robust to introduce and hope for creativity in 45 minute segments. The teens loved the platform so much that they did not want to break during the break time and returned to the station after said break. They were really interested in beating the challenges and getting to the next level. The platform kept them engaged and challenged.

Only one student made it through the entire gamified code to learn experience and was just about to start building when it was time to break and he had to go somewhere after so he did not return.

We had about 7 students in our station they worked collaboratively to solve challenges to navigate the levels but again learning and creating in the platform does not allow enough time for an actual build so we had no games created at the end. In as far as what the game jam was created for that might be a fail but we are also able to look at the backend to see if they continue to create which could be helpful in the measurable outcome. (will ask admin to check it out)

It was also cool to have the creator of the platform come out and help the kids navigate and intro the platfrom.

Board Game Design 101: Hexacago

Originally authored by Game Changer Chicago

Full Description of Station

Session 1: Content
Teens will receive fact sheets and discuss a range of social and emotional health topics. Together they must figure out the game's logistics and general direction answering the following questions:

- What is the game about?
- What are the goals of the game?
- What do you hope players will come away with?

Teens will then write a short game design document for the next sessions participants to design from. This might include high level game mechanics along with concept art.

Session 2: Game Mechanics
Teens will create a pen-and-paper prototype based on the game design document from the previous session. In this session, participants will learn the importance of rapid prototyping, play testing, and iteration, refining the game design document and creating a basic rule set.

Session 3: Refining and Balancing
In this final session, youth will make final adjustments to the hexacago game, focusing on statistical analysis to make sure the game is balanced and fair. Teens will continue to play test and make smaller iterations on the game while finalizing the game design document and rule set.

Reflections (not captured in 5/9/15 event)

Crafting Stories from the Ether

Originally authored by Iridescent

Description

1) 5 min. Give the youth a quick demo of the game, using the level editor. Show the three kinds of planets, and how they differ. Show how black holes control the planets. Show how the square light up, and how the blocks break. Also, show the effect of a sun.
2) 15 min. Direct youth to the worksheet. Have them fill in the front first. choosing a role for their characters and objects, and fill in the narrative line. Next, have them go on the back and map the position of the objects to relate to 3 consecutive levels. They should both draw in objects, and write the storyline that corresponds to that level.
3) 25 min. Have youth create their levels on the level editor. They shouldn't publish them at this point.
4) 10 min. Youth should get some playtesters to test their levels, and get feedback. They should incorporate the feedback into their levels, and publish them once done.

This activity can be easily expanded to fill more time by adding more levels.

Reflections from Iridescent 10/18/14

This activity purposely focused kid's attention towards the level editor from the start, rather than first focusing on gameplay and then on the level editor like all of our previous attempts to use this game. This meant we had to demo the game's functionality using the level editor. During the first design time, we didn't quite walk through all of the objects in the game, and definitely saw some misunderstanding on the worksheets as students weren't able to clearly place the objects into categories. Often kid's would write descriptions in for the objects that would require the objects to do something that they couldn't normally do in the game, requiring them to adjust their expectations when they finally built their levels. In general, by focusing on crafting a story and only interacting with the level editor, we saw much greater creativity in designs, but also more unrealistic designs. There needs to be a balance of showing kids in a demo what's possible in the game, without directing their action so much that creativity is stifled.

In general, there was very high engagement, and kid's were much more productive in their level designs (each kid on average produced and published 2-3 levels in that hour) than when we started with gameplay (each kid would produce 1 level, and sometimes publish it). There often was a disconnect though between the stories described in the worksheet, and the actual levels

executed in the game. Would be great to find a way to make the story more present in the design of the levels.

Make Your Own Flappy Bird

Originally authored by Black Girls Code

Description

"Make Your Own Flappy Bird" tutorial via Code.org. The tutorial shows beginners how to use drag and drop programming to create their own Flappy Bird Game.

1. The Flappy Bird tutorial is appropriate for ages 6+
2. Tech leaders will introduce themselves to students and briefly go over the activity activity then show "Flappy Intro" video (3 minutes)
3. Leaders will then assist each student through each of 10 levels in online tutorial (20-30 minutes)
4. After completing all 10 levels, tech leader will guide students through process of sharing their Flappy Bird game with friends. Note: Creating an email address or getting a parent's email address might be necessary. (3-5 minutes)

- Tech leader at station should ideally have some familiarity with drag and drop programming and/or the specific Flappy Bird tutorial.
- Laptops set-up for 1-2 students per tech leader.
- Tutorial is avaialble at: http://studio.code.org/flappy/1

Reflections from Black Girls Code 11/22/14

The Flappy Bird activity was appropriate in terms of difficulty for the wide age range of students at the November Game Jam event - the students enjoyed it and were engaged. However, it was challenging because there were a few steps in the activity and it was hard for the kids to stay focused since everyone was moving between stations.

For a future event, we would need a structure requiring students to stick with the activity through completion. Station should be set up in an area not near music-making or other activity that could affect student focus.

Scary Maze Remix

Originally authored by Exposure Camp

Description

6 Stations are equipped with chromebooks with Scratch opened to Scary Maze Game, Justin Bieber Edition (http://scratch.mit.edu/projects/16659739/)

-Offer a brief description of how Scratch works
-Have everyone play the game a few times and give their thoughts
-If you don't like "the Biebs" who would you change the game to have scare you at the end?
-Show how the blocks work and read as code
-read through the scripts under Justin Biebers face to understand how it work
read through the maze scripts and explain how that works
-have young people google a picture that they would like to have replace Bieber
-challenge them to replace Bieber with their picture -how do you import the picture? what code is needed for it to work? how do you delete Bieber? are there different ways to make sure the code is correct? what are they?
-once they complete it playtest, change the size and speed of the image
-Bonus add another level to the maze.

Reflections from Exposure Camp 11/22/14

Many youth were familiar with the original Crazy Maze game and thought it was cool to be able to recreate it. Many youth were interested once they heard the screams come from other people playing. It was a good way to pull others in. The code for the game is pretty easy intro into programming something to do what you want and many of the youth were able to understand how to make changes without even being prompted. Really cool hour of code exercise.

Reflections from Exposure Camp 3/14/15

This game jam helped me to refine a few things about how I would run this station more efficiently next time.
-One key element would be to have the youth log in to our organization Scratch community page. It alleviates the time of having to have kids create an account and makes it easier to show off work at the conclusion verses tracking down youth to have them log in and show their work. It also makes sure that you have all work in one place. However I would still make sure kids know how to create an account

- It worked well to have kids work in groups, teams of two it helped to foster collaboration and they were able to figure out concepts alot easier in teams. During the last jam that we used this project everyone had their own computer and we had fewer completed hacks.
-In the future I would also create a card or something that has the Scratch website on it and a place to fill in a tiny url link to the games they created to foster continued design.

Hacking the Ether

Originally authored by Iridescent

Description

1. Students first play through the first three levels of the game, being asked to pay special attention to the third level. Wait for all students to get to the third level, letting some students play ahead if needed.
2. Introduce students to the activity sheet and give them the challenge. The challenge is to change the third level of the game, to change three of the goals in the level to new goals, while not changing any of the existing components in the level. Students are only allowed to add new components in producing a way for someone to beat their new goals.
3. Student first draw and write out their idea on the activity sheet.
4. Students then program level 3 into the level editor, first copying it piece for piece (steps 3 and 4 can be switched, depending on tech availability and flow).
5. Following their drawing, students change level 3, test their level to see if it works, and then iteratively keep tweaking their level until it does work.
6. Once completed, students should publish their level to the game server.

