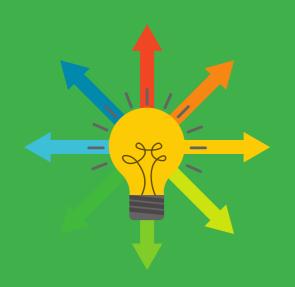
### Problem to Pitch



### **CURRICULUM AREAS**

Design, Technology, Environment, Sustainability

**Problem to Pitch - Project Management** 

AND COMMUNITIES

Problem to Pitch is a generic project management module that can be adapted to any topic. It introduces learners to the concept and process of Design Thinking; the cognitive, strategic and practical processes for creative problem solving.

The module encourages learners to engage with their local context to enable them to explore real-world problems in meaningful and tangible ways that are manageable. The module encourages the development of 21st Century skills supporting learners to keep up with the lightening pace of a constantly changing technologised world.

Design Thinking helps the learners to understand that they can create their own future by enabling them to design their own experiences and participation.

Using linked learning and systemic thinking with practical methods of learning, including inquiry and project-based methods, the activities support teachers and learners to undertake projects that address contemporary issues on a local scale, in line with the Sustainable Development goals and the 2030 agenda.

### In this Project Management module, the learner will...

- develop skills of organising, planning and scheduling
- develop awareness of the basics of Design-Thinking for problem-solving
- practice problem solving and critical thinking skills as individuals and part of a group
- be introduced to project management tools such as Lean Canvas, Logic models, 5Ws (who, what when, why where)
- Vision boards and a Pecha Kucha presentation

### This module includes:

- Lesson plans
- Accompanying resources
- Project-specific worksheets related to specific goals and other project modules,
- Optional assessments Skill support resources

### Problem to Pitch - Introduction











### Problem to Pitch – Introduction to Design Thinking, Project Development and Management

Lesson 1: What is Design Thinking? Design Thinking is the cognitive, strategic and practical process for creative problem-solving. This lesson introduces learners to the 5 stages of Design Thinking.

Worksheets include: Introduction to Design Thinking, Stakeholder Mapping, Flipped Classroom

Lesson 2: Empathy 1: Stanford Design School's five-chairs exercise encourages learners to learn how to develop design principles for a user profile. Learners consider the 5 users' needs and develop ideas on paper and create 3D prototypes of their designs, encouraging learners to design with a user in mind.

Worksheets include: User profiles worksheet, Empathy Map, Step into the Problem worksheet.

Lesson 3: Defining the Problem: In this lesson, learners will begin to understand how to define a problem. Learners are asked to begin to identify a real problem they have wanted to address on a local or global level, using the SDGs as a starting theme. Learners also have an opportunity to develop awareness of a local problem.

Worksheets include: Define the Problem support sheet, Problem Tree worksheet

Lesson 4: Ideate, Generating and Remixing - Ideas: This lesson enables learners to develop an understanding of the process of generating ideas starting with their personal experience and then moving into project themes.

Worksheets Include: Ideate Remix worksheet and Remix SWOT worksheet

Lesson 5: Ideate 2 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.

Lesson 6: Prototype Your Idea: In this lesson, learners will begin to consider their ideas for prototyping, develop a concept statement and look at ways to prototype their ideas depending on their users / audience.

Worksheets Include: Rapid Response prototyping worksheet and Ready, Set, Design worksheet

### Problem to Pitch - Introduction











### Problem to Pitch – Introduction to Design Thinking, Project Development and Management

Lesson 7: Test Your Idea: Creating and Using Vision Boards - Evaluating an idea is a key aspect of Design Thinking. In this lesson, learners will begin the process of testing their ideas with potential users. Learners will learn that this is not the end of the process and that they may learn something that means they might need to return to an earlier stage, e.g. Define or Ideate.

Worksheets include: Vision Board Support Support Resource: Creating a Vision Board, 5 Ws of Business planning, 8Ws Business planning, Lean Canvas and Zone Map

Lesson 8: In this lesson, learners will be introduced to the Pecha Kucha format and begin to analyse what makes a good presentation so they can prepare to create their own Pecha Kucha presentation.

Worksheets Include: Pecha Kucha Analysis

Lesson 9 - 10: In this lesson, learners will continue to plan, create and present a Pecha Kucha by using the lean canvas and the 5 Ws of business planning to gather the information to present their project.

Worksheets Include: Pecha Kucha Planning Guide, Pecha Kucha Outline, Pecha Kucha Checklist, 5 Ws Business Planning and Lean Canvas



**Problem to Pitch - Project Management** 

Introduction to Design Thinking

## 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION 15 LIFE ON LAND 15 ON LAND

### **Lesson Title and Summary: What is Design Thinking?**

Design Thinking is the cognitive, strategic and practical processes for creative problem solving. This lesson will introduce learners to the 5 stages of Design Thinking to build a foundational understanding of the process.

**Vocabulary:** Empathy; Context, Culture; Qualitative; Users; Stakeholders

### In this lesson, the learner will:

- · be introduced to Design Thinking
- explore the 5 stages of Design Thinking create their own understanding of the stages through quick practical tasks
- work as pairs and individuals to begin to
- understand the iterative processes
- practice time management

### **Materials:**

- Introduction to Design Thinking worksheet A4 paper
- Internet access
- Lesson 1 Flipped Classroom worksheet Stakeholder mapping activity











### **Activity Instructions**

### **Activity 1 Introduction to Design Thinking (25mins) Use**

- 1) If working digitally share the worksheet or this can also be projected. You can also circulate handouts and ask learners to keep all their work in a folder to be assessed at the end of the module. The first activity completes the worksheet up to the section on Define.
- 2) Watch the short video on Design Thinking Introduction worksheet then have learners working in pairs to find the meanings of the words and re-write them in their own words.
- 3) Have each pair share their meanings with the class, photograph each groups answers and use this to create a 'group' design thinking vocabulary list / glossary.
- 4) As a class, discuss the 5 stages of Design Thinking image reviewing any terms that are new.

### Activity 2 – Ideate - Worst Idea Good Idea – (30 mins)

1) Allow learners 30 minutes to complete the Ideate and Prototype task of the worksheet in pairs. Remind them that they will have to manage their time to allow for the prototyping and testing stage. The aim is not to create masterpieces but to work quickly and experimentally – it should be made clear that given the limitations, it's just to quickly show the idea in 3D.

Have learners complete the Flipped Classroom worksheet before the next lesson.

Reflective exercise – see below (5 - 10 mins)

### **REFLECTIVE EXERCISE: 3-2-1 (5-10 mins)**

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









### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, remove activity 2 and spend more time in building the collective vocabulary list – have each learner type up their words and definition and add to a shared document

Extension: For a longer class, give learners more time and materials for the Ideate – Prototype stages of Design Thinking.

If learners have project themes in mind they could also begin to research their stakeholders and local organisations through the stakeholder mapping worksheets – see media box.

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

- Worksheet: Design Thinking: Introduction To Design Thinking
- Flipped classroom worksheet introduction to complexity
- Introduction to Complex Systems: Patterns in Nature [7:51] <a href="https://www.youtube.com/watch?">https://www.youtube.com/watch?</a>
   v=g5evD6AQeCQ&ab channel=IlanaSchoenfeld
- Applying Design Thinking in Schools poster https://www.makersempire.com/design-thinkingfor-schools-poster/
- To focus on SDG 15: Seeding Sustainability combine SDG 4 Problem to Pitch with SDG 15 micro-module lesson plans and worksheets
- Generic SDG Focus: See Introduction to Sustainable Development Goals lessons
- Introduction to SDGs for Young People https://www.un.org/sustainabledevelopment/youth
- Explore the SDGs https://sdgs.un.org/

SDG Focus: See Introduction to Sustainable Development Goals lessons

- Introduction to SDGs for Young People https://www.un.org/sustainabledevelopment/youth/
- Explore the SDGs https://sdgs.un.org/

### Local Trip / Expertise / Additional Work and Assessments

Stakeholder Mapping worksheet supports learners to focus on their local place, its issues and its audience.

