Practical Lessons From Creating the Control-Alt-Hack™ Card Game

Research Challenges for Games In Education and Research

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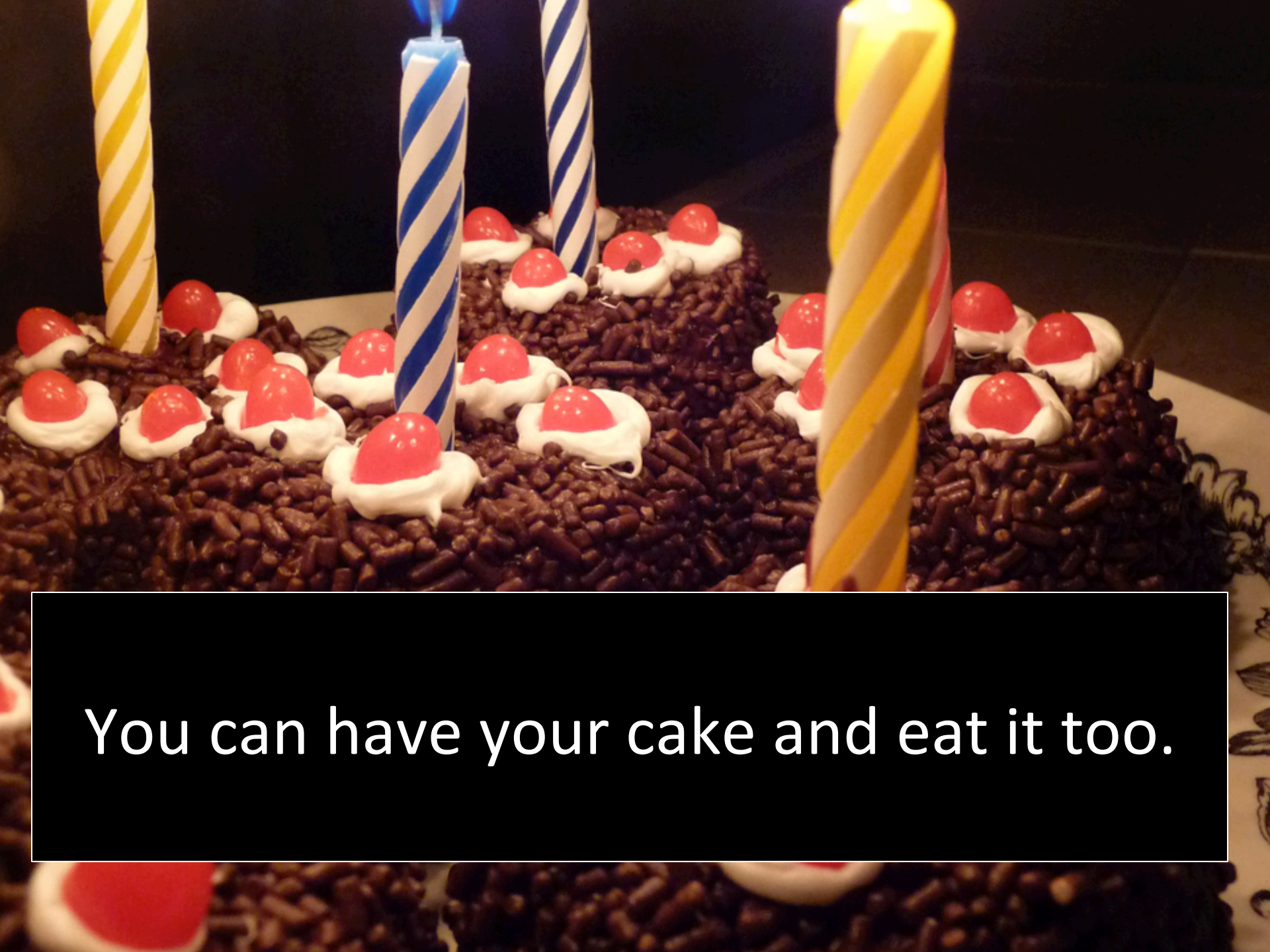
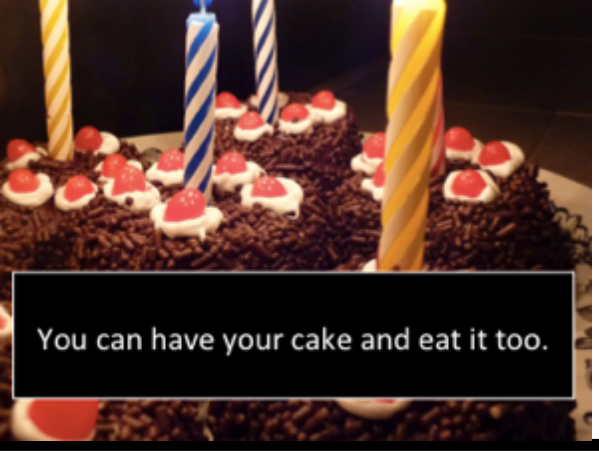
….aka, a talk about cake.

