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
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’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

Decide how to serve your cake.
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
Research and Evaluation

Metrics for more nebulous goals

Isolating conflating variables

Evaluations for different stages/styles of research
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Metrics for more nebulous goals

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Evaluations for different stages/styles of research

Research investment vs. research yield
Thanks. Questions?