Linked learning: Communication Skills and Media Communication Skills micro-modules support the development of the 4Cs skills – Creativity, Communication, Critical Thinking and Collaboration. Tutors are encouraged to work with other tutors to develop the project through multiple outcomes such as video, poster, Pecha Kucha, Interviews or Podcasts and SDG 4 supporting Skills - reports.

### **LESSON 1 DESIGN THINKING INTRODUCTION**



### WHAT IS DESIGN THINKING?



Working in pairs google these words (or use a dictionary) to find out what they mean and rewrite the definitions in your own words

- 1. Ergonomic -
- 2. Context -
- 3. Culture -
- 4. Stakeholders -

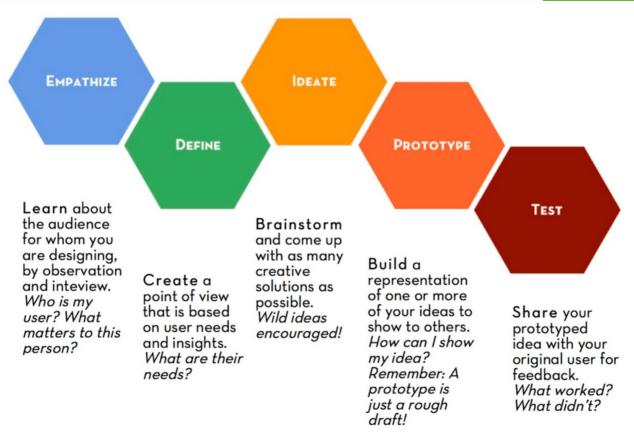


Your answers will be shared with the other teams to build a vocabulary list and definitions - this is called a glossary

### **LESSON 1 DESIGN THINKING INTRODUCTION**



### The 5 stages of Design Thinking:



Before you start to work on your problem or project have a look at each stage and see what you need to think about in any project. You will also have to manage your time as the last three tasks will take more time.



Empathise - Most projects will involve people at some point. What might you need to think about - Discuss with your partner and write down 3 things that might matter to a user / audience member.

- 1.
- 2.
- 3.

Define - What's your problem? Often we deal with symptoms - a runny nose, a sore throat but we need to deal with our immune system. In defining your problem you will look at the whole system. Write down 3 problems you know of in your community or the world.



- 1.
- 2.
- 3.

### **LESSON 1 DESIGN THINKING INTRODUCTION**

### 15 LIFE ON LAND

### The 5 stages of Design Thinking:



Ideate - This is the stage in the process to think about as many ideas as possible. For now, write down the 2 worst ideas you can think of - swap them with your partner and try to create three good ideas from each others bad ideas.

Bad Ideas.	Good Ideas
1	1.
2.	2.



Prototype- using only one piece of paper, build or make one of the good ideas above. You will have to be creative, how will you make the shapes; folding, tearing? If you are to fix it together, how might you do this - links, cutting, what other ways of joining things together can you experiment with?

Remember: There is no right answer this is about experimentation - have fun!



Test - The final stage is testing. In this stage you learn about the product, service or idea you have created . Share your 'good idea' prototype with your partner and they will share with you.

Things to discuss / consider:

Test - The final stage is testing. In this stage you learn about the product, service or idea you have created . Share your 'good idea' prototype with your partner and they will share with you.

Things to discuss / consider and questions to ask:

- 1. Who might the user be?
- 2. Look at how it is made remember there were limits to materials so you are looking at their problem solving and creativity.
- 3. Is there anything they could try to make it better or improve it using the materials they had?
- 4. How might you explore the idea further if time and materials were not a limit?

### **LESSON 1 FLIPPED CLASSROOM ACTIVITY**



### **Learning about Complexity**

Why are systems complex <a href="https://www.youtube.com/watch?">https://www.youtube.com/watch?</a>
<a href="https://www.youtube.com/watch?">v=FW6MXqzeq7M&ab</a> channel=SustainabilityScienceEducation



### What is a Wicked Problem (Rittel, 1973)?

What is a wicked problem <a href="https://www.youtube.com/watch?v=IOKpB4KtUZ8">https://www.youtube.com/watch?v=IOKpB4KtUZ8</a>

Watch the video and give 4 qualities of a wicked problem.

- 1.
- 2.
- 3.
- 4.

### Climate Change is a Wicked Problem

https://www.youtube.com/watch?v=XRoCxS6n53U

### How can Design Thinking help with wicked Problems?

https://www.youtube.com/watch?v=WrdSkqRypsg

Watch both the videos above and give 3 areas you might use Design Thinking to work on an aspect of climate change



**Problem to Pitch - Project Management** 

Design Thinking Lesson 2 - Empathy



### Lesson Title and Summary: Empathy and Empathic Design?

Stanford Design School's five chairs exercise encourages learners to learn how to develop design principles for a user profile. This has been adapted to suit the Ice Cream Olympics project.

Learners will consider the 5 users' needs (this sets the design principles) and develop ideas on paper. In this lesson they will also complete a user empathy map and create 3D prototypes of their designs. This activity encourages students to iterate on their designs and practice using different materials.

### Vocabulary

Assumptions; (Biases, Judgement) Design Principles; Empathy; Identify; Immersion

### In this lesson, the learner will:

- understand empathy in design
- develop critical thinking through the practical tasks of asking leaners to analyse their user's profile to find their needs
- build, test and iterate design ideas grounded in a user's needs
- practice group work and develop the ability to work through design challenges collaboratively

### Materials:

- Worksheet: User profiles worksheet
- · Worksheet: Empathy Map
- · Pens, pencils
- Paper











### **Activity Instructions**

### Activity 1 Developing design principles from user profiles (10 mins)

- 1. Organise learners into groups of 2 or 4.
- 2. Introduce the lesson and the importance of empathy in design.
- 3. Hand out the user profile worksheet, one per group.
- 4. Explain the task to the learners and ask different groups to read out each of the user profiles from the user profile worksheet.
- 5. Learners will develop the design principles (rules / needs) for the users' chairs based on needs of user for all profiles.

### Activity 2 – Developing paper designs – (20 mins)

- 1. Have learners select a two users they wish to work on and identify two three needs (design principles) they see in the description of their user.
- 2. Learners will develop ice cream design ideas on paper for two of the users that integrates the users' needs (design principles).
- 3. Discuss the challenged and the flavour ideas learners have developed based on their users' needs.

### Activity 3 – Using an Empathy Map – (20 mins)

- 1 Through discussion or writing the questions on the board for learners to answer, discuss the empathy questions Checklist use the empathy map to expand on the users:
  - Did you identify the design principles required for your user?
  - Did you make any assumptions about your user?
  - Did you discover any biases / judgments about your user that you might have?
  - How much do you think you really know about your user do you need to do more research?
  - How will you do more research on your user?
- 2. Using the Worksheet: Empathy Map learners will complete the activity based on one or both of their selected users, depending on time from activity 2.

### **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









### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, undertake activity 1 and 2 only and make paper designs only for one user in activity 2. Use any remaining time to ask learners to watch the video empathy mapping at home and complete an empathy map for the user they worked on in class.

