

SDG13 Climate Change Engage Game Design



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Lesson 7: Deconstructing Games

Subjects: Design, Environmental Science, Game Design, Geography, Science, Technology

Lesson Title and Summary: Deconstructing Games

Through deconstructing games, learners will develop their understanding and knowledge of different kinds of games and game construction.

This lesson enables learners to gain insight into game mechanics, design and purpose, which provides a foundation for learners to construct inclusive games.

Vocabulary: Conflict, Challenge; Deconstruct; Findings; Gameplay; Industry Influence; Interaction; Objective; Participant / player; Research; Revenue; Rule/instruction

In this lesson, the learner will:

- explore their understanding and knowledge of different kinds of games
- identify elements that make a game successful.
- research a well-known game to deconstruct and report findings
- work collaboratively and engage in critical and analytical/evaluative research in groups

Materials

- Worksheet: Deconstructing Games
- Worksheet: Game Evaluation
- Worksheet: Game Review Sheet see also lesson 11
- Internet access
- Paper / whiteboard
- Markers / chalk
- Pens, pencils

4 QUALITY EDUCATION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



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Activity Instructions

Activity 1 Goals, Components & Core Mechanics of Games (25 mins)

1. Using Worksheet: Deconstructing Games, ask learners to brainstorm responses to the following questions (in pairs):

- *What are the three possible goals or objectives of a game? - the Goal.*
- *What is necessary for the game to function? - the Components*
- *What kinds of actions or moves do players do to power the play of a game? - the Core Mechanics.*

It may help them to focus on two or three specific games to complete the task.

These could be selected in advance and gathered through discussion with the class.

2. Bring the pairs together to make groups of four. Invite pairs to share their ideas.

Encourage pairs to feedback - what do they like about the ideas the other pair present?

And feed-forward - how might they add to what the pair have presented to improve the idea?

Activity 2 What's Out There? (25 mins)

1. Working in pairs, ask learners to undertake a Pinterest search to find 5 games that are linked to climate change, climate adaptation, or environmental action.
2. Ask learners to use the game evaluation worksheet and the game review sheet: complete the questions, review and analyse 5 games,
3. Bring the pairs together to make groups of four and invite pairs to share their ideas.

NB: Encourage pairs to feedback - what do they like about the ideas presented by the other pair present? And feed-forward - how might they add to what the pair have presented to improve the idea?

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One opinion they have about the activities, what did they like or how they would improve them

Use Post-its or a mentimeter survey - www.mentimeter.com to gather reflections

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EXTENSION / REDUCTION ACTIVITIES

Reduction: for a shorter lesson, elicit briefly different types of games and complete activity 1.

Extension: for a longer lesson, share the games the learners found with the whole class and create a directory of all the games. Create a shared spreadsheet and ask students to complete this by adding the information they found to be completed over the course of the Game Design project.

Option 2: Include an exploration of the game, 'Climania' (see Media Box). Encourage a group discussion on aspects of the game, using the game evaluation sheet.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Breaking down games (video) - part of a course with free enrolment

- <https://www.coursera.org/lecture/gamification/4-1-breaking-games-down-BvorV>

Game deconstruction information for online games

- <https://departmentofplay.net/guide-how-to-deconstruct/>
- <http://www.leagueofgamemakers.com/breaking-down-games/>

Activity idea source:

- <https://gamesforchange.org/studentchallenge/teachers-resources/>
- <https://climaniathegame.com/about-climania/>

Local Trip / Expertise / Additional Work and Assessments

Link learners to Ireland's gaming industry

- <https://www.thinkbusiness.ie/articles/the-irish-people-dominating-the-gaming-industry/>

Learners can then research Ireland's University's for Gaming Undergraduate programmes

- <https://www.courses.ie/course-category/game-design-animation/>

Career pathways learners can begin to explore career options in the film and games industry

<https://www.cgspectrum.com/career-pathways>



USE THE 'GAMES FOR CHANGE' CRITERIA TO ASSESS THE GAME DESIGNS

GAMEPLAY:

- Is the game playable?
- Is the gameplay smooth and glitch-free?
- Is it well-balanced (not too easy/hard)?
- Do players have meaningful choices in the process of achieving the game's goal?

ORIGINALITY:

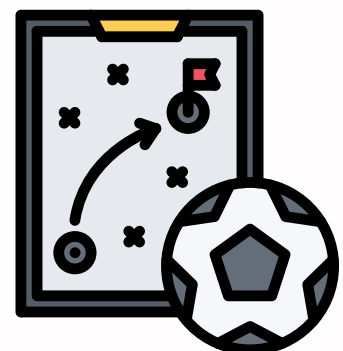
- Is the game new and innovative?
- How unique is the design and concept of the game?
- Does it bear any resemblance to other games?

USE OF THEME:

- Does the game address its theme in a meaningful way?
- Is the theme information presented clearly and accurately?
- Is there an engaging storyline or backstory?
- Is there a sense of a 'complete world' for players to engage in?

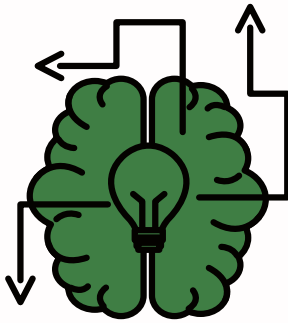
OVERALL FUN FACTOR:

- How engaging and fun is the game?
- Would you recommend it to someone else?





WORKING IN PAIRS YOU WILL CHOOSE AND EXAMINE PARTS OF A GAME FROM THE LIST PROVIDED.



RECORD THE NAME OF YOUR CHOSEN GAME HERE



Use this space to mind map your ideas.

1. What are the three possible aims, goals or objectives of the game?

2. What is necessary for the game to function? - the Components of the game, which includes players.

3. What kinds of actions or moves do players do to power the play of the game? - the Core Mechanics.



Using the question prompt to discuss the questions and note ideas in the space below: goal, challenge, core mechanics, rules components, space:

Goal -

- What does a player or team have to do to win?
- How might this be enjoyable and engage the players?

Challenge -

- What obstacles are in the player's way to make reaching the goal fun and interesting?
- How is the player being kept from reaching a goal?
- How might these obstacles engage the player?

Core Mechanics -

- What core actions or moves does the player do to power the play of the game?
- How might these actions or moves encourage engagement?
- How might these affect engagement?

Components -

- What parts make up the materials of play, including players?
- How might these components affect the goal of the game?

Rules -

- What relationships define what a player can and cannot do in the game?
- How might these determine the goal of the game?
- How might these encourage engagement?

Space -

- Where does the game take place and how does that space affect the game?
- To what extent is the space important in the goal of the game?

CCE L7WSC: GAME REVIEW SHEET

13 CLIMATE ACTION



USE THE TABLE TO GATHER INFORMATION ABOUT THE VARIOUS GAMES YOU ARE FINDING

| GAME'S NAME | GAME TYPE | # PLAYERS | GAME AIM. | COMMENTS / OPINION |
|-------------|-----------|-----------|-----------|--------------------|
| | | | | |