

# Tragedy Of The Commons Game

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## Design

### Target Audience

#### **What is their age range?**

18-25

#### **Describe some of their personality traits.**

These people will be passionate about the well-being of all people as one group. They think about others before themselves and find joy in helping other beings.

#### **What types of games do they play?**

They play strategy, simulation, or management games.

#### **What is their location?**

They will most likely be from urban/populated areas where the tragedy of the commons is more likely to be demonstrated.

#### **How much time do they spend playing games?**

They will play games casually - less than or equal to 5 hours per week.

#### **What are their hobbies?**

Their hobbies most likely include volunteer work, activism, debating.

### Overall Goal

Create an educational game to teach the economic and social science sustainability concept: Tragedy of Commons. Learning is the central driving force. The project will engage the target audience, but the primary intention is not entertainment.

### Objectives

*In a five to ten minute play-through of this game, the audience should be able to realize that a shared resource should only be used as minimally as possible to allow everyone else to get their fair share of that resource. They should be able to figure out that their short term decisions that benefit themselves have consequences for the whole population in the long-term.*

### Experience Overview

*[Provide a description with details such as gameplay, user experience, technology, etc.]*

*Users will Keep their family alive while considering the wellbeing of others as they decided to steal rations or take what they need. They will enter how much they want to take, consume and store using text boxes and buttons while the computer manages all of the other families.*

## Game Rules

*Number of Players: Single player*

*Age: 13+*

*Play time: roughly 5 minutes per game*

*End game conditions: player family alive as well as 2/3 rest of the other families*

*Gameplay:*

1. *Users will open the game and be assigned a family*
2. *Based on the size of the family, the user will have to decide how many rations to take*
3. *After the take they either need to consume or store their rations.*
4. *The computer will manage the other families*
5. *Repeat for 10 years (3 days a year, day over after computer is done)*
6. *Scoring is managed in "families alive and per family health"*

## Technology/Platform

*The technology is a Unity game for PC/Mac*

*The technology benefits the audience because it is easy to update game mechanics and create new ones will a fast ship time to the audience.*

## Playtesting

### Play Test Plan

1. Usability goal - The user is able to navigate the game well and understand what each module does at any given time during the play session.
2. Go through game to make sure all UI elements and logic is working properly.
3. Try to break the logic by testing values out of range.
4. Introduce the tester to the game and give them the basics unknowing to the tragedy of the commons.
5. Ask the tester how they might accomplish this task.
6. The tester is told to survive the 10 game year long famine by taking government rations for their family. Tell them that the goal is to keep your family alive while allowing other families to survive as well. There are 4 modules for the user to navigate. Three are information and one is only for tester interaction. In game instructions are presented at the top while real-time notifications let them know what they can interact with at any given time.
7. How does this interface work for you? Is it too much or too little to keep up with? At any time did you feel overwhelmed or disattached from the game?

### Play Test Results

Testers seemed to understand the interface, but a few of the elements could be better laid out, however, functionality-wise everything was in the general area of where it should be.

## Credits

*Michael Hodge - Code and Design*

*Lloyd, William Forster. "Two Lectures on the Checks to Population : William Forster Lloyd : Free Download, Borrow, and Streaming : Internet Archive." Full Text of "Passing", London : F. Warne ; New York : Scribner, Welford, and Armstrong, 1 Jan. 1970, [archive.org/details/twolecturesonch00lloydgoog/page/n21](https://archive.org/details/twolecturesonch00lloydgoog/page/n21).*