Dig Deeper with Engagement Games

A presentation deck for training educators on the Project MASH engagement games process, from the Engagement Lab.

Full day version
Today

1. Welcome (15 min)
2. Play & Games (85 min)
3. Engagement Games (1hr 50 min)
4. Project MASH (15 min)
5. Reflection (30 min)
6. Conclusion (10 min)
1. Work in small groups to create a list of some broad challenges facing your school community.

2. Write these challenges down, give each a name/heading.

3. If the workshop has more than four groups, then each group should decide which 1 or 2 of their challenges they find to be the best material for discussion. (We’ll revisit these challenges later in the workshop.)

   See the next slide for sample challenges...
Create broad challenges that concern a range of different school community members. For example:

**Going Green**: How can we make our school more environmentally sustainable?

**Eat Smart**: How can we provide students with access to healthy food choices inside and outside of school?

**Youth Jobs**: How can we create opportunities for students to work at jobs, earn a decent wage, and learn skills valuable for the future?

**Respect**: How can we create a shared language and culture of respect at the classroom, school, and larger community level?
What is play?
What is Play?

• An activity in which means are more valued than ends

• Is non-literal, imaginative, marked off in some way from reality (a.k.a. the magic circle)
Children often encounter the world through play.
Games structure the “magic circle” of play with goals and guidelines for action.
Games help us harness the power of play to:

- Foster **learning and empathy** (which are necessary to develop strategy)
- Build **social norms** (i.e., competition and cooperation)
- Allow for a variety of **player motivations**
Uncertainty and suspense are built into the game’s structure. Escalating challenges and clear feedback focus attention, support reflection, and build meaning.
Elements of a game

- **Objective and feedback**: What does it mean to win? How to players evaluate their progress?
- **Actions/mechanics**: What actions can players take, and how does this move the game forward? What are the obstacles?
- **Clear rules/boundaries**: What are the limits on player choice? What is/is not allowed?

...and room to play: uncertainty, choice, strategy, interaction
Modification of existing game elements is a common strategy for creating new games.

Most of us know the game of Checkers.

In fact, Checkers is a mod of an English game called Draughts, played with bottle tops... And Draughts is itself a mod of several similar ancient games dating back several thousand years...
Elements of Checkers

- **Objective and feedback:** Winning is achieved by clearing your opponent from the board, while losing your own pieces gives feedback on your gameplay.

- **Actions/mechanics:** Pieces advance diagonally and capture with a diagonal jump.

- **Rules/boundaries:** Players can only move on their own color, on the board, cannot jump their own pieces, and must land on an open space.

- **Room to play:** A player doesn’t know what their opponent will do, but may have many options available to them.
Challenge #2: Mod It!

Goal: To modify Checkers, the modern version of Draughts

Time: 20 min

Steps:

1. Work in groups of 4-5.

2. Discuss what you know about how to play checkers.

3. How can you modify it? See the next slide for more specifics

4. Name your game, and create your pitch.
Challenge #2: Mod It!

Goal: To modify Checkers, the modern version of Draughts

Time: 20 min

Pick 2 or more of the following game elements to mod:

1. **Objective and feedback**: In “Suicide” Checkers, the first player who can’t make a legal move wins..

2. **Actions/mechanics**: What if you could bargain to get checkers back? Or sacrifice pieces to take another turn? What if play happened off the board and involved physical movements in the room?

3. **Clear rules/boundaries**: In some versions of Draughts, players have to capture as many pieces as they can in each turn.

4. **Theme**: Introduce new colors and shapes or use humanoid figurines instead of discs?
Challenge #2: Mod It!

Goal: Pitch your game

Time: 15 min

Each group pitches their game to the other groups:

• Name
• Objective and feedback
• Actions/mechanics
• Rules
Challenge #2: Mod It!

**Goal:** Play another group’s game

**Time:** 15 min

Each group plays the game created by another group. (If there is an even number of groups, pair up. Otherwise, rotate.)
Challenge #2: Mod It!

Game design is a cyclical process.

You can always improve or modify what you have for new circumstances.

Most games go through many cycles, or iterations, before they’re published.
Challenge #2: Mod It!