Extension: For a longer class, integrate either Video: Design Thinking 1 - 'Empathise' or 'The Importance of Empathy' before activity 1 and Video: 'Empathy Mapping' in advance of activity 3 - see media box.

Develop a class discussion based on the empathy questions in activity 3 and learners' empathy maps.

Option: 2 Learners can research ice cream company's and develop questions to email to them based on how they do their market research and use inclusive design to develop ice cream for a diverse range of consumers, e.g. dietary needs.

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

Video: Design Thinking 1 - Empathise (3:08 min) <a href="https://www.youtube.com/watch?v=LSXop-NTfR0">https://www.youtube.com/watch?v=LSXop-NTfR0</a>

Video: 'The importance of Empathy' (3:30min) <a href="https://www.youtube.com/watch?v=UzPMMSKfKZQ">https://www.youtube.com/watch?v=UzPMMSKfKZQ</a>

Video: 'Empathy mapping' (5:36min) <a href="https://www.youtube.com/watch?v=QwF9a56WFWA">https://www.youtube.com/watch?v=QwF9a56WFWA</a>

Video: 'Empathy not Sympathy' (2:32min) <a href="https://www.youtube.com/watch?v=HznVuCVQd10">https://www.youtube.com/watch?v=HznVuCVQd10</a>

Linked learning: Media Communication Skills micro-modules support the development of the 4Cs skills – Creativity, Communication, Critical Thinking and Collaboration

### **Local Trip / Expertise / Additional Work and Assessments**

Connect to one of the organisations in the local town or village to research ice cream preferences, undertake a survey of local unusual ice cream flavours that people know about or have tried.

Linked learning: Tutors are encouraged to work with other tutors to develop the project through multiple outcomes such as video, poster, Pecha Kucha, Interviews or Podcasts and SDG 4 supporting Skills - reports.

### **5 USER PROFILES**





Grandad is getting on an can be a bit cranky. Nothing cheers him up like a walk to get ice cream. Grandad has to watch his cholesterol and sugar intake. He has also been told to limit dairy in his diet, but he loves ice cream and his favourite flavour is mint chocolate chip.



Maggie is 9 months old and she loves to play and crawl. When her brother and sister have ice cream she wants some too. Marge tries to limit added sugar as she doesn't want Maggie to have a 'sweet tooth'. She gives Maggie bananas or nut butter as a treat. Maggie also loves avocado and mango.



Neil is an astronaut who travels to space. When he is in his space ship he is in a weightless environment. This is cool most of the time, but it is a challenge when he wants to have an ice-cream. After a few months on the International Space Station, Neil is desperate for fresh fruit and loves to get some ice-cream.



Lisa is a marathon runner who runs every single day and her metabolism is very high and she can eat what she likes. She snacks a lot on nuts as they are high in protein and eats food with a lot of ginger, turmeric, cardamom or cloves to help with aches and pains. She also drinks a lot of milk after her run for calcium.



Ralph is in secondary school and spends about 6 hrs a day sitting down. In the summer he likes to go for ice cream with his friends, but no 99s for Ralph as he is lactose intolerant. He's lucky the shop they go to have other frozen options, but he has to be careful as he is also allergic to nuts and strawberries.

### **DESIGN THINKING STAKEHOLDER MAPPING 1**



**INFLUENCERS** 

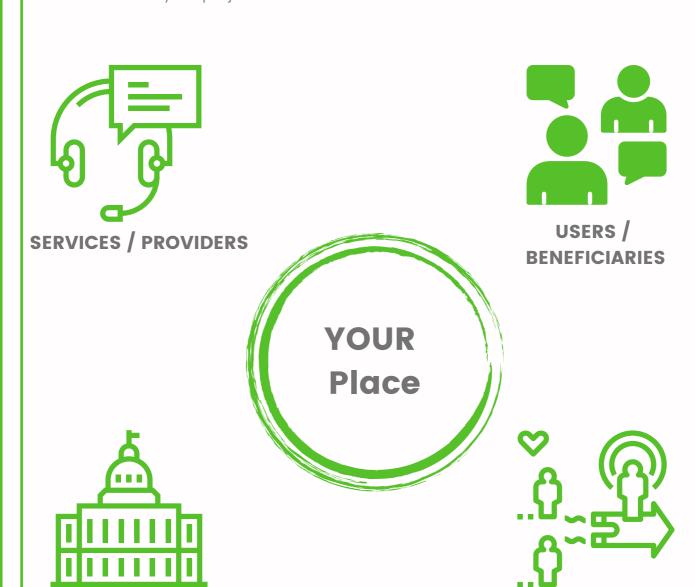
### **Stakeholder Mapping**

**GOVERNANCE** 

A project's stakeholders are the people or groups of people who can impact or are impacted by a project. If doing a project you will need to understand the different parties involved and how you will need to communicate and engage with them.

You will now begin to undertake a stakeholder mapping of your local place. Usually you will start this by having your decision challenge at the centre of your mapping.

Individually or as a class, create a list of all the different individuals, groups, or organisations that you can begin to identify and categorise who you might need to discuss or share your project with.



### **DESIGN THINKING STAKEHOLDER MAPPING 1**



### **DIFFERENT WAYS OF MAPPING**

Now you have a list you are going to practice organising them with project samples.

	Low	Strength of interest	High
Low	Inform		Consult
on success	LOW INTE LOW INFLU SHARE / MO RESPON	JENCE LO ONITOR	OW INFLUENCE HIGH INTEREST INVOLVE
o eouenljul High	LOW INTE HIGH PO KEEP THEM IN Involve	REST H	IGH INFLUENCE IIGH INTEREST OLVE AND WORK WITH THEM Partner

1. You are developing a skate park in a square in the centre of town - use your own town / village and pick the most central spot.

Use the grid above to organise your list of stakeholders and how you will need to communicate and engage with them.





2. You are want to create a youth music festival for your town / village.

Use the grid above to organise your list of stakeholders and how you will need to communicate and engage with them.

You will undertake another stakeholder mapping once you have your own project idea.



- What really matters to them?
- What do they think about?
- What are their worries, dreams or aspirations.





### What sort of things does your user hear / listen to?

- Where does your user get information?
- Who might your user listen to or be influenced by?

# THINK AND FEEL THINK AND FEEL WHAT DO THEY SAY

### WHAT DO THEY SAY AND DO

- What other things might your user do?
- What other things are they interested in?

### What does your user see?

- When do they use the town and what do the see? Do they walk, cycle or drive through the town?
- What might they notice?



### **Problem to Pitch - Project Management**

Design Thinking Lesson 3 - Define



### Lesson Title and Summary: Defining The Problem?

In this lesson learners will begin to understand how to define a problem.

Leaners are asked to begin to identify with the real problem using the Sustainable Development Goals (SDGs) to connect to aspects of the Ice Cream Olympics. Learners will use SDG 2 and 3 as a way to consider food production, nutrition, and exercise for health and well being. They will look at SDG 10 to begin to identify how they might make the Olympic games and the flavours more inclusive to address diverse health needs and abilities.

This lesson is the foundation for lessons in the other Micro-Modules where they will consider these aspects more systemically.