This activity sheet was used to guide the activity, and was sitting next to the iPad when students arrived.

Reflections from Iridescent 11/22/14

It was interesting to see this activity in the event, for several reasons. First, we had mixed age students, both middle and high school students playing the game. As usual, both ages were able to get engrossed in the game, but the ways in which they interacted with the level editor was very different. The high school students seemed to really appreciate the structure provided in the activity, of first re-creating a level piece for piece, and then hacking it in a very directed way, and several of them actually went through with the activity as directed. Those that didn't complete the activity were ones that just wanted to play the game and didn't want to go to the editor. Middle School students, though, had less trouble stopping their play and turning to the editor, but none of them wanted to recreate one of the levels in the game- all wanted to make their own level, in just the way that they wanted. So the younger students responded better to less structure, and seemed to have less trouble coming up with a creative idea when given a totally blank slate. On one hand, not too surprising, on the other it was funny that the younger students needed less structure and guidance than the older students, which isn't a conventional way of thinking about curriculum design.

Agree with the reflection that the younger students just wanted to make their own level. They also didn’t need a lot of guidance in creating their levels--they were able to just jump in without the aid of worksheets or asking us too many questions.

Scratch: It's the Remix

Originally authored by MOUSE

Description

We will start the session by giving students a chance to play the game they will be remixing: Ghost Blast.

Students will remix the game as they see fit. Images from the Scratch library are suggested as a starting place, then images from Google image search.

As students continue to remix Ghost Blast they can create new backgrounds, find new music, change the game physics, add a score mechanic or otherwise explore the game freely or find another Scratch game to remix. Floating facilitators will help students who finish the initial character creation early to continue their remixing.

Reflections from MOUSE 12/6/14

This activity overall went well, it was a little difficult to compete with some of the more initially popular stations but as more students started to wander by the station they dove deep into the activity making a number of awesome games. Unfortunately saving ones game was not a part of the activities explicit instructions and so several student games were saved over. In the future creating a new saved copy of a game should be the absolute first step in the activity. Many students preferred to create their images with the computer instead of choosing to draw and digitize and sketch with pens and markers. Some students used the webcam to put their face in games. Google image search was more popular with younger students and people who had less confidence in their ability as an artist.

Student work can be found in the following Scratch studio:
http://scratch.mit.edu/studios/741770/projects/

Reflections from MOUSE 1/23/15

Changing the focus of this activity to start with images from Scratch and Google Images and removing the focus on hand-drawn images seemed to streamline the activity. This was by far the best this activity has been run, possibly because there were three staff members facilitating it. The pitch for this activity was changed, and this seemed to work well. The new pitch is "Alex made a game called Ghost Blast for Halloween, but he took too long and just finished it. We need you to give the game a new theme.

Reflections from MOUSE 3/14/15

This station went well! The biggest challenges were internet connectivity (which became less reliable over the course of the jam) and the fickle nature of the computers we were given. The focus of the activity was on digital remixing (since iSight cameras were not available) but the digital remixing is by far the most successful part of this activity and it looks like we may drop the analog component altogether.

Remixing sprite costumes and backdrops worked really well. When there were not enough devices students paired up to create their games which worked great as well.

Reflections from MOUSE 4/25/15

This time we used different source games for students to remix, specifically a Flappy Bird clone (and an example remix) and a Mario clone (and an example remix). Older students responded to this games more strongly than younger students, with several older students spending almost the entire Game Jam working on their projects. Those who stayed with the activity for more than a few minutes enjoyed it greatly, those who found it to be too much left quickly.
We had 6 Makes from this station, which are viewable at this Scratch studio:
https://scratch.mit.edu/studios/1168822/

Reflections from MOUSE 5/9/15 in Chicago

This activity worked really well at this game jam. Students took time to create detailed remixes of the Ghost Blast game, and for some reason this time were much more interested in creating hand drawn graphics than in previous jams. In the future we need to take the sound off the game (since it mostly gets annoying) and fix the template game to either be something different without such a long loading screen. Having four students doing the activity at a time was the max that a single facilitator could handle, having a larger table would require four facilitators. High school age students seemed to be the ideal candidate for this activity, younger students haven't gotten quite as invested at previous jams.

Students also expressed some interest in wanting to make other types of games, it would be good to have a few different templates to select from instead of having only one game to remix.

7 makes were made at the following Scratch studio:
https://scratch.mit.edu/studios/1212586/

Sharknado Escape

Originally authored by Iridescent

Description

You wake up. The weather is: Rainy? Sunny? Sharknado?! Using Twine, you'll be able to edit this choose-your-own adventure story so that you don't get swept up in a sharknado (at least not in every ending).

Reflections (not captured at 5/9/15)

Brickbreakers

Originally authored by Museum of the Moving Image

Description

Introduction to brick-breaker games (10 minutes)

In small groups, students will play an online version of the arcade classic "Super Breakout," and then regroup for a quick discussion:

- How could we describe this game to someone who has never played?
- Does this remind you of other games you've played?
- Why might this type of game be popular in an arcade setting?

Exploring brick-breaker game mechanics and components (10 minutes)

- How does this game work/what is the game mechanic?
- What are the two main components, and how do they interact? (ball & bricks)
- What are some ideas about how we could mod this game to behave differently, while still being a "brick-breaker"?

In small groups or individually (depending on total number) students will design a new component for the "ball" figure in a brick-breaker game using card stock, markers, and scissors. Students should be prompted to think about how their version will behave differently than the classic version. Some questions to consider if students need more prompting: will the speed change? What happens when it touches a brick? Does the direction change?

Group animations (30 minutes)

Using post-its as the "bricks," each small group/individual will have a turn to animate their unique ball figure using stop-motion animation. Each small group/individual will be challenged to animate a specific number of frames (at the discretion of the instructor, based on total number). The rest of the group should participate by offering suggestions and feedback throughout the animation process.

Students can bring home their component/ball design as a takeaway, and final animations can be made available to share.

Reflections from MMI 12/6/14

On the whole, this activity went really well. It required critical game thinking, making, movement, learning a new skill, and a lot of collaboration. We could fine tune resetting and transitioning for the second group. If students have the option of continuing at their first station while others are joining for the second session, it would be useful to create some printed materials that can communicate first steps of the activity when station educators are occupied with helping the students who stayed, students who need help finding a bathroom, students who arrived late, etc..

I think it would be helpful to have a slightly longer (15-20min) reset time budgeted in. As was also mentioned in our debrief, I think it would be best if snacks were only given out during that reset time. Between 2nd session kids coming over after we'd already begun and snacks appearing at various times, they were all over the place.

The kids who stopped at our station made at least two paper game components each in addition to working collaboratively on an animation. I'd say the total count is around 20.

Here's a link to the animation: http://bit.ly/GameJamAnimation

Create your own iPad Game with PixelPress

Originally authored by CodorDojo

Description

In order to run the station, the following materials will be required.

1. iPads with Pixel Press Floors Installed
2. Pencils with erasers
3. Straight Edge Rulers
4. Sketch Guide (http://projectpixelpress.com/floors-sketch-guide/)
5. Blank Sketch Sheets (http://projectpixelpress.com/floors-sketch-guide/)

When the kids are seated they should be distributed a sketch guide / a blank sketch sheet. Briefly explain to them what PixelPress is and pass around the iPads with PixelPress installed to give them a good idea of the games they can create.

Tell them to draw and only draw one level of their game. This task should take about 20 minutes. Make sure they are drawing straight lines as the iPad will have a difficult time reading the sketches if they don't. As they are drawing look at their sketches and make sure things make sense. Is the terrain drawn properly? Is the level impossible to beat? etc.

