Making Real Change
Learning from Game Developers: The Transformational Design Model

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How do we Design To support Change?
Problem: Teach safe handling of raw chicken.

1. Desired change
2. Transformational activities
3. Design of digital tools
The Secret Process for Designing Games that Matter

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Choose your challenge:

- Bring Sewing Skills Back
  The maker movement has raised interest in creating, reusing, upcycling, and reinventing. It’s also revealed a critical side effect of having removed home ec classes from schools — no one knows how to sew anymore. From sewing on a button, to selecting fabric, to constructing and using patterns, basic skills are required before building costumes, repurposing vintage items, and integrating new wearable technologies. Without sewing machines, and family members who know how to sew, creative individuals are struggling with how to learn these basics.

- Design a game that solves this problem, and gets people sewing again.

- Raise awareness of peanut allergy dangers
  Peanut allergies are significantly different than other food allergies (meaning someone who is allergic to peanuts is not allergic to tree nuts, and vice versa). Some people experience very serious and sudden reactions, and can be at risk of death with even a very small exposure.

Design a game that solves this problem, and gets people sewing again.
Because I Care, I Wash My Hands

Hand washing and good hygiene show respect and consideration for co-workers, your family and the community. Research shows that child care centers can be significant sources for the spread of illness within a community, even indirectly impacting families who do not have children.

Ideally suited to child care centers, this fun, hands-on curriculum, packed full of songs, activities and experiments, helps even very young children understand why and how hand washing helps keep friends and family healthy.

Building on scientific research conducted at Michigan State University, this five-day curriculum is available for free download of the daily activity lists, child materials, and songs. The curriculum materials, developed by Media Productions at New Mexico State University, also include teacher training videos and free downloadable songs for the classroom.
Julia Child Was Wrong: Don’t Wash Your Raw Chicken, Folks

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Heard on Morning Edition
What change do we hope to see in learner?

How will our digital tools support lasting change?
What change do I want to see in the learner?

- Knowledge: what they know
- Skill: what they can do
- Behavior: how they act
- Emotion: how they feel
- Physiology: how they are
- What they can do
- How they act
- How they feel
- How they are
What change do I want to see in the learner?

- **Knowledge**
  - What they know
  - Washing chicken spreads bacteria

- **Skill**
  - What they can do
  - Simply move chicken to pan

- **Behavior**
  - How they act
  - Teach others

- **Emotion**
  - How they feel
  - Value new, healthy technique

- **Physiology**
  - How they are
  - Fewer adverse problems
What activities lead to change?

- Watching others use safe technique.
- Investigating and computing food safety data.
- Becoming familiar with food safety standards.
- Hearing dramatic stories.
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<td>Build Mental Model</td>
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<td>Build Relationship</td>
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<th>Experience Things</th>
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<td>Be Immersed</td>
<td>Examine Surroundings</td>
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<td>Be Rewarded</td>
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What activities lead to that change?
Focus on what will encourage user change!

It’s too early to think about the media tools!
Problem: Eating raw cookie dough.

What change do we hope to see in learners?
- Understand why this is a problem
- Be aware of the danger

What activities may encourage change?
- Using science-based animations to explain the science
- Investigate potential health impacts, especially for kids

How can interactive media facilitate change?
Anticipated use of games, animations & interactives

**Where and how** will it be played?
- What is the venue?
- Using what devices?
- What context?
- Will social interaction be important?

What is the desired **user experience**?
- What will make the game challenging?
- Can the player win? How?
- Why will people play?
- Why will they play repeatedly?
The Transformational Game Design Model

1. Describe the change
2. Choose the activities
3. Design the game
Development Process

- Prep
- Design
- Production

Everything Else

1 2 3
get funding
 identify content experts, conduct initial research
 articulate high level outcomes
 establish parameters (budget, timeline, device)
- design summit (approach, media, specific outcomes)
- multiple versions, testing, revision
- assessment: how will we know if we succeed?
- group reaches consensus on best approaches

- working prototype (and sign off)
- art style, platform, media are agreed on
- design documentation
final programming
complete art, audio, text, other assets
supplemental materials
prep for assessment, promotion, placement

Everything Else

• ready for initial release to target audience
Everything Else
Design
Production

• studio, process and project management
• assessment, research documentation
• promotion and placement
• maintenance, additional versions, expansions

Prep

• archive and sunset project
Be our partner.

Let's create something great together!

learninggameslab.org
Designing Digital Learning Tools

The Transformational Game Design Framework

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