### Vocabulary

Assumptions; Analyse; Conflicts; Define; Source

### In this lesson, the learner will:

- understand the importance of getting to the source of a problem
- become more accustomed to the SDGs
- develop and awareness of how to localise the SDGs
- develop an understanding of the connection of local and global issues
- · complete a problem tree
- understand the complexity of wicked problems in their location
- develop critical thinking about problem solving

### **Materials:**

- · Worksheet: Problem Tree
- Support Sheet: Define the Problem
- · Pens, pencils
- Paper











### **Activity Instructions**

### Activity 1 Aligning your problem area to the Sustainable Development Goals (10 mins)

- 1. Organise learners into groups of 2 or 4.
- 2. Have groups randomly choose a piece of paper / posit with an SDG on it. This is the SDG this group will focus on.
- 3. Visit the Sustainable Development Goals (SDGs) knowledge platform see Media Box. Learners will use the SDGs knowledge platform to consider SDG 3 Health and Well-being; SDG 11 Sustainable Cities and Communities; SDG 13 Climate Action and SDG 15 Life on Land.
- 4. In their groups, ask them to look at the targets and indicators of their selected SDG and begin to think about the potential impact their solution might need to address Activity 3 Worksheet: Problem tree (20 mins).
- 5. Discuss as a class what they have discovered.

### Activity 2 Finding and defining problems in your local Ice Cream Olympics landscape (20 mins)

- 1. Organise learners into groups of 2 or 4.
- 2. Give each group of learners a local news paper and ask them to search for food and related articles that might help identify local problems issues or concerns in this area, e.g. farming, advertising local food businesses or products, sustainability and environment.
  - Alternatively, if using the internet, ask students to search online versions of local newspapers for local problems, issues and concerns.
  - Ask each group to feedback at least one problem, issue or concern.
  - As a class begin to think about your local area list of problems, issues and concerns.

### **Activity 3 Use a Problem Tree (20 mins)**

- 1. As a class watch the Video: Defining the Problem see Media Box.
- 2. After visiting the SDG knowledge platform write your selected SDG challenge from the Ice Cream Olympics on the problem tree trunk.
- 3. As a group, discuss the causes of this problem and write them underneath the problem. These become the "roots" of the tree.
- 4. Discuss the effects or consequences of this problem and write them above the problem. These become the "branches" of the tree.
- 5. For each cause, ask what causes it? For each effect, ask what the consequences are?

Continue this process until no further causes and effects are mentioned. You may not have all the answers at this point, so make notes of any assumptions, questions, conflicts, or gaps in knowledge.









### **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

### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, undertake activities 1 and 2 only.

Extension: For a longer class, watch the Video: 'How to Design a Problem Statement' and begin to try to develop a problem statement in canva as guided in the video. In addition, ask leaners to read the Support Sheet: P2P define supporting sheet and discuss as a class.

- Discuss the SDG diagram https://www.researchgate.net/figure/The-interconnected-nature-of-the-SDGs-Credit-Adopted-from-Azote-Images-for-Stockholm fig1 327884976
- Learners can also begin to research the organisations and stakeholders for their problem area, learners can undertake a stakeholder mapping.

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

- UN SDGs Knowledge Platform <a href="https://sdgs.un.org/goals">https://sdgs.un.org/goals</a>
- Video: Design Thinking 2 Define (4:34 min) <a href="https://www.youtube.com/watch?v=TNAdanuvwtc">https://www.youtube.com/watch?v=TNAdanuvwtc</a>
- Video: Defining the Problem (3:08 min) <a href="https://www.youtube.com/watch?v=2rJRVv-NOaA">https://www.youtube.com/watch?v=2rJRVv-NOaA</a>
- Video: How to Design a Problem Statement (5:38 min) <a href="https://www.youtube.com/watch?">https://www.youtube.com/watch?</a>
   v=w7l8qEj1JX0&ab channel=Canva
- Linked learning: Media Communication Skills micro-modules support the development of the 4Cs skills – Creativity, Communication, Critical Thinking and Collaboration - video, poster, Pecha Kucha, Interviews or Podcasts and SDG 4 supporting Skills - reports.

### Local Trip / Expertise / Additional Work and Assessments

Contact the local librarian to collect back issues of the local news paper for learners look for information on the project focus.

Learners can interview local organisations to find out more about their problem issue through primary source research. Learners can begin develop an empathy map for a user of a local service / business that seeks to 'solve' their problem area, e.g. access to healthy food or local food producers.

### **LESSON 3 P2P DEFINE YOUR PROBLEM**



### **Problem Solving**

### First Step in problem-solving - Understand the Problem:

While it may seem obvious, identifying the problem is not always as simple as it sounds. The biggest issue can be identifying the wrong source of a problem. This could mean your attempts to solve it are inefficient or even useless. Remember: Once the correct source of the problem has been identified you need to fully define it before it can be solved effectively.

### Things to think about:



- What do I know already about the problem? Make a list.
- Can a picture or diagram help you? Try to visually draw or map the problem.
- Who's telling me about this problem? What is their perspective?
- What do I need to find out?
- Do I need to speak with anyone else about this problem?
- Try rewriting the problem in your own words?
- What do you think the problem is?

### **Step two: BRAINSTORM**





### Step Three: Research: How are you going to turn the idea into a reality?



Brainstorming, researching and refining your problem go hand in hand. You will be going back and forth between the three until you come up with a plan. Once you brainstorm some great ideas for your business, you will need to research to learn more about the problem, product or service. In turn, that leads to more brainstorming and refining your problem.

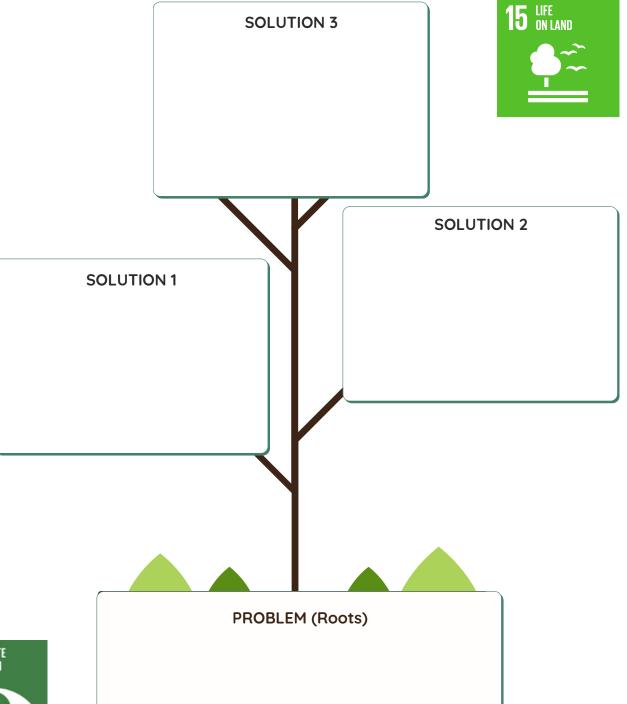
In the next phase you will think of how to turn your idea into a reality. Start to make a make a list of any questions or concerns that come to mind. Its never too eqrly!

- What materials do you need?
- What will it cost?
- Can you build it yourself or will you need help?
- If you will need to collaborate on this piece, decide who that will be and make plans to work together?

### PROBLEM SOLVING TREE

Find out different ways to solve a problem. Pick the best one.

I choose solution number \_\_\_\_\_\_because \_\_\_\_













**Problem to Pitch - Project Management** 

Design Thinking Lesson 4 - Ideate

### 13 CLIMATE ACTION 15 UNEQUALITIES AND COMMUNITIES AND COMMUNITIES

### Lesson Title and Summary: Ideate, Generating and Remixing Ideas

In this lesson learners will begin to understand how to define a problem. This lesson enables learners to develop an understanding of the process of generating ideas starting with their personal experience and then moving into project themes.