Once they are done drawing the first level, they will come to you to have their game scanned into the iPad. Show the the design editor so they can fix their app on the iPad. Now let them play the game and have other people play the game. Let them continue working on their level or creating the next level.

Modified Version of the 1 Day Plan - http://projectpixelpress.com/education/

Reflections from CodorDojo 12/6/14

We had originally intended to run the event very similarly to a structured one hour class, however upon seeing the age group we quickly abandoned that plan. We decided to simplify everything and just jump right into the task. We figured instructions weren't as necessary since the idea was pretty self explanatory. To give them a general idea of PixelPress we passed around an iPad with the game on it.

What worked? Handouts were key. By having the information written on a piece of paper, we didn't have to explain the task multiple times. We could just tell the kids to refer to the handouts.

Having the iPad projected on a laptop prevented the kids from crowding one another and fighting for the iPad. As one person was playing the game on the iPad, the others were observing and acting as commentators. This made everyone feel involved and part of the experience. Overall, the activity seemed to be a great success. Some of the kids stayed for the second session to refine their game and add complexity to it. Most of them drew a linear game on the first pass, however, upon playing their own game and understanding more of the mechanics, they started devising more complicated levels.

What didn't work? We proved to have more scanning issues than anticipated. We knew that scanning would be difficult, but due to lighting conditions it was suboptimal. We ended up finding a sweet spot away from shadows which made it easier to scan the paper sketches into the iPad after a while. Creating a structured environment was not useful since kids would drop in and out. It seems more important to create an activity that allows for both drop-in and continuity.

Improvements. We severely lacked iPads. With only two at a given time, most of the kids finished their first draft of the sketches within 20 minutes. Testing and redesigning was phase 2, but we had a hold up due to the lack of iPads. While we had handouts, we didn't provide enough for one for each child. Sharing became a pain point since everyone wanted one for themselves.

Final Thoughts. As I previously mentioned, being that this was my first event, at no point did I feel lost or overwhelmed except for the presentations. Most of the kids/parents had already left and I had expected those who were at our station to remain at our station to give a rundown of what they worked on. Perhaps a few kids should stay at each station while each of the groups are rotating around.

Reflections from CodorDojo 3/14/15

Having more than 2 iPads available definitely helped to smooth out the process. The ideal situation would be to have 1 to 1 ratio of iPads. A way to compromise with the lack of iPads would be to have half the kids play with the iPad to get a sense of the game, while the other half draws the game on paper. As people finish drawing their games, they could scan the game onto the iPad and the kids with iPad can start drawing.

We would have liked everyone to get up and away from our stations so we could re-setup everything for the second batch of kids. Some kids were still using our iPads so it became a bit chaotic. Overall, I think the event went well. We really enjoyed the new intro activity / the share about method.

Reflections from CodorDojo 5/9/15

Number of makes: Total of 19 (7 on Session 1; 12 on Session 2)
What worked:

Having a total of 10 iPads made it easier to scan more games at the same time. Most kids were engaged and understood the goals of the game (though some of the younger kids were confused on how big the marks needed to be on the page).
Having iPads pre-installed with PixelPress and most of them were well-charged.

What did not work:
Scanning difficulty remained the main source of frustration for kids. This meant that scanning and editing takes up more of the kids' time and takes away from the focus of actually designing and testing the game. Because we had more iPads, some of them also discovered the ability to draw the game plan on the iPad instead of on paper, which undermined the benefits of planning on paper first (and also made more iPads unavailable for other kids).
Being in separate classrooms didn't afford us of clear signals for finishing a session or starting the next session.

Improvements:
- Have more iPads prepared with sample games before the start of each session so more kids can see how a a game looks on the iPad
- Make sure to remind kids that the character is only 1 box high and can only jump at most 6 boxes. Show them how to draw certain parts of the game, like the moving bricks
- Keep better track of time (some kids spent too much time overdesigning the game on paper and had less time scanning and testing the game on the iPad. This will work well with a one-to-one iPad to kid ratio, since kids can start and end and iterate at around the same time
- Internet connnection would be nice so kids can upload their game to the PixelPress site
- Identify the elements of a game: goals, space, components, mechanics and rules applied to the PixelPress activity before starting the drawing (so they can come up with better designs: obstacles, moving floors, walls, lava, and so on). This will reinforce their understanding of the framework of a game. It will also provide an opportunity for shared discussions (vs the immersive solo design experience)

Minicade

Originally authored by Eyebeam

Description

Mini Icebreaker (5 Minutes)
Briefly introduce the concept of mini games by playing one of the following games.
1. Thumbwars
2. Ninja
3. I spy with my eye
Engage youth to remix the game using a very silly / ridiculous prompt, i.e. dancing, upside down, kittens (ask them for ideas)

Mini Playing Session (10 Minutes)
Show them Minica.de and ask them to play a playlist (ideally one with games you have prepared)

Mega Making Session (20 Minutes)
Give youth a theme, i.e. sloths and ask them in small teams or by themselves make a mini game (or more) around that theme by remixing the games on the playlist or use mmm.minica.de to make one from scratch. Once they are done ask them to add them as one playlist to Minicade. (If kids are not familiar with blockly, the scratch like coding language minicade uses, it's a good idea to spend some time scaffolding the experience/explaining how it works)

Playtesting & Iterating (20 Minutes)
Once the first round of making is over, kids can start playtesting each others games and the playlist. This is a good time to ask them to reflect on what makes the game fun, if it's replayable and what would they improve on.

Mega Making Session Part Deux (20 Minutes)
Ask kids to revisit their games improve and even create a few more.

Reflections from Eyebeam 12/6/14

From Erica Kermani, Eyebeam:
For this game jam, we took a break from our usual game-controller-gloves workshop to allow Eyebeam Residents Chloe Varelidi and Atul Varma (Atul wasn't able to make it) to playtest their new project called Minicade. That meant I was able to step back somewhat from my usual role as the main facilitator to observe our station as well as the larger event. Overall, I was again really happy to be part of the game jam as a presenter. I witnessed some amazing student work

and engagement. I was also honored to be around fellow adult educators who were dedicated to sharing some interesting and fun activities for the benefit of these youth.

What worked: I loved that this event was a BCAL. The space had a constant buzz of energy from the drop-in high schoolers and from the younger middle schoolers invited for the event specifically. Though I'm not sure how much the youth of different ages intermingled at the various stations, I was glad that the older students weren't afraid to join in with their younger counterparts. The middle schoolers were also able to engage with activities that the older students were participating in like playing instruments or recording audio. To me, all of the youth present were able to be part of a well-rounded experience and exposed to so many varying ideas, tools, and activities.

The activity at our table was really exciting as well. During the first session, we had a full table and Nexus tablets (thanks to BCCP!) that the students could use. Chloe started out by playing a physical game (Ninja Warrior, also Telephone) with the middle schoolers and asked them to mod the game. This warmed them up, and also introduced them to game mechanics. Then she had them write down ideas for games, allowing them brainstorm even further, and share them with the group. I felt that this was a great way to continue their engagement as game designers--makers over consumers--and then prepare them for the next activity, which was to play and hack games on the Minicade online platform. This was a success: students created and published their games to the Minicade library. Older students from Groundswell dropped into the station to participate as well.

For the second session, some of the original students remained to continue to create games. When it was time to do a share out with the entire game jam group, I was happy to see some of students share (and teach) their games on the tablets to their peers.