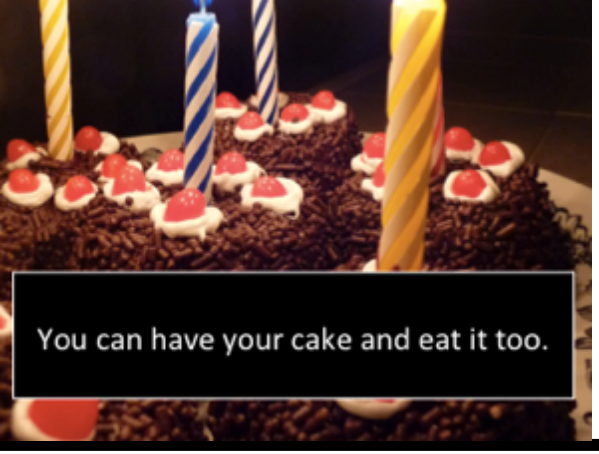

You can have your cake and eat it too.



Diversify positive outcomes

Primary design goal was for recreational, voluntary play

Evaluated (and published) on the classroom context

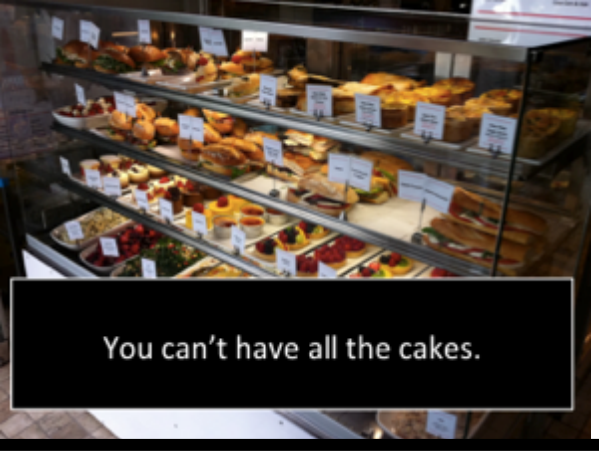


Diversify positive outcomes

Primary target audience was age 18-30 in CS and STEM

First interested (evangelizing?) group was security-minded

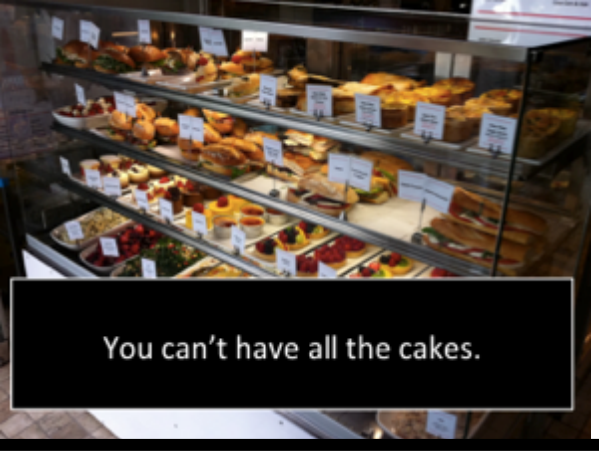
You can’t have all the cakes.