This process used in this lesson can be developed and the skills applied in other micro-modules of The Ice Cream Olympics, particularly Churning Games and Event Management.

### Vocabulary

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

### In this lesson, the learner will:

- explore their own experience as a source of ideas
- 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 Remix
- Worksheet: Remix SWOT extension task
- · Pens, pencils
- Paper









### **Activity Instructions**

### Activity 1 Remixing ideas – Rapid Response (20 mins)

- 1. Explain the activity learners will use aspects from their own experience to practice the concept and begin to understand how to develop creative problem solving skills.
- 2. Organise learners into groups of 3.
- 3. Working in groups, each person in the group fills in a row on the Worksheet: Ideate Remix 1:
  - naming a hobby,
  - what they like about it,
  - o the obstacles what annoys them or stops them from doing it,
  - and how they would change that.

NB: Learners can make this up – encourage them to be creative, be funny but make sure that the row entries are related - put on 10 min timer.

Teacher Prompt - Ask the group for input from the grid randomly e.g. "Group one tell me what's written in the second column, row 2, write their answer on the board.

Repeat 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 the 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 – see example.

Hobby	What they like about the hobby	Obstacles to undertaking the hobby	What change would remove the obstacles
Football	Meeting others	Not enough opportunities to meet others	Transport

Tutor models the activity. Ask the groups to start coming up with possibilities for a business, activity or service that include the 4 variables, the more random the variables the better to push their creativity.

### **Activity 2 Remixing ideas Rapid Response 2 (20 mins)**

1. Repeat the activity replacing the category headings with learners local theme / issue (This can build on lesson 3 outcomes, recreating the grid from the SDGs they researched, e.g. SDG X).

A local aspect / take on SDG X	Obstacles restricting reaching target	How can the obstacles be removed
--------------------------------	---------------------------------------	----------------------------------









### **REFLECTIVE EXERCISE: 3-2-1**

- 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

### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, watch the Video: 'Design Thinking Ideate' and undertake activity 1 only. Use activity 2 in a follow up class and ask students to generate 2-3 business, enterprise, product or service ideas from the variables used in the previous class.

Extension: For a longer class, use the work in activity 2 with the Remix SWOT worksheet. Ask the class to use one of the businesses, services or activity 1 ideas that has come out of the first part of the lesson.

Learners can begin to develop an empathy map for a user of the ideas, products or service that have come out of activity 1.

Learners can also integrate learning from DT 1 Empathy by using the 'Step into the Problem' worksheet or undertake a stakeholder mapping to work through the ideas generated.

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

Video: Design Thinking Ideate (4:03 min) - <a href="https://www.youtube.com/watch?v=zbLxs6te5to">https://www.youtube.com/watch?v=zbLxs6te5to</a>

UN SDGs Knowledge Platform <a href="https://sdgs.un.org/goals">https://sdgs.un.org/goals</a>

Linked learning: Media Communication Skills micro-modules support the development of the 4Cs skills – Creativity, Communication, Critical Thinking and Collaboration - video, poster, Pecha Kucha, Interviews or Podcasts and SDG 4 supporting Skills - reports.

### Local Trip / Expertise / Additional Work and Assessments

Learners can contact local businesses that may aligned to work linked to the SDGs they researched in relation to the Ice Cream Olympics.

They can interview local organisations to find out more about the SDG and the problem / issue the organisations are addressing. Learners can also develop an empathy map for a user of a local service / business that seeks to 'solve' their problem area, e.g. access to healthy food or local food producers.

Nar	ne
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### **Idea Remix 1**

Date



This worksheet will help you play with ideas using your own experience and pastimes.

Fill in the boxes - we will then work with the whole group to develop a number of possible ideas.



DO YOU HAVE A HOBBY OR PASTIME

**HOBBY** 



WHAT IS IT YOU LIKE ABOUT YOUR HOBBY

**LIKES** 



OBSTACLES TO UNDERTAKING YOUR HOBBY

**OBSTACLES** 



WHAT WOULD MAKE IT EASIER TO DO YOUR HOBBY

CHANGE

HOBBY	LIKES	OBSTACLES	CHANGE

### LESSON 4 REMIX SWOT

Name		
Date		



This worksheet will help you play with ideas using a SWOT analysis. Fill in the boxes for three ideas, businesses, services or products your team came up with from Lesson 4 and the Ideate exercise.

STRENGTHS	WEAKNESSES	USERS
STRENGTHS	WEAKNESSES	USERS
STRENGTHS	WEAKNESSES	USERS
	STRENGTHS	STRENGTHS WEAKNESSES



### **Problem to Pitch - Project Management**

### Design Thinking Lesson 5 - Ideate 2.0

### TU INEQUALITIES 11 SUSTAINABLE GITTES AND COMMUNITIES 13 CLIMATE ACTION 15 LIFE ON LAND 15 ON LAND

### 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:

- Support Sheet: Worst Idea Ever
- · Pens, pencils
- Paper











### **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. See Support Sheet.
- 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 (15 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









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

### **Local Trip / Expertise / Additional Work and Assessments**

Enterprise and Innovation Centres in Munster

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

### **LESSON 5 WORST GAME EVER SUPPORT SHEET**

The session is an iteration of the 'Worst Possible Idea' a term coined by author, president and co-founder, Bryan Mattimore, The Growth Engine Company LLC.



As a facilitation tool for ideation, the 'Worst Possible Idea' (WPI) turns the process of developing ideas upside down. Rather than having the pressure of coming up with novel or innovative ideas, WPI facilitates agile creative thinking in a relaxed, fun, collaborative atmosphere. The process is used by professionals, design studios, within hackathons and start-up weekends, and has been shown to boost confidence, challenge assumptions and offers a more inclusive approach to ideation. No one fears stating the worst possible ideas, a process loaded with fun and laughter and maybe a few groans.

This session introduces learners' to this concept focused around the worst game idea ever and a playful process of transforming how they can be formed into the foundation for possible good game ideas.

To start, explain the activity using the following examples of bad to good ideas:

- a sealed metal tube for a boat / as transport add an engine / design and pressurise it (submarine), add windows and wings (aeroplane), different wheels and slick design (bullet train)
- a chocolate teapot why is it a bad idea? It would melt. However, the 'hot chocolate spoon' that retails for about €4-5 uses that quality as a design feature to create a gift / treat product
- windows you can't see out of / opaque windows this how 'bathroom' or privacy glass started

To facilitate the worst game idea ever, have groups;

- 1. Come up with as many bad game ideas as they can. 8 -10 is a good number to aim for.
- 2. Ask them to list why they are bad game ideas, listing all the properties of what makes them bad as this is what forms the foundation of the transformation.
- 3. List what makes the WORST of these ideas SO terrible.

Here, you can decide whether to do a class activity or just swap the groups work, it is important no group works on their own bad ideas. Then either as a class (you can still swap the groups work and ask each group to offer up ideas to work on collaboratively a class) or within their groups.

- 1. Begin with searching for the OPPOSITE of the WORST attribute of each idea.
- 2. Then substitute something else in for the worst attribute.
- 3. Mix and match various awful ideas to see what happens all the time considering how to make them good game ideas or how they might become good attributes for a game e.g. penalties or benefits for players, player challenges, player / character, game world or 'backstory' development. These concepts are covered more deeply in other lessons.



**Problem to Pitch - Project Management** 

**Design Thinking Lesson 6 - Prototype** 

# 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION 15 LIFE ON LAND 15 ON LAND

### **Lesson Title and Summary: Prototype Your Idea**

In this lesson, learners will begin to consider their ideas for prototyping, develop a concept statement and look at ways to prototype their ideas depending on users / audience. They will also develop their designs on paper using their concept statement and prototyping support sheets. This lesson can be delivered over a number of sessions depending on learners timetable and lesson options selected.