What didn't work/Improvements: When the older students came to participate in the first session, there wasn't as much dedicated focus on them as to how to use the tool, especially since they arrived sometime in the middle. To alleviate this issue, we could have had worksheets or a tutorial for them to follow so they didn't have to rely on an adult who was busy working with younger students. Once they understood how to use it, they were hooked, but we might have lost some people due to lack of instruction and attention.

We didn't have as many students involved in the second session; many students were interested in other tables or distracted by other activities to stay. I'm not sure it would have been necessary to engage them in similar activities as the first session (i.e. a physical game) but perhaps worksheets would have also helped in this instance. Or fewer sugary snacks :)

I think we could have used the final share out as an opportunity for students to playtest their games and get feedback from their peers.

Reflections from Eyebeam 4/25/15

At the game jam I was given 5 tablets to help teach the minicade. Unfortunately due to problems with wifi well as bugs on the site, the students were unable to create or remix the games on the minicade site. Instead I told them about minicade, and luckily we were still able to play some of the games. As the event continued, we brainstormed some ideas on how we could integrate minicade games into one large obstacle course. We were given poster paper, and markers which was awesome and we created our very own life sized candyland game board. It was fun, and more students began to join us. Each student was in charge of drawing one part of the game board, as well as testing the game. In the end we came up with a game where students first completed an obstacle and had to play a mini game afterward. I am happy with the turn out of the event, as well as the support given from everyone at the game jam. I would call the entire event a success.

Classic Character Makeovers

Originally authored by Museum of the Moving Image

Description

1) Warm-up (5 Min)
Discuss some of the group's favorite game characters and what they like about them.

2) Introduce Character Design for Games Session (20 Min)
Where do sprites come from? A game designer may have an idea for a character in mind before they ever begin programming the game. Oftentimes, the design of the character relates directly to the story and mechanics of the game. What games come to mind?

- We're going to be playing some classic games. During the time we're playing the game, keep in mind the design of the characters, story, and mechanics.
- Randomly assign some classic games to play in small groups. (We selected *Ms. Pac Man, Frogger* and *Super Mario Brothers.)*
- Break into large groups by game. Fill in a chart paper grid describing the mechanics, the story, and the movable parts of the character for the game you played.
- Hang your grids and discuss as a larger group: What were the mechanics in the game you played? Did the mechanics correspond to the way the character looked in any way? What did you like/dislike about the character? Was there a story in your game? If yes, what was it? If you were making your own version of this game, what would the character look like?

3) Character Make-over (20 Min)
With your game's mechanics (e.g. Our character just eats.) and/or story (e.g. Our character is out to rescue a princess.) in mind, make-over the character from your game.
(We decided to give them the option of using digital tools or arts and crafts materials.)

4) Character Share (5 Min)
As students complete their characters, copy and prepare them on to a laptop for projection for share out. During the last five minutes, watch a slide show of their characters and ask students to give shout-outs to characters.

Reflections from Museum of the Moving Image 1/23/15

The opening discussion, game play, and grid activity went well. Through discussion of characters they like and characters in the games we played, we were able to have rich discussion about what might inspire or inform game designers to create certain characters in a certain way. This thinking was reinforced by the grid activity and was also an easy way to review the elements of games. Participants enjoyed drawing on the iPads and many remarked on how much they liked the free drawing application we used, Tayusi Sketches.

We ran this activity a little differently for each session, as it's a new one for us. I feel it was most successful when we gave participants more design constraints. When we gave them a specific challenge inspired by our grid discussion, their characters were not only unique, but also connected back with earlier discussion during reflection.

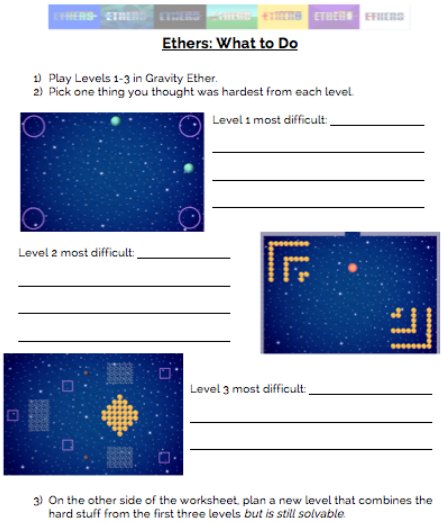
Remixing the Ethers

Originally authored by Iridescent

Description

1) Students will play first three levels of Gravity Ether
2) Students will reflect on the hardest part of each level on their worksheet (see below)
3) Students will plan a new level, combining the hardest parts of the first three levels, but still solvable
4) Students will create and redesign the new level in the level editor of Gravity Ether
5) Students will reflect on how their new level combines the components and goals of levels 1-3 into a new level.

Supporting material:
Ethers Worksheet


Ethers: What to Do

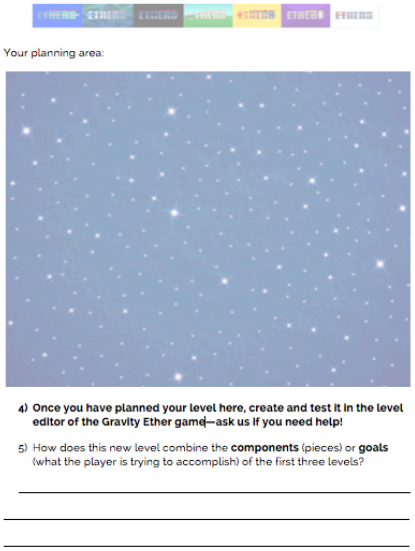
1) Play Levels 1-3 in Gravity Ether.
2) Pick one thing you thought was hardest from each level.

Level 1 most difficult: _____

Level 2 most difficult: _____

Level 3 most difficult: _____

3) On the other side of the worksheet, plan a new level that combines the hard stuff from the first three levels *but is still solvable*.


Your planning area:

4) **Once you have planned your level here, create and test it in the level editor of the Gravity Ether game—ask us if you need help!**

5) How does this new level combine the **components** (pieces) or **goals** (what the player is trying to accomplish) of the first three levels?

Reflections from Iridescent 1/23/15

The students were more engaged with the game and a few played through the levels. On the worksheet, the area where it asked students to reflect on what was hardest was most successful--none planned their level on the back side of the worksheet and instead preferred to iterate within the level editor, which we've seen before.

Remixing Flappy Bird *(or another small game on scratch ^_^)*

Originally Authored by Blue1647

Description

We'll start by introducing the students to Flappy Bird on Scratch, although they'll most likely already know about the game! :)

1. Once the introduction is done, ask each student what they think would be cool to change about the game they just finished.
2. Write each one up on the board.
3. Task them with making those changes using Scratch's remix option.

Reflections from Blue1647 5/9/15

- Things that went well:
    - The turnout for the event was good.
    - The event started on time and most of the kids seemed excited to be there.
    - It was good that we decided on Flappy Bird to remix at the event. Having a game that kids already were familiar with seemed to help facilitate experimentation.
    - Most of the kids took to making MAJOR changes to the game as soon as they could, only to eventually find out that they made the game too difficult/easy.
    - Their curiosity with how to make the game different from the original, yet more fun for them, was incredibly refreshing to experience.
    - Overall, having them understand that "failing faster" in game development is a good thing was incredibly rewarding.
- Things that didn't go well:
    - It was a bit difficult to walk each kid through the design processes and answer some questions regarding the game since they came and went as they wanted to.
- Potential Improvements
    - I hadn't thought about bringing signage for the booth in order to make it easier for kids to know what we were doing at a glance.