Prioritize

Tradeoffs between:

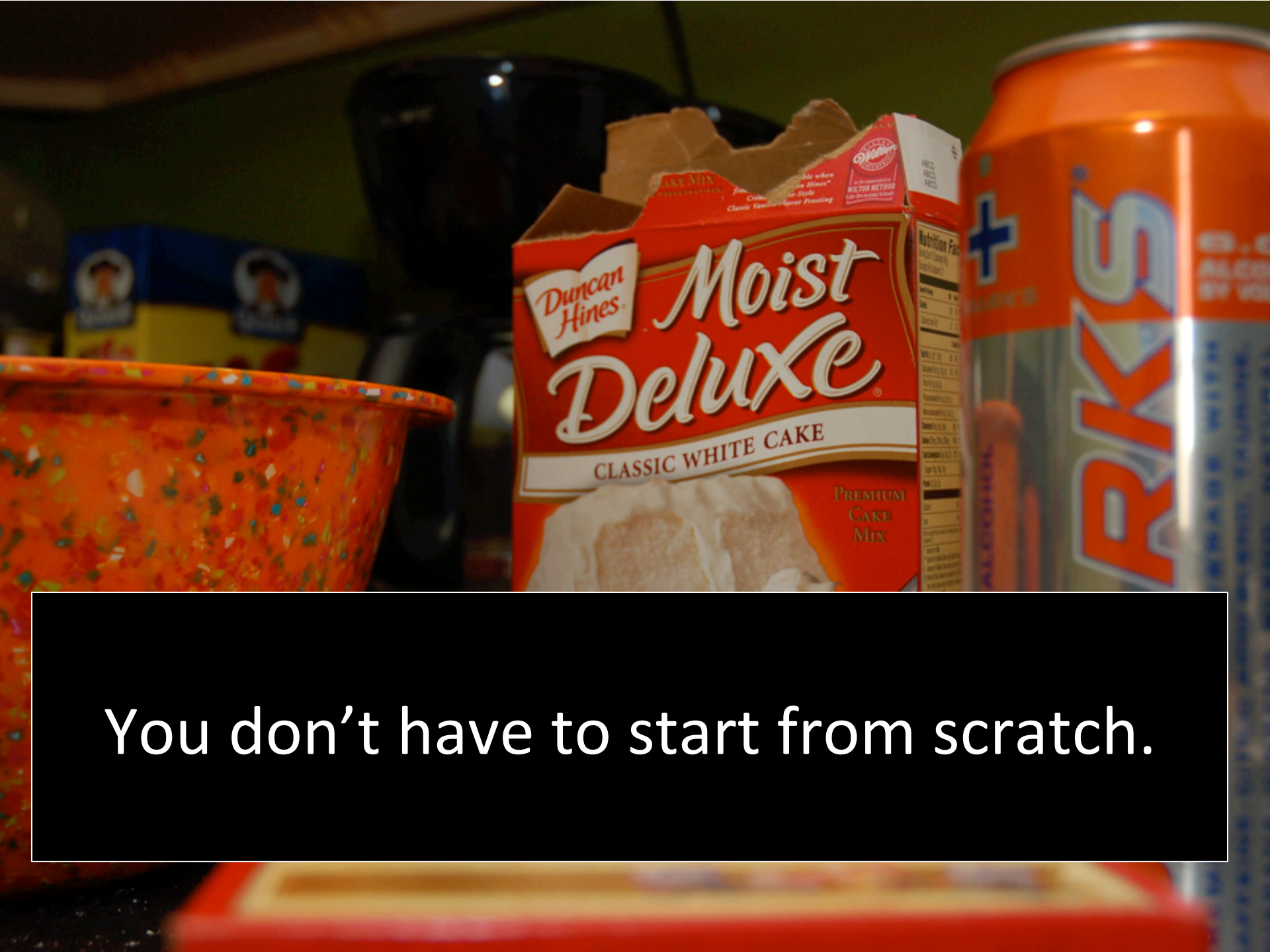
- Control over details
- Calendar time
- Person-hours
- Cost
- Quality



Prioritize

Target audience & play context influences:

- Graphic design & illustration
- Properties of mechanics
- Level of technical detail
- Jokes/references to include
- Mechanics choice



You don’t have to start from scratch.

Pre-Existing Mechanics

You're probably not a master at gaming mechanics

Put your time & effort on the important parts

Use quality ingredients.

Locating Expertise

Many people (can be) involved:

- Mechanics Designer
- License Coordinator
- Graphic Designer
- Illustrator
- Manufacturer
- Production Manager
- Trademark Lawyer
- Distributor
- Retailer

Decide how to serve your cake.