Learners can use the Ready Set Design Challenge as a vehicle to develop the skills of Prototyping some of their ideas that came from Lesson 3 or 4. These skills will be applied within the Ice Cream Olympics' in other micromodules Ice Cream Remix, Churning Games.

### Vocabulary

Concept Statement; Enterprise; Innovation; Prototype

### In this lesson, the learner will:

- explore how to evolve and iterate their ideas
- · develop a concept statement
- explore prototyping methods
- develop prototyping skills

### **Materials**

- Support sheet: Rapid Response Prototyping
- Worksheet: Concept Statement
- · Video: 'Design Thinking Prototype'
- Worksheet: Ready Set Design Challenge
- Ready Set Design (RSD) materials' bags
  - A fastener, e.g. pipe cleaner, pin, paper clip
  - A surface, e.g. material, tin foil, card
  - A structure, e.g. sticks, straws, box,
- Craft / recycled materials (paper, card, glue, etc.)











### **Activity Instructions**

### **Activity 1 Prototyping – Rapid Response (15 mins)**

- 1. Watch the video What is a prototype.
- 2. Discuss the benefits of prototyping.
- 3. Go through the Support: Sheet Rapid Response Prototyping skills to give learners tools they can use for making models / prototypes.

### **Activity 2 Creating a Concept Map (20 mins)**

- 1. Review Worksheet: Concept Statement to ensure task understanding.
- 2. Ask learners to complete a concept statement for their project.
  - Learners focus on their project and its selected problem area e.g. climate adaptation. Using their empathy maps and the project's driving questions learners will create a concept statement. It is important that learners document this process as they will use images in their vision board and if doing the Pecha Kucha lessons.
  - Learners could use this opportunity to design an ice cream flavour based on a user's needs or a concern identified in the local landscape or the SDGs.

### **Activity 3 Developing your Prototype – Rapid Response (20 mins)**

- 1. Using their Concept Map Learners can begin to prototype an aspect of their concept.
- The Ice Cream Olympics: Learners can focus on the selected SDG problem / issue or concern they explored in relation to the Ice Cream Olympics in Lesson 3 and continue to work on those activities as a team. Teams can be grouped by selected SDG.

Option B: Learners undertake a Ready Set Design design challenge using the Worksheet: Ready Set Design, selecting an open ended problem aligned to the SDGs and a global challenge or a challenge set by the teacher. Each team will use the 3 items in the bag for this.

### **REFLECTIVE EXERCISE: 3-2-1 (5 mins)**

- 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









### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class undertake activity 1 and 2 only.

Option B: Ask learners to watch the Video: 'What is Prototyping' and complete the concept statement at home and come into class with the 3 benefits of prototyping for a class feedback session and undertake activity 3.

Extension: For a longer class, Watch the Video: Design Thinking - Prototyping before activity 3.

Option B: Ask learners' teams to present their concept statement and a prototype or design ideas for an Ice Cream Flavour.

Option C: Leaners can undertake a Ready Steady Design - see Media Box and P5 Rapid Response Prototyping worksheet - in preparation for activity 3.

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

'Design Thinking: Prototyping' (4:54min) <a href="https://www.youtube.com/watch?v=Q4MzT2MEDHA">https://www.youtube.com/watch?v=Q4MzT2MEDHA</a>

'What is a Prototype?' (4:11min) <a href="https://www.youtube.com/watch?v=4XengN5lb9o">https://www.youtube.com/watch?v=4XengN5lb9o</a>

'Paper Prototyping' (2:36min) <a href="https://www.youtube.com/watch?v=85muhAaySps">https://www.youtube.com/watch?v=85muhAaySps</a>

'Rapid Prototyping' (7:31min) <a href="https://www.youtube.com/watch?v=JMjozqJS44M">https://www.youtube.com/watch?v=JMjozqJS44M</a>

'Ready Steady Design' (3:26min)

https://www.youtube.com/watch?v=jIXSuZg2awA&feature=emb\_logo

### **Local Trip / Expertise / Additional Work and Assessments**

Enterprise and Innovation Centres in Munster

- Kerryscitech <a href="https://kerryscitech.com/">https://kerryscitech.com/</a>
- The Tom Crean Business Centre <a href="https://www.creancentre.com/">https://www.creancentre.com/</a>
- RDI Hub Killorglin (home to the NDRC in the South West <a href="https://rdihub.com/">https://rdihub.com/</a>
- HQ Kerry <a href="https://hgkerry.com/locations/hg-tralee/">https://hgkerry.com/locations/hg-tralee/</a>
- Cork Bic <a href="https://www.corkbic.com/">https://www.corkbic.com/</a>

### **LESSON 6 RAPID RESPONSE PROTOTYPING**

### 15 LIFE ON LAND

### INTRODUCTION

Watch the following video: 'What is Design Thinking?' <a href="https://www.youtube.com/watch?v=a7sEoEvT8l8">https://www.youtube.com/watch?v=a7sEoEvT8l8</a>

Answer the questions below. You can re-watch the video as many times as you need to.

a) What or who does design thinking help you focus on?	
b) How do design thinkers learn?	_
c) What do simple prototypes do?	_
d) What do rapid prototypes do?	_
e) If you ideate, prototype and test too early - what are three mistakes that can be made?	
f) Write down the two reasons for using design thinking.	
g) What are the five stages of design thinking?	

Watch the video: 'How to make a cardboard prototype' <a href="https://www.youtube.com/watch?v=k\_9Q-KDSb9o">https://www.youtube.com/watch?v=k\_9Q-KDSb9o</a> Write down as many tips as you can.



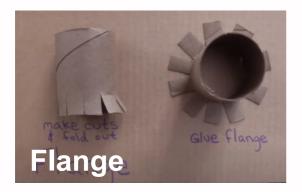


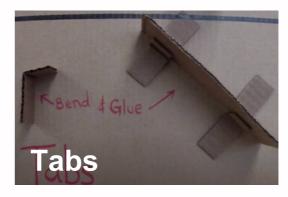
### **LESSON 6 RAPID RESPONSE PROTOTYPING**

### READY, STEADY, BUILD: KNOWLEDGE GATHERING

Today we are going to experiment with rapid prototyping with materials that we have to hand. You will explore three basic elements - useful for rapid prototyping:

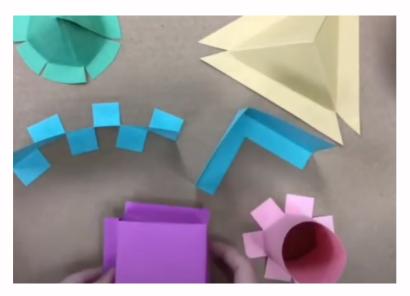
- Structure
- · Fastening / Joining
- Surface
- 1. <u>Structure</u> this will provide support and form to your prototype. The structure provides strength by load-bearing if re-enforced or solid, e.g. columns or supports for covering, or other materials, e.g. tent poles. Here's some simple tips for creating structure.





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Watch the short video on structural techniques - all these processes can be scaled up to make bigger models and forms.

Write down the key ideas in the video. Use bullet points.



Creating 3D sculptures https://www.youtube.com/watch?v=pi6Y7yCz7Y8

#### **LESSON 18 - 20 RAPID RESPONSE PROTOTYPING**

13 CLIMATE ACTION

2. <u>Fastening / joining and attaching</u> - this can be done using structural approaches, such at slots and tabs, or using other materials like pins, paperclips, string tape or glue.