Scaffold up! Visual Literacy

Originally authored by Groundswell

Description

The world is full of visual symbols, pictograms, and hieroglyphs. Street signs, subway maps, and packages all use visual communication would be impossible without these images.
Play challenge mode and create your personal symbols based on different trivia questions!
We will start the session by looking at examples of signs and symbols in everyday life.
Some guiding questions for youth:

1. What do these symbols mean to you?
2. What role do these symbols and colors play in your everyday life?
3. What materials were used to create these symbols?
4. What could you add or take away to these symbols to make a stronger message?

Afterwards, youth will collage different icons, add text, or even upload their own background on Scaffold Up! Visual Literacy game to create their own personal symbols! Series, overlays, collage and changes in scale are also approaches youth can experiment with regardless of the theme they choose.
Trivia challenges include creating a symbol using the letters in your name, re-creating a well-known symbol, creating a symbol for a social justice topic and many more!!

Reflections from Groundswell 1/23/15

The students who participated at our station were walked through our visual literacy app by our team of peer Game Jam youth. I believe having a fellow peer introduce them to the app allowed for more engagement and conversation around the goals of the game. Additionally, our team of Game Jam youth were excited about being able to introduce the app to our other Game Jam presenters. The space was excellent and our team had more than enough laptops for game play.

Some of the challenges we faced were presenting a more “buggy” prototype version of our app. Our tech partners were working on the game in “real time” and thus created some problems with access/lagging during play. Our team hoped to see more “finished” symbols, and hope that refining the app will make it easier and more accessible across different ages.

Playing the Beat

Originally authored by Iridescent

Description

Reflections from Iridescent 3/14/15

Playing the Beat

Originally authored by Iridescent

Description

For general info about Osu.

Osu is a rhythm game, played by clicking on numbered circles that appear on your screen with your mouse. The circles appear in timing and patterns that correspond to a song that's being played as you play the game. The game is as much a chance to make your own beatmaps to songs, as well as to play other people's beatmaps.

This station is a more lightly structured activity that relies heavily on facilitation.

Start with a 10 min demo of the game itself. Let kids play through the tutorial, then demo the editor briefly. Show how to add the two basic types of beat (single clicks and drags), and show how to build the beat map in live play versus play and pause mode. Also show how to use the timeline for navigation.

Next challenge students to build a beat map for a 1 min. piece of music, which you have pre-loaded into the game. For this, we tried preloading 3 songs that students can choose from, and cropping them to a 1 min or so length. This solves several problems. It still gives students choice, but not so much choice that they would spend 20 minutes just picking out a song. It also ensures that most youth will be using the same songs, and therefore have more of a joint feeling of work.

We used the following songs:

- Pharrell: Happy (easy, medium and hard)
- Glee: Friday (easy, medium and hard)
- Nintendo: (easy, medium and hard)

For the rest of the time, help out students as needed. The game's editor has a lot of functionality, and rather than explain all of that functionality up front, we'd suggest introducing new features as they seem useful and needed to help students achieve their desired beatmaps. This does mean that as a facilitator, you should become very familiar with the game's editor yourself before running the activity.

Reflections from Iridescent 3/14/15

Osu was a difficult tool to explain and some students (especially younger) felt some initial frustration. We had some success asking them to complete the tutorial first before they jumped in to playing the different levels. There was also a problem with the updating in the account, and they did not have access to the three songs we intended.

Also, the editors were different than we anticipated--some students found editors that we weren't even aware of. Some spent around 20 minutes editing their own levels, but the edits weren't very complex and tended to be more of them just playing with the tool than creating something playable. There were two games (and editors) that beginning students jumped to most- the mode with catching fruit, and the most where you had to hit the mouse in time to the music so only timing and not position mattered (Catch the Beat and Taiko). These might be a better focus than the basic Osu editor. One student played Osu before, and another student hadn't but was very musically proficient, and both were able to use the normal editor without difficulty and produce interesting songs, but no other students were able to do so. High school students were also able to use the tool much better than middle school students.

Extreme Modding: Musical Chairs

Originally authored by Institute of Play

Description

Musical Chair Mod:

1. **Mini Lesson on Game Modding** ***10 mins***
    a. Introduction: Modding a game that already exists is the easiest way to get started with game design. Let's use tic tac toe as an example
    b. Model regular tic tac toe:
        i. Is it fun?
    c. Model modding process:
        i. Let's change **one** thing:
            1. Add a third player and playtest with the group
            2. Get group feedback
            3. Do you think we need to change other things after changing the number of players? What other part(s) of the game (space, rules, goal, mechanic, component, or challenge) would you change to make it more fun/challenging?
                - **Games as systems**
2. **Review the rules of Musical Chairs** ***5 mins***
    a. Now it's your turn! You are going to mod musical chairs!
    b. Review how Musical Chairs is played normally so everyone can get on the same page.
3. **Assign teams (4 people) and roles within each team** ***5 mins***
    a. Time keeper (to make sure the group stays on track in the given time constraint)
    b. Facilitator (make sure every voice is heard!)
    c. Feedback lead (to make sure the group has a plan for how to rollout their game and is ready to do so)
    d. Playtest provoker (constantly encourage team to playtest their ideas)
4. **Brainstorming + Prototyping** ***15 mins***
    a. Each group is given their constraint card (each aligned to a part of a game - space, mechanics, rules, goals, components, challenge) and given time to start brainstorming
    b. Groups do NOT have to use it. It is just a place to start for inspiration.
        i. Constraints:
            1. **Make it collaborative (change the rules)**
            2. **No chairs (change the space)**
            3. **incorporate ball (change the components)**
            4. **incorporate handkerchiefs (change the components)**
            5. **Everyone stays seated (change the mechanics)**
            6. **Not everyone walks at the same time (change the rules)**

c. Teams should start brainstorming immediately and should be playtesting within their group or with facilitators after 5 minutes.
d. Facilitators should rotate to help groups.

5. **Playtesting *25 mins***
    a. Model playtesting process with the big group.
        i. Have the designers ask for one glow, grow, question, idea
    b. Distribute one playtest feedback form per team. This is how designers should record feedback from playtesters.
    c. Divide into group pairs and have them playtest each others' games.

Reflections from Institute of Play 5/9/15

Worked well

- High engagement for those who participated
- Really fun - good non-digital game

Didn't work so well

- Low numbers for first rotation

Improvements to be made

- Better description at the beginning
- More interesting constraints

Mazerunner Beta in Appmaker

Originally authored by Iridescent

This activity is no longer recommended for use...

Because the Appmaker platform was removed by Mozilla and is no longer available

Description

Have kids follow this doc, ideally online so that they can follow the link to their game, but also have paper versions ready.

Have labtops set up with the googledoc open, and logged into an AppMaker account.

Part 1: (5 min)

Step 1 and 2 in the doc.

Students play through the game in it's current form, and then click on the remix button to open up the editor

Part 2: (5 min)

Before step 3 in the doc.

Introduce students to the editor. Point out that object have inputs and outputs wired in certain ways. Make sure to show how clicking on the adventure game screen allows you to add objects, or components, to the screen. Point out that the second row, which are the walls, are what the player should should focus on for making their maze. Also point out the tabs, and show how when a player leaves a screen, it jumps to another page.

Part 3: (30 min)

Step 3 in the doc.

Students start working on designing their maze. Wander and troubleshoot as needed.

Part 4: (10 min)

Step 4 in the doc.

Once students have a maze, there are several things you can prompt students to do for a next step.

