

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

An Analysis of the Efficacy of Climate Challenge

Nicholas Barnes
Old Dominion University

Leslie Cook
Old Dominion University

Brandon Sharpton
Old Dominion University

Follow this and additional works at: <https://digitalcommons.odu.edu/undergradsymposium>

 Part of the [Climate Commons](#), and the [Communication Technology and New Media Commons](#)

Barnes, Nicholas; Cook, Leslie; and Sharpton, Brandon, "An Analysis of the Efficacy of Climate Challenge" (2018). *Undergraduate Research Symposium*. 4.

<https://digitalcommons.odu.edu/undergradsymposium/2018/internationalstudiesgeography/4>

This Oral Presentation is brought to you for free and open access by the Student Works at ODU Digital Commons. It has been accepted for inclusion in Undergraduate Research Symposium by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.



“An Analysis of the Efficacy of Climate Challenge”

Nicholas Barnes, Leslie Cook, Brandon Sharpton

Introduction

Background

Methods

Results

Discussion



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.”

(Ouariachi, T., Olvera-Lobo, M. D., & Gutiérrez-Pérez, J., 2017).



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

Vol 145 No 21
January 1st, 2000

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 gasses cars release and climate change," a spokesman for Earth Concern Network said. "We must all sacrifice if our children are to have any prospect of a healthy...



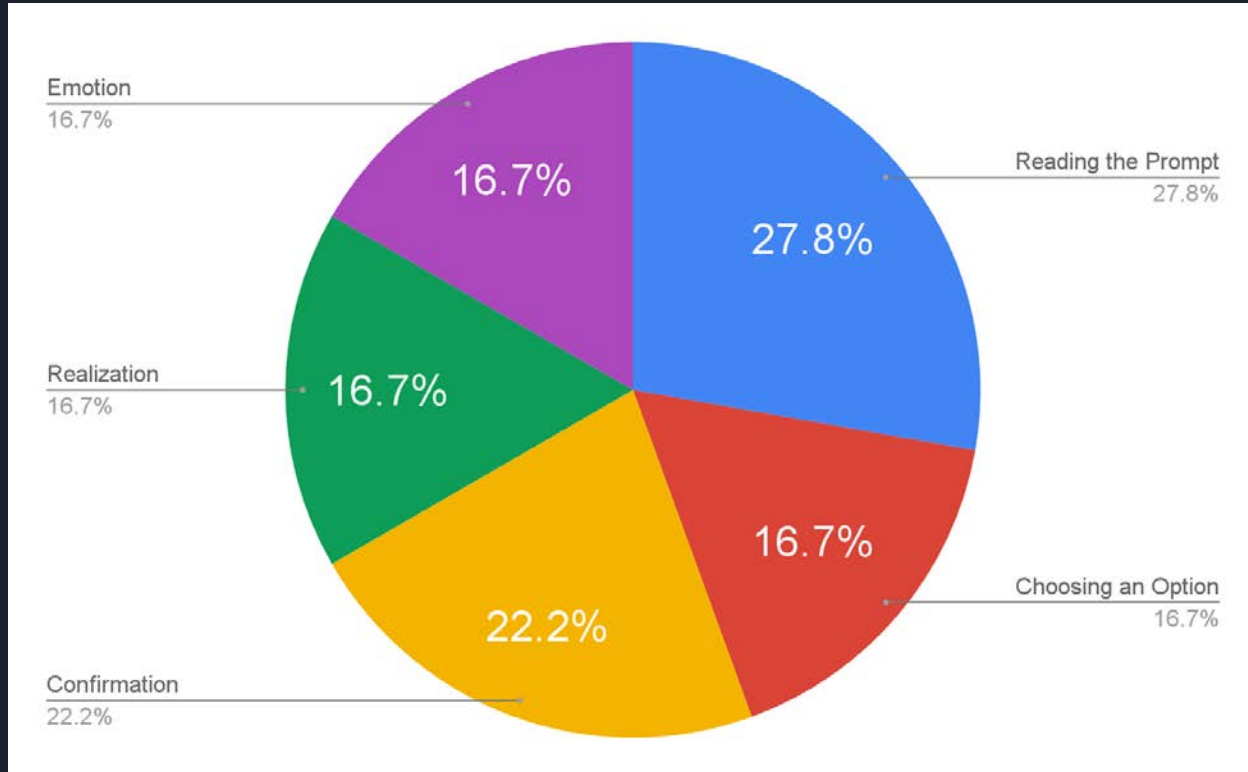
Election results

There was little change for the government in elections this week. The latest polls show the average overall approval rating changed by 10%. The government maintained a small majority.

The president's policies did not have a significant effect on the final result. 'Subsidise aviation' was the most popular policy and 'Introduce new fuel tax' was the least.