Goal: Share, Reflect, Discuss

Time: 10 min

Consider your group’s design and the other group’s design:

• What elements of each worked for you?
• What would you like to change?
Challenge #2: Mod It!

Goal: To reflect (whole group)

Time: 10 min

- What did you learn from this activity?
- How can you connect this to student learning in the classroom?
Collaboration and Systems Thinking

Modding even a simple game not only gives students a chance to collaborate creatively, but it can teach students how changing one part affects the whole.

This kind of thinking shows up in causal relationships and logical arguments in all the core content areas. It’s also known as systems thinking.
Students and teachers can learn even more by modding and playing games specifically designed to teach them about real-world problems.
Games & Real World Problem Solving

There are a number of ways in which games or game-like systems have been used for real-world problem solving.

- Games that model real-world systems
- Games that teach values
- Games that accomplish real-world actions
Games that model real-world systems

Sim City is a fun simulation game designed to entertain a mass audience.

Players realized its educational value, and educators have built projects and curricula around it.
Games that model real-world systems

• present players with multiple goals, tradeoffs, and uncertainty

• teach the workings of the system through play
Let’s explore @Stake, a game that teaches the players to value diversity, cooperation, and negotiation.

Similar to games that model systems, games that teach values provide plenty of room to play.
What is @Stake?

@Stake is a paper-based game designed to spark civic process around local problems or challenges.

It is a role-playing game where players propose solutions to local challenges from the perspective of different stakeholders.
Challenge #3: @Stake

**Goal:** Prioritize your challenges

**Time:** 15 min

1. In your groups, review the challenges you chose earlier today.

2. Pitch these challenges to the other groups.

3. Together, all the groups vote to choose the top four challenges that everyone will address, and which challenge will be addressed in each round of the game.
Challenge #3: @Stake

Goal: To play 4 rounds of @Stake

Time: 60 min

Details

Timing

- Brainstorm: 1 minute
- Pitch: 1 minute/player
- Deliberation: 90 seconds total
Challenge #3: @Stake

OPPORTUNITY:
Create new roles as you play!
Challenge #3: @Stake

Goal: To share and reflect [small and large group(s)]
Time: 10 min

What kind of impact do you envision this game having?

- On students’ learning of core content?
- On relationships and culture at the classroom level, school level, and within the greater school community?
Can a game go beyond learning to facilitate real-world action?
Here is a good spot for a break if you need it.
Can War Game

• Students are split into teams.

• Each team is assigned a fixed food budget.

• Teams get points for bringing in the most nutritious canned food within their budget.
Can War Game

✓ Real-world actions: Can drive
✓ Core learning activities: Analyze nutritional info, budget for cost versus health
✓ Values: charity, nutrition, frugality
How Well Can You Spell?

• Students are split into pairs.

• Each pair rolls the die. The number rolled determines the number of letters in the word that the pair has to spell. (With older students, use more dice for longer words.)

• Partner A writes a letter, then partner B writes a letter. This continues until a word of the specified length is spelled. (No other type of communication is allowed!)

• Different pairs compete at the same time to see which pair is fastest. The first pair to win five rounds is the winner.
How Well Can You Spell?

✓ Real-world actions: Being silent, spelling a word together

✓ Core learning activities: Spelling, real-time problem-solving

✓ Values: Collaboration
Challenge #4: Make your own!

Goal: To create a game that incorporates real-world actions

In your groups:

1. Choose one of the four challenges from the @Stake activity. (5 min)

2. Create a new game that incorporates real-world actions to address your chosen challenge. (40 min)

3. Pitch your game to the other groups. (15 min)
Challenge #4: Make your own!

Goal: To create a game that incorporates real-world actions

Time: 40 min

10 minutes to define:
• Real-world actions connected to your chosen challenge
• Core learning activities
• Values

30 minutes to define:
• Name
• Objective and feedback
• Game actions/mechanics
• Rules/boundaries
Collaboration is more fun – and productive – when you say “yes” to your peers’ ideas. So for this challenge, try following this rule:

You get three “No, but” cards to use when saying something along the lines of, “No, we shouldn’t do that, but we should do this.” Once you’ve used each one, you can only say, “Yes!”