As some easy next steps, you can 1) prompt them to redesign the look and feel of their character or of the blocks and floor, to add a theme to the game. 2) you can also prompt them to change the win screen. The channel DE currently goes into a firework display- send channel DE into a different object to change what is triggered by winning the game.

You can also offer some more challenging next steps for those that may seem up for it. The three more difficult actions are written out on the doc under step 4. They are not completely

specified, so you should make sure that as the facilitator you become somewhat familiar in doing these extra steps in AppMaker.

Also, make sure to record the final levels from students in some place that can be easily accessed, so that kids can playtest each other's games. Adding games to the googledoc works well.

Reflections from Iridescent 5/9/15

The ability to remix projects was really helpful in this tool- it made sharing and adding on to each other's projects very simple. And also having a template that was easily accessible was a big help- some kids wrote down the URL for their game, or for the general template, so that they could keep working on them at home. This was much easier than when projects were stored to a saved account that kid's could only access at the game jam. This also made it easier for kids to not just start at ground zero when making a level.

We were worried that this might be too complex a tool to get going, but in fact kids explored it on their own and found it pretty intuitive. Many kids figured out how to recolor objects on their own, even though it wasn't something we expected them to do.

Another nice thing we realized was that they all wanted to play each others' games, and encouraging that if they felt done with their own work went well.

Gamek.it

Description (needs to be fleshed out)

Gamek.it challenges provide kids with simple game constraints that spur great design thinking. Kids will have a choice of two different Gamek.it challenges-- “Mix Strategy & Luck” and “Create Competition”. Kids will come away with a set of rules for their games, diagrams, and pics. These games can be played at home with everyday game objects, like cards, dice, balls, paper, and markers.

Used Aug 2013, before reflections were captured

Twine

Description (needs to be fleshed out)

Twine makes it easy to create interactive stories that are like Choose Your Own Adventure games. Kids will play a sample Twine game and create their own short interactive adventure. One of the easiest platforms to use, Twine requires no programming skills and allows you to create rich, detailed stories where the possibilities are limitless. These games can be uploaded to a DropBox and shared with friends and family.

Used Aug 2013, before reflections were captured

Games from Scratch

Description (needs to be fleshed out)

Students will be introduced to the basics of the Scratch programming language, have opportunities to explore and solve puzzles that will build their skills, ultimately allowing them to remix a game or create their own….from SCRATCH!

Used Dec 2013, before reflections were captured

Rules are the Program

Description (needs to be fleshed out)

Students will play the classic arcade game FROGGER, paying close attention to the rules for each of the main characters (frog, car, etc). Students will be challenged to write down the rules for each individual character, and then play a life-size physical version of the game (we will create a game board on the floor with painters tape) based on those rules.

Used Dec 2013, before reflections were captured

The Model Hardware RaceCar Rally

Originally Authored by CodeCreate

Description

Participants begin by exploring building supplies and then constructing a simple car chassis out of corner protectors and battery holders, cut, drill for and insert aluminum axles, cut and tape a hood covering, wire a motor into the car and race it in a “broadcast” race.

The Model Hardware RaceCar Rally engages youth in building as described above but provides enough activities throughout the production and racing of the cars that diverse interests can and should be discovered among participants and emphasized in the creation of that participant’s model. More aesthetically minded youth will have a great interest in the cardboard chassis of the car and may wish to design this chassis quite differently. More electrically minded youth will wish to add additional “bells and whistles” onto the car such as an on and off switch, an L.E.D. headlight or a buzzer. The above steps should be presented incrementally as well as in isolation so as youth come and go from the station they may work on the activity that most interests them. The components of the cars are, of course, important and should be very inexpensive representations of the youths’ own community, however, should also fulfill logistical requirements (such as the rope being of greater width than the height of the cars). The presence of broadcast media is very relative to availability however should introduce further creative opportunities as needed.

Reflections from CodeCreate 5/9/15

What Worked Well

As the designer of this activity, I can only reflect on it from an outside perspective, but it seemed to be an exceptional activity. As Elsa has noted, the students’ own writing proves a lot of the efficacy of this activity. Indeed, one student wrote, “I learned it will take multiple times to reach your goal.” A great sentiment in itself, but the student then crossed out times and amended the word to “tries.” Reviewing the day with our gifted facilitators Carolina and Susan, who presented the activity, I almost broke down upon hearing about this outcome- is there really any better message we want youth to realize in a meaningful way? A critical strength of this activity, however, is the reflexivity of this “goal-” while it is, somewhat, prescribed, it is largely dependent on the vision of the creating student. In this way, it is with great pride that we realize the message that we sent. Of course, it may not have been as positive an experience for everyone and I can only speculate on the full experience of this author. (Please note more writing to come about this quote and other reflections of the experience at codecreate.us.)

What Didn’t Work Well

In the two hours in which this activity was facilitated, some of the “gaming” aspect seemed to be lost. Perhaps, however, this was appropriate. As Susan explained to me, she was happy letting it be a competition with one’s self. There also didn’t seem to be as much time as would be ideal

to expound on the further technical opportunities or “breaking” one’s circuit with a switch or routing a parallel circuit for a “headlight.” Further explanation from Carolina and Susan will clarify more of the outcomes of this activity.

Resources

Feedback survey

The full survey is available here as a Digital For, or a slightly adjusted version is here as something to be printed out. Here are the questions, listed out.

- How old are you?
- What is your previous experience playing games?
- What is your previous experience writing codes or programming?
- Which stations did you check out at the Game Jam?
- Which station was your favorite and why?
- Tell us something you learned about how to make your game better at this Game Jam.
- Was there anything you didn't like about the Game Jam? Tell us so that we can make it better!

Checklist for those running a station

Before the event:

- Fill out your activity description on the Game Jam Guide
- Bring all needed technology, or arrange to borrow the host's technology
- Gather all non-technical materials
- If possible, figure out how to capture games that students create for later sharing

After the event:

- Adjust your activity description in the Game Jam Guide as needed
- Fill in the reflection section of the Game Jam Guide
- Count the number of games made at your station and add it to the running total

Checklist for those hosting a Game Jam event

Things you are expected to provide:

- Space to run the event, to hold 30-45 youth and 8-10 staff. Space should be reserved from 12:30-5:00PM on the day of the event.
- Wifi connection and to provide some devices that can connect to the wifi, located in the reserved space. 30 devices would be ideal, at least 10 are necessary. You should also ensure that the devices are loaded with all necessary software for the event in advance.
- At least 2 staff to specifically help with running the event. One or both of these staff will act as the event facilitator, keeping track of time and helping keep kids engaged as they wander between stations. If comfortable and willing, the facilitator can also run the intro activity.
- Light snacks for refueling. This is just an open table with graham crackers, chips, fruit, etc. that kids can come to as they get hungry during the open design time.
- A post-jam reflection to the Game Jam Guide after the event

Parent Shareout document

Since parents were not around during the Game Jam, they may not have a good idea of what their kids had been up to when they showed up to the final shareout. Although we prefaced the shareout with a description of what happened, we also wanted to make sure the parents would be able to have meaningful conversations with their kids about what they built. So we created a document with sample open-ended questions for parents to use as they looked at and played the games their kids created. The staff observed this working really well in structuring better interactions between kids and parents at the end of the Game Jam.

Game Jam Creation Share Out
1:30-2:00

Dear Guests,

Thank you for attending our Game Jam share out! Please feel free to walk around the studio and observe the cool things your child and others have taken the time to create today. Here are some questions that you can ask to get more information from the designer about the game…

- What is the game/level called?
- How did you create it?
- What is it supposed to do?
- Why should someone play your level/game?
- How did you redesign it/what did you change to improve it?
- What would you continue working on or change if you had time?
- What was challenging today?
- What did you really enjoy during designing today?

