

SDG 15 Seeding Sustainability

MM1: Problem to PitchThe Ice Cream Olympics



MM1: Problem to Pitch - The Ice Cream Olympics

Programme Phase 1: Research and Development

Lesson 5 Design Thinking Ideate 2.0

**Subjects: Climate Action
and Sustainable
Development, Design,
Technology, Science**

Lesson Title and Summary: Generating and Remixing Ideas 2.0 Good Idea / Bad Idea

This lesson builds on lesson 4 and enables learners to develop an understanding of the importance of developing ideas and looking for opportunities to iterate and improve on existing ideas.

Learners are also introduced to open source concepts, e.g. iteration and collaboration.

Vocabulary

Agility; Creativity; Disruptive Innovation; Enterprise; Problem Finding and Solving

In this lesson, the learner will:

- explore how to evolve ideas
- consider opportunities to improve ideas
- feel comfortable with exploring experimental approaches
- develop skills around idea generation
- learn to transfer and apply skills

Materials:

- Pens, pencils
- Paper



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Activity Instructions

Activity 1 Worst Idea ever – Rapid Response (20 mins)

1. Explain the activity – Learners will work in their groups to come up with 8 - 10 examples of the worst ideas ever. These will then be swapped amongst the groups to be transformed in Activity 2.
2. Tutor to give some real-world starting ideas – see Media box.
3. After 15 minutes, ask learners to share one or two of their worst ideas ever.

Activity 2 Transforming Ideas – Rapid Response (20 mins)

1. Gather up the sheets from the groups and begin to swap them with other groups.
2. Give some examples of a transformation of a worst idea into a good idea.
3. Give learners 15 mins to transform the examples on the sheets into good ideas.

Activity 3 Generating and Remixing Ideas – Rapid Response (10 mins)

- Discuss some of the ideas that have been generated.
 - What did the learners notice about the process?
 - Where they surprised at how hard / easy the task was?
 - Which activity did they find easier?
 - Can they see how they might use this method with other skills?
2. Use the activity to introduce key ideas of open source; ideas development and iteration.
 3. Watch the Video: Open Source As Explained by Lego video (4:04 min see media box) or the Video: Open source culture, ask the learners to think about this and consider how The Ice Cream Olympics could be an Open Source project - Learners can report back using Teams.

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

- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One – their opinion they have about the tasks

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

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EXTENSION / REDUCTION ACTIVITIES

Reduction: For a shorter class, undertake activity 1 and 2 with less examples e.g. 4 – 6 of worst / transformed ideas.

Extension: For a longer class, Discuss how The Ice Cream Olympics could be an Open Source project. Consider the recipes, the games and the sharing of knowledge including using and sharing herb lore / traditional ingredients.

Option B: Undertake an empathy map and Remix SWOT analysis of some of the ideas - see lesson 4 resources.

Option C: Tutors can also extend the discussion and include some examples of open source projects for students to research – see Media box

- Open Source Ventilator
- Crispr Editing
- Aquaponic Greenhouse

Option D: Aquaponic Greenhouse: Learners could develop ideas for a greenhouse and explore designing and prototyping in preparation for growing herbs / ingredients for Micro-Module - Ice Cream Remix.

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

- Video: What is open source explained by Lego (4:40min) <https://www.youtube.com/watch?v=a8fHgx9mE5U>
- Video: Open source culture (1:09min) <https://www.youtube.com/watch?v=gobBQwtFeyk>
- Article: Open Source Ventilator <https://www.siliconrepublic.com/start-ups/open-source-ventilator-project-coronavirus>
- Video: Crispr Gene Editing (4:22min) <https://www.youtube.com/watch?v=1VaG3DpFXjs>
- Video: Open Source Aquaponic Greenhouse (3:44min) <https://vimeo.com/141252002>
- Video: Design Thinking Ideate (4:03 min) - <https://www.youtube.com/watch?v=zbLxs6te5to>

Local Trip / Expertise / Additional Work and Assessments

Enterprise and Innovation Centres in Munster

- Kerryscitech <https://kerryscitech.com/>
- The Tom Crean Business Centre <https://www.creancentre.com/>
- RDI Hub Killorglin (home to the NDRC in the South West <https://rdihub.com/>
- HQ Tralee <https://hqkerry.com/locations/hq-tralee/>
- Cork Bic <https://www.corkbic.com/>