Distribution/ Production Decisions

Download and self-print

Print-on-demand

Domestic (Smaller) Print Run

International (Larger) Print Run

Distribution/ Production Decisions

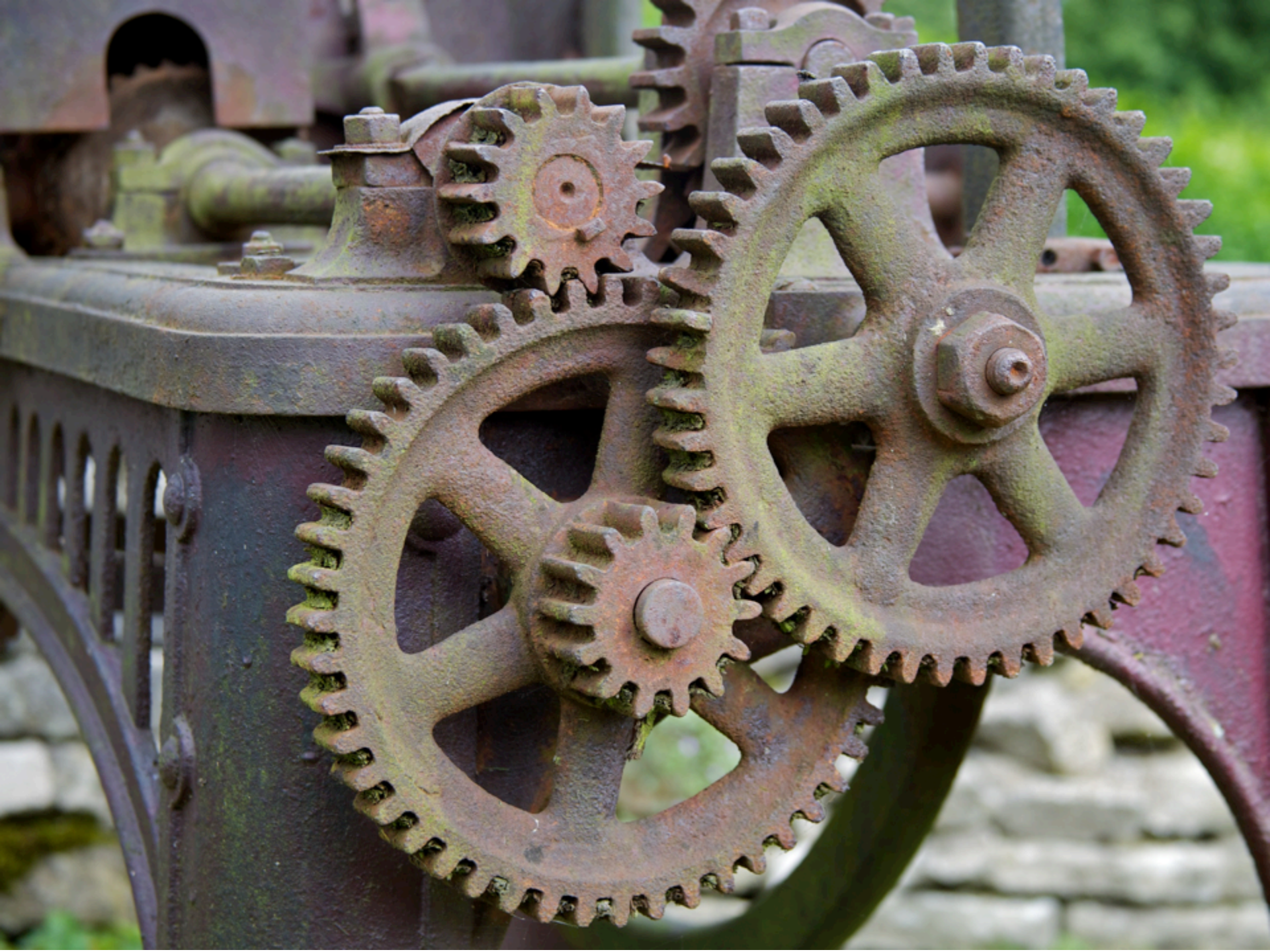
Tradeoffs between:

- Cost per unit
- Customizability
- Quality
- Minimum order size

Distribution/ Production Decisions

Affects:

- Timeline
- Graphic Design/Illustration Parameters
- Budget



Can you have too much cake?