Reflections on the general format

May

Intro activity was longer, but that was good
Different rooms felt less free to roam
Cubelets were easy to jump in and have kids join.
Strangers were working together in the openier
Good physical space for this - library
Dojo - Felt quiet - very personal - good quiet in that they were focused, but wasn't sure if/how to facilitate more with sharing
Maybe it's the school and desks that puts them in that mode?
Cubelets - moved all desks out and changed the space
With Cubelets and Sphero, more tinkering to figure out but didn't design as many games
Maybe we have them mod an existing game to incorporate the bots
Lot of iteration and similar thinking/skills
Musical chairs - not introduce as such - got more people as they notice that they are actually changing parts of the game
SPACE
Kids not distracted with other things - only focus on that one task
Not as much exploring and seeing with other kids are making to get inspired
Mini shareout after rotation
Demo before releasing into wild
More manageable and easier to get around to kids
SHAREOUT
Science fair format an improvement
Maybe reflection moment before shareout, right after surveys
Very focused but kids asking where to go afterwards

April

Having 1 person shareout is good
Good having everyone is same space
Had natural between station connections developed, Tshirts to Grow a game
Dance was on its own
Managing natural flow
Need more clarity on when they could go and not go.
Challenge them to find X of 6 stations
Fill time with activity
For BCCP to see in another venue, see how it works
Basketball was hard to get back and forth
kids who were used to doing these making things, those for which this was new.
Proximity

March event.
Codordojo, intro activity was tougher this time. Last one was hacking rock paper scissors
Stuck more on this activity, but had to push through. Was good to talk through.
Foundation set well. More creativity in this section. More presentations.
Needs more time than Roshambo. More scaffolding, specifically pairing people with staff members. Maybe staff members role is to start acting out their activity.

Have something recognizable in the pitch.
Shareout worked. Maybe critical mass was needed for this format to work.
Some liked the gallery walk, some didn't.
Move chairs away during shareout, for browsing.
Transition kids from stations for surveys.
Group activity with facilitator during 15 min period. Then re-setup space.
Reminder, bring waterbottle
even structure for open sharout, share 1-2-3-4 station in order

Jan event.
Liked the intro- Groundswell
Become too focused on the paper component- either more materials, or make it a purely physical game and take out all components
Too many options is bad
Space was great, perfect for this
Space was open and connected, but didn't bleed into each other
More constraints on the intro, too many options, not a good starter activity
More face time meant better games
Parents were present, family worked well. Everyone was really respectful across the age range.
Adults had fun too
Space was big enough people stuck at the station
No problem with disengaged high school students
Groundswell felt more engaged here than at BCCP, felt more childish than here
Some parents disengaged in the space
Clearer sign up process
revisit gamification
Age spread sometimes is a problem, but wasn't here
Age field in registration
Maybe target groups
Maybe add something to best practices in how to engage with parents in spaces
Was a relatively quiet event, even from MMI space for their space.
Dealing

Dec. event
Flow was well managed, gk, mouse

Snacks era disruptive
Share out was too short, only a a few
No room for feedback
We're able to share out well
This format good, too many choices in share out can be exhausting, and choose not to go to other stuff
Have a paper to evaluate stations, think critically about it
Post it note feedback on stations
Make feedback in the station itself
Playtesting a necessary part of mouse station
Peer to peer feedback, one got stuck, and other had the advice on how to get out of it
Have peers explain to new kids
Second part felt more drop in, drop out, maybe only the first station feels more structured
Mouse plus gk had good repertoire, sent back and forth
More like one event
Good to see creativity of students
They were able to be very creative
Would have been cool for staff to see more of what was going on?
Each activity felt good in itself, but worked together very well
Kids could interact with each other, kids took feedback on where to go from peers
Make them put phones away during intro
Kids didn't want to leave
MMi activity had kids dropping in and out, but welcoming new kids and bringing them in
More time for playtesting
Looked around, then went to one station, then went to playtesting. Maybe second design time is about staying and getting playtesting
One kids didn't want to come, but had a great time here
Kids migrated throughout the space, and did stuff on their own
Make their own station, using space
Eyebeam had trouble with kids just dropping in
Allowed kids to learn and try new stuff
Ricki was stumped by end presentation part. Kids took materials, felt confusing

Oct. event
BCCP is great space, great energy for a game jam
Spaces have been separated, made space feel less connection, couldn’t connect with it
Need to get high schoolers involved the whole time- conflicted with drop in space
Video snippet for advertisement
Require registration
Embedded in other existing programming, here is drop in space, different than any other game jam. Game Jam maybe has to adjust its format. Context has to be different.

Age range was more diverse.
scratch didn't get older students
In the computer lab, there were people filtering in and out, disruptive to the space- if other things are going on, they shouldn't be going on in the same room as something else
Engage older population to be mentors in some way, maybe come in an hour early
Beta had within peer-group mentoring
Maybe tickets are specific to organizations
Playtesting was beyond time limit or not super necessary for most stations
Cubelets, internal playtesting
Should be on the facilitators to make playtesting happen, needs to be in station design, not part of whole event strusture
make a map+schedule of events,
Make pitch more important more focus

What tools and structures work best?

Game design is hard. It involves what can be quite complex tools. And it involves a lot of creativity in generating a novel idea for a game. These two issue often complicate game jam type of events, in particular a short game jam event like the one here. If we were to run a 2-day game hacking event for experienced youth programmers, these problems would be mostly alleviated. But it is much more interesting and sustainable (speaking as an organization running the programs) to run shorter events aimed at inexperienced youth. In particular, one of the goals that became more articulated over the course of implementing this grant was that we wanted to work with youth that were new to programming and hacking but had an interest in games, and that we wanted to move these youth into acting more as creators and less as purely consumers of media. In other words, we wanted to engage novice hackers in a deep game design learning experience in a short time period: achieving this goal ended up being quite a challenge.

Aug 2013: In the first game jam, we found that The Gravity Ether and Gamek.it stations performed this goal pretty well. The Gravity Ether was quite scaffolded and easy-to-use tool, which allowed kids to immediately dive deeply into the constraints of level design. Thus by somewhat constraining what kids could do, the creativity of kids was focused, allowing them to dive deeper and more meaningfully into the core components of game design. Gamek.it was also extremely "easy-to-use," as it involved no technology. Constructing games out of everyday materials was quite easy for students to grok and start experimenting with. Additionally, the Gamek.it design challenges further constrained and directed a students designing, allowing that deep dive into a specific idea and game design in general.

We also found that Hack-a-Game and Twine stations did not work that well at engaging beginning students. This seemed to be primarily due to the complexity of the tool- both were not as user friendly as the other stations. This meant kids spent more time understanding the grammar of the tool, rather than diving deeply and creatively into game design. Additionally, these stations were relatively unconstrained in their focus, we just sort of told the kids “make whatever you want!” The tools were sufficiently open-ended that giving this message meant kids were not able to generate and act on an original idea in a short time period.

I don’t want to suggest that Hack-a-Game and Twine are bad game design tools (in fact I think they are great tools), but rather that they were ill-suited to the aims of a short program aimed at novice hackers. I would suggest that the tool might be made more useful for this purpose by adding more structure, perhaps by adding some design constraints or challenges or allowing students to hack on a partially made game.