Some techniques can be both structural and used to join things together like the slots / tabs here on the left.

What other ways do you know of joining things together? Discuss this in your group and make a list.

Knots are another useful joining technique- here's a useful website for learning to tie knots <a href="https://www.animatedknots.com/complete-knot-list">https://www.animatedknots.com/complete-knot-list</a>

#### **LESSON 6 RAPID RESPONSE PROTOTYPING**



3. <u>A surface</u> - a surface has a number of functions, such as protection, decorative, textural, adhesive, and are made from numerous materials, e.g. plastic, wood, fabric, paper, both natural and synthetic.



Sometimes they can be structural as well as serving other functions. This surface material could provide support and be used as an attachment or joining function as well as offering a decorative purpose.



Natural materials often have other properties such as insulation, waterproofing, protection as well as being structural, making them good for outdoor construction.



Waterproof, or those that are water repellent materials (hydrophobic), are often inspired by nature, whether a rough surface that minimises water contact and absorption or the nanopatterns of insects who fly in the rain undisturbed. You can also treat materials with sprays to make them waterproof.



Safety surfaces can be both decorative and functional. They often use bright colours and recycled materials from other processes. They can be highly durable and so reduce maintenance



Interior design surfaces, e.g. upholstery, curtains, wallpaper, bedding, worktops, are increasingly synthetic and made from recycled materials, e.g. SeaQual or Econyl from recycled fishing nets. They can be durable, easily cleaned and pleasurable to look at.

#### LESSON 18 CREATING A CONCEPT STATEMENT

#### What is a Concept Statement?

A concept statement summarises a project's meaning, purpose, direction and depth. Concept statements are used at the beginning of the project planning stage. Within innovation and product development, the concept statement helps to focus ideas and keep the team on task.

Use the prompt boxes below to help your team create a concept statement for The Ice Cream Olympics event, game or Ice Cream flavour.

1. Define the need in two sentences



You are developing The Ice Cream Olympics event, game or Ice Cream flavour for... Who? (tell us about your attendee / player / consumer). To do what? (This is the purpose of the event, include your specific theme / SDG focus).

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2. The problem / issue - explain how your concept will address the problem

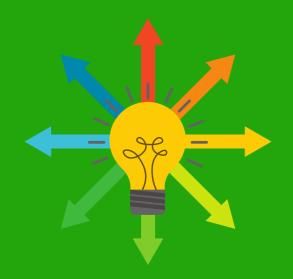


3. Your people / person's needs - tell us about your user and their needs from your solution



4. Details- explain how your solution's concepts meets this need





## **SDG 15 Problem to Pitch Project Managment**

## Lesson 7 Design Thinking - Test 1

**Creating and Using Vision Boards** 

# 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION 15 LIFE ON LAND 15 CLIMATE ON LAND

## **Lesson Title and Summary: Creating and Using Vision Boards**

Evaluating an idea is a key aspect of Design Thinking. In this lesson learners will begin the process of testing their ideas with potential users.

This lesson prepares learners to present their work in a structured way and prepares them for organising documentation (images, details) of their idea development and process. Learners will learn that this is not the end of the process and that they may learn something that means they might need to return to an earlier stage, e.g. Define or Ideate.

This lesson will begin to help them test their ideas by developing their vision boards using the Vision Board support worksheets and prepare them for their final pitch - their Pecha Kucha presentation.

#### Vocabulary: Documentation; Test; Vision Board; Visualisation

#### In this lesson, the learner will:

- · further define key elements of their idea
- structure their thinking
- · understand the purpose of a Vision Board
- present their thinking visually

#### **Materials**

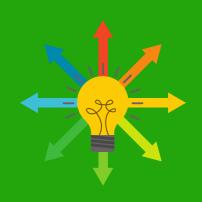
- · Worksheet: Vision Board Support
- Support Resource: Creating a Vision Board
- Internet Access
- · Pens, pencils
- Large pieces of paper
- Whiteboard











#### **Activity Instructions**

**Activity 1 Testing and Defining your elements of your idea (20 mins)** 

- 1. Watch the video 'Design Thinking TEST'.
- 2. As a class, discuss each of the boxes on the Vision Board Support worksheet, so that learners understand the task and its purpose.
- 3. Using their work from the prototyping process, ask learners to fill in the Worksheet: Vision Board Support, which will help them to define the key elements of their project idea.
- 4. Once they have completed this activity they will be ready to develop their Vision Boards.

Activity 2: Using and Creating your Vision Boards (30 mins) and either additional lessons or complete in their own time or other supportive classes e.g. English, CSPE.

- 1. Explain the activity, going over the key elements of the Worksheet: Vision Board.
- 2. Watch the video 'Create a Digital Vision Board'.
- 3. Ask leaners to google 'vision boards' and select 3 styles that they like and take a screen grab as inspiration for their own vision boards.
- 4. Ask learners to decide if they want to create a digital vision board or use physical materials.
- 5. Once decided, learners can either make a list of the materials they will need to create their vision board, or set up a Canva account for a digital vision board.
- 6. Learners will begin to think about the materials and images required to help them present the key elements of their project ideas and their paper designs and paper prototypes.
- 7. Learners will begin to work through the worksheet: Vision board required to create and complete their vision board.
- 8. Learners can begin to gather images including any they may have from the prototyping sessions and start their preparation work for their vision board.

Evaluating an idea is a key aspect of Design Thinking. Learners will see that this is not the end of the process and that it may reveal something that means they might need to return to an earlier stage, e.g. Define or Ideate. They will begin to create their vision board in preparation for creating their design and pitch.

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

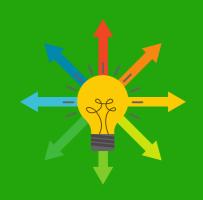
- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One opinion they have about the tasks











#### **EXTENSION / REDUCTION ACTIVITIES**

Depending on class duration and number of teams, it is suggested that two lessons are used to allow learners to create their vision boards which will form the initial steps in helping them develop their Pecha Kucha's - see Media Communication Module 3.

Learners will be able to gather images and use their vision boards and the vision board support worksheet as prompts to think about some of the ideas within their project.

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

Video: 'Design Thinking TEST' (3:19min) https://youtu.be/UVEQCNM6X-A

'Create a Digital Vision Board' <a href="https://www.canva.com/create/vision-boards/">https://www.canva.com/create/vision-boards/</a>

'How to make a pitch using a mood board' (4:00min) <a href="https://www.youtube.com/watch?v=8dG--KvDIX8">https://www.youtube.com/watch?v=8dG--KvDIX8</a>

'Paper Prototyping' (2:36min) <a href="https://www.youtube.com/watch?v=85muhAaySps">https://www.youtube.com/watch?v=85muhAaySps</a>

#### Local Trip / Expertise / Additional Work and Assessments

Invite the Local Enterprise Officer to the learners' final pitch presentations - share their vision boards in advance.

Present their vision boards to a Local Development Company or Community and Business Alliance /or Chamber of Commerce.

Organise a visit from the Local Enterprise Office to discuss Enterprise.

Create a local enterprise event / exhibition to share their vision boards and present their Pecha Kucha, e.g. in school at the end of school year, in the local library or online - align to National Enterprise Month.

Develop a Rocket Pitch event - 3 mins 3 slides - create an event to share the learners ideas.

Look at enterprise competitions encouraging this as part of the students learning process, e.g. Eco-Unesco, Cool Projects.

