

GAMES CONTENT

Activity 2: Adding Green Mechanics





Game Development students, B.A. or M.A. level



Intermediate



1 - 2,5 hours (depending on group size)



6-25 participants



Basic understanding of theming vs. gameplay mechanics, foundational knowledge of game design and development scope



A timer for activities













SUMMARY

An interactive workshop where students work to add sustainability messages to existing games by changing or adding new gameplay mechanics.

TASK

Students will take existing games and create new ideas about how real-life sustainability actions could be added to them, and consider the implications for the game's development scope.

PREPARATION

A timer for activities. No further equipment necessary, but it is highly recommended to have a shared screen (e.g. a projector connected to a computer), list making software (e.g. Microsoft Word or Excel) and for students to have access to computers for research and/or note-taking materials.

LEARNING OUTCOMES

Improved appreciation of the opportunities and complexity of including environmentally-aware mechanics in a larger game.



Step 1 *Introduce/remind students of theming vs. systemic (5 minutes)*

Let students know they will be working with the idea of sustainability theming in games.

Remind them of the distinction between theming and systemic sustainability content:

- 'Theming' where the aesthetics of the game (visual, narrative, etc.) have environmental/sustainability themes
- 'Systemic' where a game's core systems operate in ways that relate to sustainability actions
- Typically these either show good practises or act as a warning (utopian v.s dystopian)

(See Greening Games teaching materials downloads for more information.)





Remind/explain that gameplay systems are likely to represent forms of action, i.e. living sustainably, the transformation of unsustainable systems to green(er) alternatives, and resistance actions (e.g. defence of nature or protest).

See 'forms of action' in the diagram below.

Forms of pro-environmental messaging suitable for video games

Foundations of Action

Knowledge

1. Awareness of problems
2. Knowing steps to take
3. Understanding effectiveness of actions
4. Understanding the systems of the
environment

Pro-Environmental Attitude

Preservation versus utilisation of the environment
 S. Feeling connected to nature
 S. Empathy for creatures in the natural world

Efficacy

The sense that we can take effective action

Hope

The belief that a better outcome is possible through action

Forms of Action

Live Sustainably

Support systemic change: prove markets demand sustainability

Support resistance: be a model for the world we want to live in

Facilitators of Action

Feeling empowered



Believing it is good to act

Support from peers

Transform Systems

Support sustainable living: create new sustainable living options

Support resistance: set benchmarks for regulations

Resist Destruction

Support sustainable living: protect the conditions for life

Support systemic change: signal that inaction or further destruction will not be tolerated



Step 2 Ask students to pick a game with minimal sustainability features, and suggest 3 ways to add or improve environmental systems (10 minutes)

Encourage students to explore multiple options for the game they choose to work with, not just pick the first game that comes to mind.

Tip: put a timer on a screen with a 10 minute countdown.

Students should work alone for this section of the exercise.

Remind them to take note of their 3-or-more options for changes to the gameplay systems, otherwise they will likely forget them during later conversational steps.

This should be done individually. A little quiet conversation will likely occur closer to the time limit and can be used as an indicator of readiness to progress.

If they need further inspiration:

- Remind students they are aiming to change or add gameplay systems, not only the aesthetics.
- They can create positive or negative gameplay actions, e.g. adding a planting mechanic might be positive, or they could change the outcome of an existing mechanic by giving it negative gameplay consequences e.g. hunting a vital creature to extinction.
- Remind them both adding or changing mechanics is possible in this exercise.

Outcome from this step: each student has picked one game, and has a minimum of three options to change it.

Step 3 As a class, go around the room and collect the names of the games chosen (max. 5 minutes)

Only get the names – don't ask for the systemic changes yet. There will likely be some fun or thought-provoking choices already, which helps maintain energy levels.



Step 4 Presenting the game and system (gameplay mechanic) in groups of two to three students (10-20 minutes)

Using the notes they've made, students get between 5-8 minutes to talk about their game and their choices. Ask them to collectively and quickly agree their favourite systemic change-option per game.

Step 5 Ask students to pick the favourite of each group that will be presented to the class (max. 5 minutes)

Tell students they will need to give a very quick explanation of the game for people unfamiliar with it (genre, basic gameplay, typical target audience), and then a clear description of the proposed change in the system.

Break Drink, exercise, snack (10 minutes)

Step 6 Every group presents their game and systemic adjustments in strictly 5 minutes (30-60 minutes)

Students present the game and the one systemic change to add explicit environmental systems to the game.

Use a timer (on a phone is fine, just turn the sound on, or on a screen). This is usually quite fun!

If you have many groups, limit it to 4 minutes.

Keep a track of the changes on a whiteboard or spreadsheet visible to the students – you can track game name, genre, and type of change (positive/negative actions, sustainable living/social system change/resistance/other) to see if trends appear.



Step 7 Closing reflections (5-20 minutes)

Encourage the students to pick their favourite suggestions:

- Which was the most entertaining?
- Which would be most impactful?
- What criteria are they applying to judge 'impact', and what does this say about their own priorities?
- Which would be the easiest to implement?
- Would it change the game's target audience?

Ask if they would include similar mechanics if they were/are working on a game – why would or wouldn't they do this?

Identify any themes in the changes the students suggested, e.g. were they mostly positive or negative?

Final thought: do they think they feel more inspired about the range of options available to include environmentally aware systems in games?



Credits & Acknowledgements

Author

Prof. Dr. Mata Haggis-Burridge, Breda University of Applied Sciences

All Team Members

Tuki Clavero, Breda University of Applied Sciences Prof. Dr. Sonia Fizek, TH Köln (Cologne Game Lab) Dr. Laura Frings, TH Köln Dr. Lukáš Kolek, Charles University Andrea Hubert, Charles University Dr. Maria B. Garda, University of Turku Karoliina Koskinen, University of Turku

Layout design: Noa Marcon (BA student at CGL, TH Koeln)

Logotype design: Sara Mohamed Badawy Omar Alkotkat (BA student at CGL, TH Koeln)

This educational material has been created within the framework of the project "Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies" (2021-2024) that supports educators in addressing the interdisciplinary nature of green digital gaming. The project has been funded by the Federal Ministry of Education and Research in Germany within the framework of the Erasmus+ Programme of the European Union (KA220-HED – Cooperation Partnerships in Higher Education).

Project reference: 2021-1-DE01-KA220-HED-000029501

More information may be found at: https://greeningames.eu.

This publication is distributed free of charge and is funded with the support from the European Commission. The sole responsibility of this publication lies with the author(s). The European Commission or the National Agency (FRSE) are not responsible for any use that may be made of the information contained therein.

This work is subject to a **Creative Commons CC BY-SA l**icense.



30.06.2024 Köln – Breda – Praha – Turku