Dec 2013: We found that have a variety of different tools that could simultaneously engage kids of different ages, skill levels, and interest was ideal. We had a great mix of both digital and non-digital game-hacking activities, and the staff felt that such variety was one of the keys to that events success. This questions the idea that there is one style or type of activity that works best in a game jam, and that a suitable variety of activities may lead to the most successful game jam.

Aug 2014: Two stations at this event had both a physical and digital component to their station, and this worked exceptionally well. There was always some activity that youth had to do on paper before building out their game. This paper activity served several purposes. First, it helped kids plan and think out designs before getting absorbed in a digital tool. Second, it alleviated technical difficulties as the number of devices was no longer the primary constraint on how many students could be at the station. Additionally, when technical problems inevitably occur the paper prototypes can provide something for student to do. Third, during the shareout at the end, whether or not a student had a game to showcase, every student had a paper design to showcase, and posting those designs on the wall was a great way to facilitate sharing during the parent shareout session.

Several stations also had multiple components to their activity, and they found that physically separating out the parts of the activity was very helpful, both from a logistics and from a learning perspective. This would mean creating the “draw out your design here” table, and the “code your design into the computer” table, rather than just having the student draw out the design in front of a computer and then code it.

One staff had an interesting interaction with a student, in which they asked the student about their experience at a different station. The student described this fantastic game concept that they had planned out, all the pieces and characters, what happened in the game. The staff asked if they could see the game, and the student said they hadn’t had a chance to build it, only plan it out, but that was clearly fun and rewarding by itself. The paper documents were able to

scaffold that kind of experience, where a game was fully conceptualized and thought out, even if it wasn't actually created.

We noticed that students who simple modded an existing game, rather than creating a new game from scratch, didn't always feel enough ownership to call the game their own. We wonder how much this has to do with the activity or with how the activity is framed. Since modding challenges can be very effective in this kind of context, we'd rather encourage orgs to think about how to inject opportunities for youth to feel ownership rather than pushing away from modding in the direction of activities that are more about building a game from scratch.

Technology Concerns

Aug 2014: It is worth noting that at every event so far, we've run into some kind of technical difficulties. We are running events for ideally 40 students, and trying to get 40 devices available for those students is difficult, and even if we could get 40 devices, having all of them connect to the internet seamlessly at the same time is another potential stranglehold. At this point, we have several strategies to engage 40 kids without being bogged down by technical difficulties:

1. Always include at least 1 totally non-digital station. Youth seem to appreciate the variety of activities anyways, and it cuts down on your tech needs. Especially if attendance is uncertain, you can always direct more youth to this station.
2. Have youth work in teams. It forces collaboration and communication, which we've found to further learning (youth learn more when they have to vocalize ideas to a peer) and so is useful in it's own right. But this also cuts down on your technology to student ratio.
3. Make or use activities with both a physical and digital component. This way, the booth won't be totally shut down when the internet goes out- you can just direct youth to focus on the physical component.

Using these guidelines, we've been able to run 4 stations for 40 youth needing only about 15 devices on hand.

Incorporating Playtesting

Aug 2013: The playtesting station did not work out exceptionally great. We really wanted to emphasize playtesting as a way to both get feedback and redesign your game, as well as to interact collaboratively with peers. We had a lot of discussions beforehand about whether to playtest at stations at a certain time, or to create a separate playtesting station. We decided to make a separate playtesting station to account for pacing issues among the four different platforms. However, this did not work exceptionally well since group timelines rarely aligned. As a result, facilitators had to pull individuals out of groups to playtest while other members continued working, and it felt disruptive.

Dec 2013: We decided not to budget any particular time to playtesting, but most activities at that event had a playtesting component structured into their hour long time slot. This seemed to work well, than having a global playtesting station or playtesting time, though it makes the playtesting more informal and is harder to ensure that each student has a chance to playtest. In any case, it appears that although we agree playtesting is crucial in the game design process, it will happen naturally and explicit playtesting does not make or break this kind of event.

Aug 2014: This was the first event that had an explicit facilitator (someone coordinating the event who was not running a station). Besides keeping the event on time and focused, this also helped the playtesting issue. The facilitator understood which stations needed playtesting, and when they say kids become disengaged from stations or wander around the room, they could direct them back to a particular station for playtesting purposes. The playtesting was a little scattered and informal, but did not feel disruptive. The staff noted that playtesting feedback often fell into one of two categories: 1) the feedback was overly harsh and not too helpful, or 2) the creator of the game was not always receptive to the feedback. We decided this could be fixed by setting group norms of playtesting- what sort of feedback you should give, and how you should receive it. This should probably be scaffolded into the intro activity, and we will attempt this in the next game jam.

The Introductory Activity and Event Consistency

Aug 2013: We separated out an icebreaker (Spectrogram) from the main introductory activity. There wasn't anything necessarily bad about this, but it did take up a fair bit of time. We discussed the possibility of incorporating the two into one- for example having a game-based icebreaker like Zip-Zap-Zoop, that kids then hacked as an intro to game design. We attempted this in the second game jam, by using a tic tac toe hacking activity as both the icebreaker and dame design introduction activity, and it worked well.

There was a related concern about event consistency. In general, it would work really well to constrain the variety of tool choices they have, and to pair an introductory activity which specifically leads into and develops a vocabulary appropriate to those tools. On the other hand, the variety in the second phase of the event was appreciated by all, and terms and ideas from that event's introductory activity continued to be used by kids in other stations despite the variety and apparent inconsistency of the event. Towards that end, it's not exactly clear how general or specific the introductory activity should be customized to the stations offered at that particular game jam. For now, we will continue to try different kind of intro activities, but always emphasize the 5 game design principles: goal, rules, space, components, and mechanics.

Showcase event

Aug 2014: A few random reflections about the final showcase event.

- When kids came in a group and were showcasing their design to peers, they were very reluctant to do so. On the other hand, when kids came with parents and were showcasing their designs to their parents, they were very eager to do so.
- Once someone started showcasing, other peers who initially didn't want to showcase their design then wanted to. Fostering that first showcase is important.
- Perhaps we can offer an "open studio time" time of thing- kids aren't presenting, just working on their design, but when someone comes up to them, they stop working and explain what they are doing. Keeps everyone busy, and makes the showcase lower stakes.
- Some stations might work well as a "gallery walk" format, where certain students will present their designs to a group for 5 min, and then they will walk to the next station in the gallery where a new group of students will present.

Numbers needed for reporting on NYC grant

August 2014 game jam
35 youth attended
7 Game design documents recorded
9 Platform games made
5 Pong mods modded
15 Power gloves made
17 grow-a-game documents recorded
10 game prototypes made

October 2014 game jam
20 youth attended
9 Scratch That games made
7 Robot games made
12 stories crafted from the Ether
18 Gravity Ethers levels made

Nov. 2014 game jam
30 youth attended
3 published Ethers levels
1 scary maze hack

Dec 2014 game jam
50 youth attended
18 grow-a-game documents recorded
14 levels were created on Gamestar
13 Scratch remixes made
20 Brickbreaker pieces made
1 awesome collaboratively-made stop-motion video of gameplay
3 Minicade games made
18 Pixel drawings and 9 Pixel Press levels made

Jan 2015 game jam
20 youth attended
11 Scratch remixes made
2 levels published to the Ether
1 design doc made for the Ether
17 characters were created
8 remixed signs were made

March 2015 game jam

49 youth attended
8 original Osu beatmaps created
25 Pixel Press Games made
11 Scratch remixes made
8 Scary Mazes crafted

April game jam
50 total youth
45 total makes

May game jam
44 youth
19 Pixel Press levels made
2 Musical Chair mods
13 Mazerunner mods
6 Robot levels made