Games in the Classroom

Red Queen Effect

Games in the Classroom

Red Queen Effect

Excessive focus on mechanics

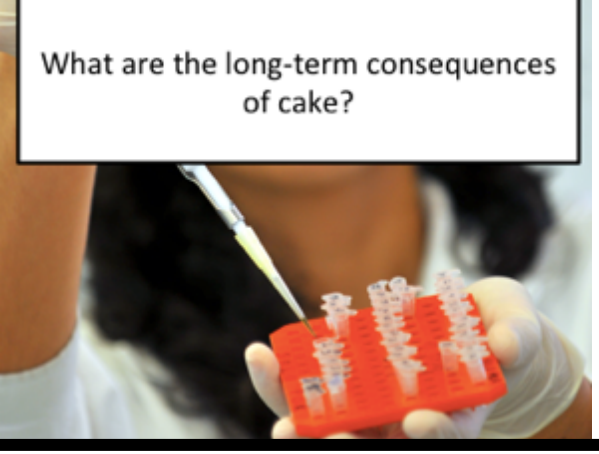
Games in the Classroom

Red Queen Effect

Excessive focus on mechanics

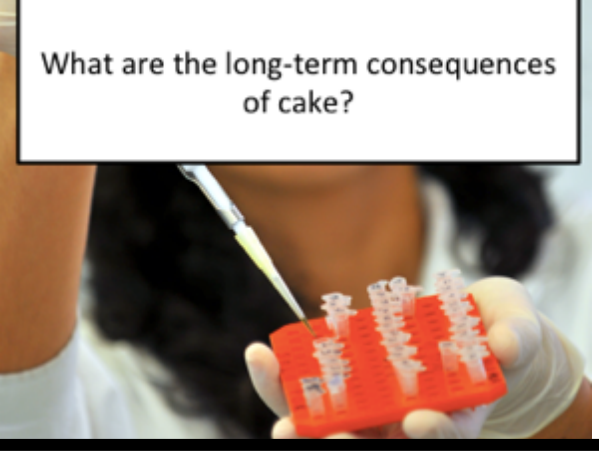
Oversaturation

What are the long-term consequences of cake?



Research and Evaluation

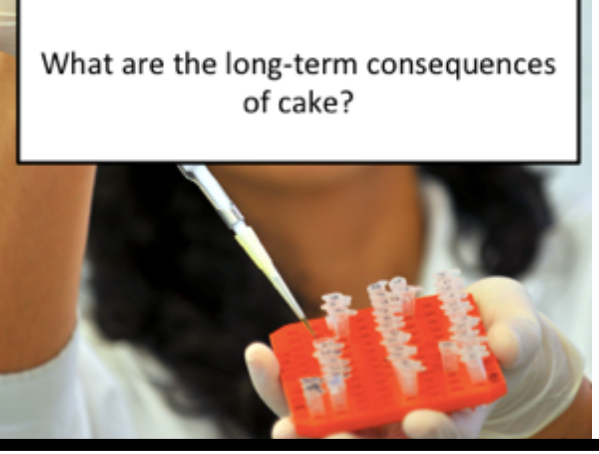
Metrics for more nebulous goals



Research and Evaluation

Metrics for more nebulous goals

Isolating conflating variables



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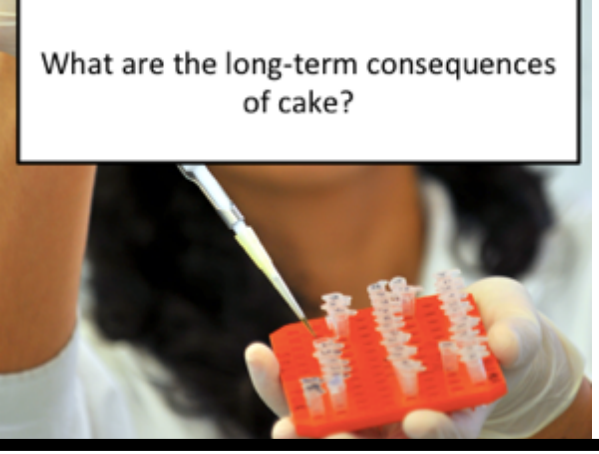
Evaluations for different stages/styles of research



Research and Evaluation

Metrics for more nebulous goals

Isolating conflating variables

Evaluations for different stages/styles of research

Research investment vs. research yield

Thanks. Questions?