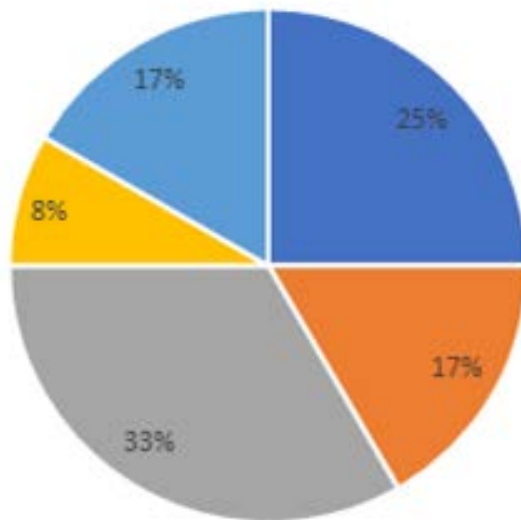


Results



Results

Amount of gameplay

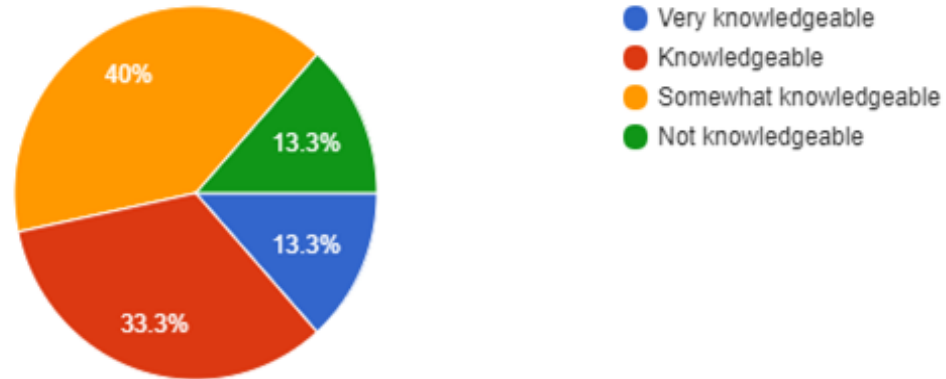


■ Daily ■ Weekly ■ Monthly ■ Yearly ■ Miscellaneous

Results

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

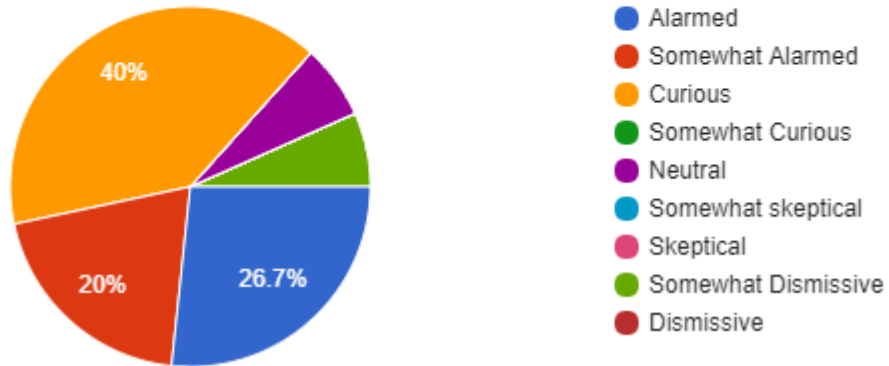
15 responses



Results

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

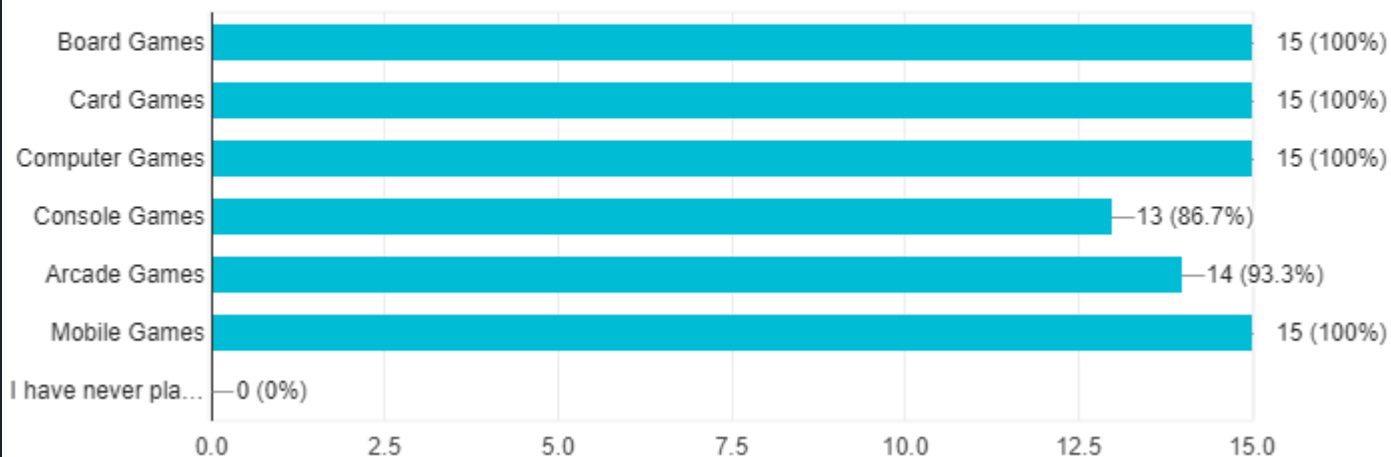
15 responses



Results

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

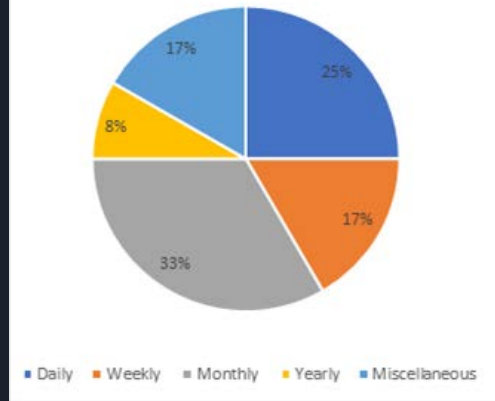
15 responses



Survey Result Discussion

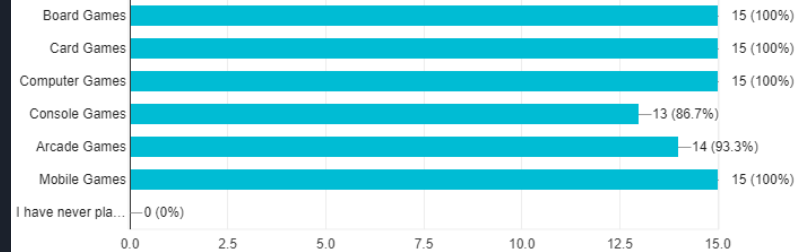
- All participants had played games before
- Most people play games weekly or daily
- We need climate change games!

Amount of gameplay



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

15 responses





