# SDG13 Climate Change Engage Game Design



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Lesson 17: Generating and Remixing Ideas

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

# Lesson Title and Summary: Generating and Remixing Ideas

This lesson builds on Lessons 7 and 8, enabling students to develop an understanding of the process of generating ideas using the fundamental components of a game.

The learners will work in teams to identify 4 components of 3 games building on their understanding of games from Lesson 7 and how to use random variables to create useful building blocks for design ideas.

# Vocabulary: Agility; Creativity; Disruptive Innovation; Open Source; Remix

# In this lesson, the learner will:

- feel comfortable with exploring experimental approaches
- develop skills around idea generation
- accommodate variables and limits into design processes
- · learn to transfer and apply skills



# Materials

- Worksheet: Ideate Rapid Remix
- Worksheet: Rapid Remix SWOT analysis
- Pens, pencils
- Paper



# **Activity Instructions**

#### Activity 1 Remixing Ideas – Rapid Response 1 (30 mins)

1. Watch the Video: 'Ideate' - see Media Box.

2. Explain the activity – learners will use aspects from their own gaming experience and the understanding of games from Lesson 7 to practice the concept and begin to understand how to develop creative problem-solving skills.

- 3. Organise learners' teams into pairs.
- 4. Working in their pairs, the learners fill in a row on Worksheet: Ideate Rapid Remix
  - How many players?
  - How do players move around the game?
  - What are the games core components?
  - What are the goals / objectives of the game?

| PLAYERS | PLAYER MOVES | COMPONENTS | GOALS |
|---------|--------------|------------|-------|
|         |              |            |       |
|         |              |            |       |

4. Ask pairs from the class to input from the grid randomly e.g. "Pair XX, tell me what's written in the second column, row 2.' Write their answer on the board.

5. Repeat this three more times until you have something on the board from each of the columns e.g. 'group 4 tell me what's written in column 3, row 1', 'group 2 tell me what's in column 4, row 2', 'group 3 tell me what's in the column 2 row 3.'

#### Activity 2 Remixing Ideas Rapid Response 2 (20 mins)

1. Ask learners to invent 3 more games, using the four variables (number of players, players movement, game components and the goals of the game) with a focus on climate change awareness and adaptation e.g. a game with x players who virtually travel, (players moves define different options in the game) gathering clues to destinations (components) earn points, to move up a global leader board having travelled the furthest with the lowest carbon footprint with the winners getting a grand prize (goals).

# **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 - <u>www.mentimeter.com</u> to gather reflections



# **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, complete Activity 1 only and use Activity 2 in a follow-up lesson.

Extension: For a longer class, use the work in Activity 2 with the lesson's Rapid Remix SWOT worksheet.

Option B: Learners can develop an empathy map for the user of the games that has come out of Activity 1.

Linked learning: Lesson 5 and 16 worksheets, (Gamer-profiles, Gamer Journey and Empathy Map) can be revisited to hone in on their gamer, their interests and focus their game design.

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

'Design Thinking Ideate' (4:04min) https://www.youtube.com/watch?v=zbLxs6te5to

'The Four Types of Video Game Designers' (8:56min) <u>https://www.youtube.com/watch?</u> <u>v=suhANDk1h40</u>

'Non-Professional Game Dev - The Joy of Making' - Extra Credits (8:14min) <u>https://www.youtube.com/watch?v=m4p7T9O\_tqg</u>

'Making Your First Game: Minimum Viable Product - Scope Small, Start Right - Extra Credits' (7:38min) <u>https://www.youtube.com/watch?v=UvCri1tqIxQ</u>

# Local Trip / Expertise / Additional Work and Assessments

Link learners to Ireland's gaming industry - these links can be used as research for career paths and to inform subject choices / programme choices for the senior cycle

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

Learners can then research Ireland's University's for Gaming undergraduate programmes <u>https://www.courses.ie/course-category/game-design-animation/</u>

Career pathways learners can begin to explore career options in the film and games industry <u>https://www.cgspectrum.com/career-pathways</u>

# CCE L17WS IDEATE RAPID REMIX

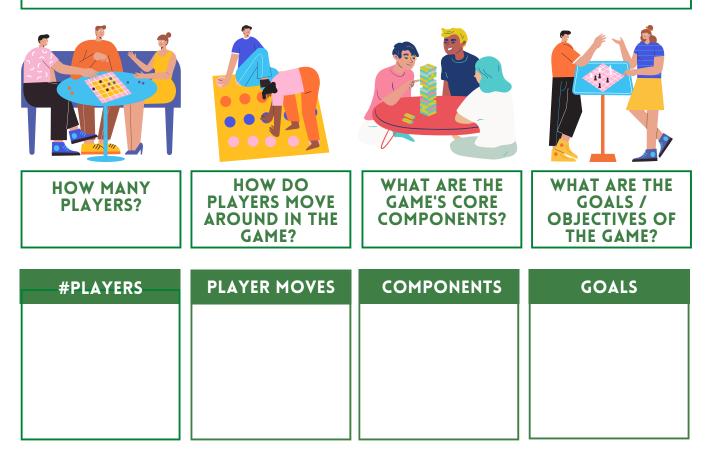
Team Name

Date



Developing a Game

This worksheet will help you play with game fundamentals. Fill in the boxes - we will then work with the whole group to develop a number of possible game ideas using the Rapid Remix process.



| #PLAYERS | PLAYER MOVES | COMPONENTS | GOALS |
|----------|--------------|------------|-------|
|          |              |            |       |
|          |              |            |       |
|          |              |            |       |
|          |              |            |       |



This worksheet will help you play with your game ideas using an adapted Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis. Fill in the boxes with the variables for three different game ideas generated using the Rapid Remix activity.

