Feb 3rd, 11:30 AM - 12:30 PM

An Analysis of the Efficacy of Climate Challenge

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“An Analysis of the Efficacy of Climate Challenge”

Nicholas Barnes, Leslie Cook, Brandon Sharpton
Background

- CC Game: “games in which CC is at the center of the storyline, and [exclude] those where CC was a minor additional aspect” (Riecken, 2013).

- The researchers used methods like

  - narratological: “Deals with the structures and function of narrative storylines/backgrounds.”
  - ludological view: “The study of structures and features of games’ such as video game objectives.”

Current Research

- Survey of CC games (Riecken, 2013)

- About using CC games in the classroom (Tedesco et al, 2015)
Climate Challenge (BBC. 2006)

- Online simulation

- The gamer has been elected to be the leader of the European Nations.

- The gamer must pick up to 6 cards that come from 5 categories: national, trade, industry, local, and household legislation.

- Balance resources while also lowering carbon emissions.
Climate Challenge as a CC Game

- Issues with CO₂ emissions and human influence
- Climate Change Video games as a medium for awareness
- Effective, but has its flaws
Methods

- Convenience and Snowball Sampling
- Grounded Theory and Inductive Thematic Analysis
- Post- and Pre-test Survey
- In-Playthrough Recording

THE CLIMATE TIMES

Economists urge fuel tax caution

Experts warned that government plans to increase the tax on fuel, already close to 80% of the price motorists pay at the pump, could harm Europe’s economy.

"I can understand why president Richardson has called for an increase," economist John Smith said. "It's vital the government takes action on climate change but my analysis shows that Europe could experience a significant economic downturn if taxes go up."

Environmental campaigners have generally supported the tax plans as an important step in reducing greenhouse gas emissions. "There is a direct link between the greenhouse gas emissions and climate change," a spokesman for Earth Concern Network said. "We must act now to save our children from any prospect of a healthy..."
Results

- Emotion: 16.7%
- Reading the Prompt: 27.8%
- Realization: 16.7%
- Choosing an Option: 16.7%
- Confirmation: 22.2%
Results

Amount of gameplay

- Daily: 33%
- Weekly: 17%
- Monthly: 25%
- Yearly: 17%
- Miscellaneous: 8%
Results

How would you categorize yourself in terms of your knowledge of climate change? (Choose one)

- Very knowledgeable: 40%
- Knowledgeable: 33.3%
- Somewhat knowledgeable: 13.3%
- Not knowledgeable: 13.3%

15 responses
How would you categorize yourself in terms of your feelings about the risks posed by Climate Change (choose one):

15 responses
Results

Have you ever played the following games? Check all that apply:

15 responses

- Board Games: 15 (100%)
- Card Games: 15 (100%)
- Computer Games: 15 (100%)
- Console Games: 13 (86.7%)
- Arcade Games: 14 (93.3%)
- Mobile Games: 15 (100%)
- I have never played any of these games: 0 (0%)
Survey Result Discussion

- All participants had played games before
- Most people play games weekly or daily
- We need climate change games!
Discussion

- Participant did a lot of thinking in playthrough.
- Tendencies to choose familiar green options
- A lot of text leads to a lot of reading.
- Does it make an impact?
What we can improve:

- Transcript results only received with one person
- Did not talk much
- Poor audio quality

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- More participants
- Better Quality Microphones
Climate Challenge and its impact

- How does Climate Challenge highlight the issues with climate change?
- Is it efficient?
How do we teach in games?

- Story-Based
- Mechanics-Based
Other Climate Change games and class research.

- RIZK: ludological (ineffective)
- Ener cities: ludological (ineffective)
- my2050: ludological (ineffective)

Why were they ineffective?

Can CC Games be reliable forms of motivation for humanity?

What can we do to make an effective climate change game?
Acknowledgements