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

-More participants

-Better Quality Microphones



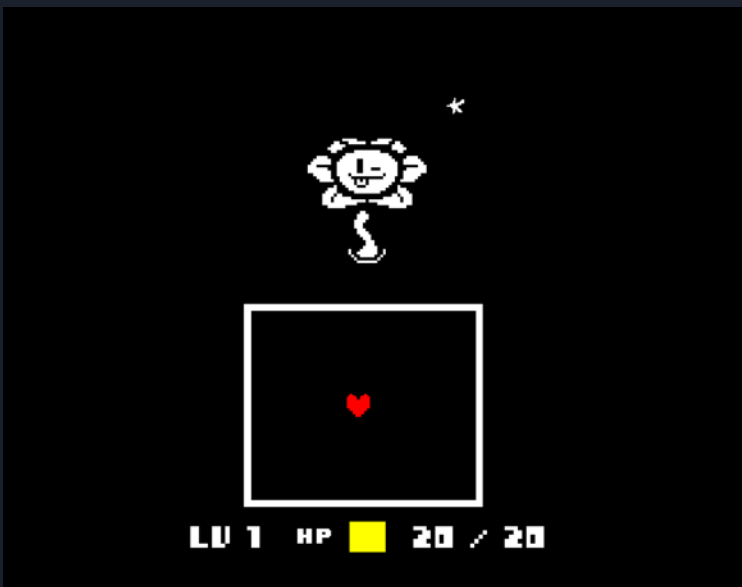
Climate Challenge and its impact

-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)

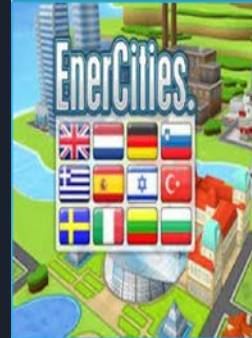
-Enercities: Ludological (ineffective)

-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

Bibliography

Slide 5:

BBC. (2006). *Climate Challenge* (Version 1) [Online Video Game]. London, UK. Game portal located at http://www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/

Fung, M. K., Tedesco, L. R., & Katz, M. E. (2015). Games and climate literacy. *Nature Geoscience*, 8(8), 576.
doi:10.1038/ngeo2499

Reckien, D., & Eisenack, K. (2013). Climate Change Gaming on Board and Screen: A Review. *Simulation & Gaming*, 44(2-3), 253-271. doi:10.1177/1046878113480867