So, your response to every other suggestion needs to take the form of “Yes, and…” to build on teammates’ ideas.
Challenge #4: Make your own!

Goal: Pitch your game

Time: 15 min

Each group pitches their game to the other groups:

• Real-world actions
• Core learning activities
• Values

• Name
• Objective and feedback
• Game actions/mechanics
• Rules/boundaries
Challenge #4: Make Your Own!

Goal: Play another group’s game

Time: 15 min

Each group plays the game created by another group. (If there is an even number of groups, pair up. Otherwise, rotate.)
Challenge #4: Make Your Own!

Goal: Share, Reflect, Discuss

Time: 10 min

Consider your group’s design and the other group’s design:

• What elements of each worked for you?
• What would you like to change?
Engagement Games

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Noun

1. The game is the process
2. Acts of play are the real-world actions
Engagement games ground academic learning in a playful approach to real-world problems.

Engagement games are not built around a single piece of grade level content; instead, they complement, enrich, and motivate inquiry into a range of issues.
Working with your team, discuss how engagement games:

- Foster engagement
- Relate to different content areas
- Build skills
  - subject matter, 21st century, social & emotional learning
- Align with the Common Core
**CLASSROOM CULTURE**
How can you set up your classroom for the successful implementation of engagement game activities or projects? Is anything missing?

**STUDENT INTEREST**
How do you integrate student interest into your instruction? In what ways do engagement games support this process?

**TIME & SCHEDULE**
How does the organization of time (bell schedule) play a role in planning? In what ways will your pacing have to be adjusted to integrate engagement game activities and projects into your instruction?

**ASSESSMENT**
What is your current system of grading and assessment? How will you apply these to engagement game activities or projects? In what ways will you have to adjust this system?
Great learning is open, authentic, and connected.

Project MASH is a digital learning network for teachers and students, and the organizations that serve them. Supported by the Pearson Foundation’s New Learning Institute, Project MASH introduces you to learning experiences that involve real world problems, as well new ways to solve them. Join us and be the source of learning.

Explore Project MASH

Project MASH
On Project MASH, classroom teachers can learn from and collaborate with some of the nation’s most innovative learning organizations. They can also share unique, project-based learning experiences with their teaching peers and their students.

Join the Project MASH alpha
Food For Thought

Food is at the center of our daily lives. We need it for nutrition, but it's also so much more. Whether it's Flamin Hot Cheetos, or a good ole' fashioned gala apple, all of the food we eat has an interesting story to tell. Have you ever wondered where it all comes from? How it's made and packaged? How it gets to you, and whose lives it affects along the way? This challenge will help you take a deeper and more creative look at a part of our lives that most people take for granted.

Goal:
Choose a food item to focus on and conduct in-depth research to understand it on as many levels as possible. Based on your insight about the food item or product, design and develop a "rival" food item that improves on the original in some way.

Intended Learning Outcomes

- Think more critically about the role of food in our lives.
- Applying observation, interviewing, researching skills to a real-world challenge.
- Work collaboratively as a creative team to develop and communicate a concept.
Engagement games can be catalysts for the power and productivity of playful learning. They harness play to help students learn difficult concepts and—more importantly—to engage players and apply their learning in live, real world scenarios. Engagement games use game mechanics to bring play and serious real world processes together, so that real action occurs while playing the game. Fusing a sense of play onto serious processes—from community deliberations to disaster preparedness—can result in increased participation and diversity, increased trust in the system and each other, and most importantly, increased ability to understand and affect change.

Problem-based learning (PBL) challenges students to identify and examine real problems, then work together to address and solve those problems through advocacy and by mobilizing resources. Importantly, every aspect of the problem solving process involves students in real work—work that is a reflection of the range of expertise required to solve issues in the world outside of school.

While problem-based learning can use any type of problem as its basis, the approach described here is deliberately focused on local ones. Local problems allow students to have a meaningful voice, and be instrumental in a process where real, recognizable change results. It also gives students opportunities to source and interact with a variety of local experts.
1. Login to Project MASH

2. Join the Engagement Games Group

3. And answer this question:

   After today’s workshop, what more would you like to learn about engagement games?