#### CREATE A VISION / MOOD BOARD





Develop the central message this is an image that will represent your solution.

Keep it colourful and visual Our brains love images.



#### STEP 1 THE 'WHAT' OF YOUR SOLUTION

Develop an image that represents the reason behind your solution - the 'problem' you want to fix. Use pictures, texts or quotes that help you tell what your business is.



Use can use Pinterest,
Google images, cut out
images and texts from
magazines and drawings

Vision board examples on Pinterest.

https://www.pinterest.ie/scrap pinmichele/vision-boardsamples/?lp=true

#### STEP 3 THE WHO OF YOUR SOLUTION

Develop an image of the people who will use your solution. Use pictures, texts, quotes, statistics that help to you define your users



#### STEP 2 THE 'WHY 'OF YOUR SOLUTION

Develop an image that will show what your solution will provide for people or fix their problem. Use pictures, texts and quotes that help you show how your business helps your customers.

### STEP 4 THE 'HOW' OF YOUR MARKETING

How will you reach your users or consumers? Use pictures, texts and quotes, that help you tell the reason for our business.

#### CREATE A VISION MOOD









#### STEP 1 MATERIALS

You can choose to do your vision board online but if you make it you will need to gather card board, card /paper, glue, scissors, images.



Begin to gather images that tell the story

of your project - you can use drawings,

cut outs, images printed from Google or

Pinterest or if digital, you can scan your

images online.

#### STEP 2 DECIDE ON WHO WILL DO WHAT

Each person should in the group should be responsible for one of the four sections in the image board worksheet.



You can organise the sections in different ways - think about your audience - who are you trying to communication for that audience.

#### STEP 3 PLANNING YOUR BOARD

As a group you can start to plan the size, shape and format of your vision board - see examples but don't be limited. It should reflect your project.



#### **STEP 4 GATHERING IMAGES** STEP 5, ORGANISE YOUR INFO

reach? Look at examples of posters,

#### REMEMBER MESSAGE AND AUDIENCE

- 1. Will they read left to right?
- 2. Will you direct them how to read using arrows or numbers?
- 3. Will your central idea be the biggest image?

#### CREATE A VISION / MOOD BOARD



## CREATIING A DIGITAL VISION BOARD USING CANVA Step 1: Gather and share your digital Images

When you have decided who is working on what section – gather your digital images and save them all together in a folder. You can create and use a shared drive folder to work in a group.

#### Step 2: Open an account in Canva

https://www.canva.com/

#### Step 3: Open a new design in Canva

Once you're signed in, you'll want to click "Create a Design," and choose the template you like, perhaps mood board, poster or photo collage.

If you plan on printing your vision board, you can choose **USE CUSTOM DIMENSIONS**. You can see this in the top right of the screen.

#### Step 4: Import your images into Canva





HTTPS://WWW.PINTEREST.IE/SUNFLOWERWAYS
/CREATING-A-VISION-BOARD/

#### **LESSON 7 ZONE MAPPING**

A zone map allows us to start from ourselves Zone O (our project or our town) and include other people, places or things in relationship to ourselves Zone I - 5.

Zone O - the self, the project

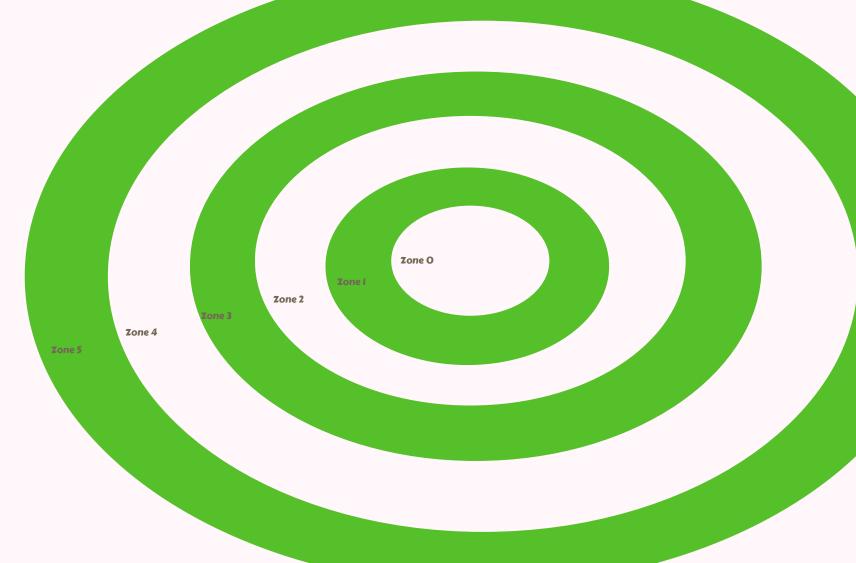
Zone I - Location of project, e.g. school or town

Zone 2 - Location of school or town

Zone 3 - Location of town, e.g. Iveragh, Kerry

Zone 4 - Location of county, e.g. Munster or Ireland

**Zone 5 - Location of province or country, e.g. Ireland or Europe** 





#### **LESSON 7 LEAN CANVAS**

#### **Problem**

List your customer's top 3 problems

-worry that pet will get lost -worry that pet is up to no good when home alone -miss pet and want a way to connect while at work

#### **Existing Alternatives**

List how these problems are solved today

There are various coll ars on the market that track your pet's location. Some track steps and various other stats. There is a separate camera device that can be worn by your pet, but nothing exists that works as a GPS, camera and communication device in one.

#### Solution

Outline a possible Solution for each problem

worry that pet will get lost-you will be able to track your pet at all times. worry that pet is up to no good

when home alone-you will be able to see what your pet is doing at all times.

miss pet and want a way to connect while at work-you will be

able to connect using your voice while you're away

#### **Key Metrics**

List the key numbers, that tell you how your business is doing

Number of units sold.

#### Unique Value Proposition

Single, clear compelling message, that turns an unaware visitor into an interested prospect

Love Paws makes it possible to be with your pet even when you're away.

#### High Level Concept

List your x for y analogy (e.g. youtube = flicker for videos

Love Paws is the Nest of pet tracking devices.

#### Unfair Advantage

Somthing, that can't be easily copied or bought

I am Cesar Milan, world famous dog trainer and I have my own TV show and numerous celebrity dients.

#### **Customer Segments**

List your customer segments and

Ideal customers are middle to high income, tech-sawy pet owners who spend a significant time away from their pets.

#### Channels

List your path to customers

Give away for free to celebrity pet owners and celebrity TV personalities on Animal Planet, then do a billboard, print and web and social media campaign.

#### Early Adopters

List the characteristic of your ideal customer

Early adapters are pet owners who love to keep up and own the latest tech innovations as soon as they come out.

#### Cost Structure

List your fixed and your variable costs

Product design, sourcing of materials, production costs, engineering, marketing, PR.

#### Revenue Streams

List your sources of revenue

We will initially sell online with the goal to being on the shelves of major pet stores by end of year.





**PRODUCT** 

MARKET

#### **LESSON 7 LEAN CANVAS**

PROBLEM List your top 1-3 problems.	SOLUTION Outline a possible solution for each problem.  KEY METRICS	UNIQUE VALUE Single, clear, compelling methat states why you are different worth paying attention.	ssage	UNFAIR ADVANTAGE Something that cannot easily be bought or copied.  CHANNELS	CUSTOMER SEGMENTS  List your target customers and users.
EXISTING ALTERNATIVES List how these problems are solved today.	List the key numbers that tell you how your business is doing.	HIGH-LEVEL CONCEPT  List your X for Y analogy e.g. YouTube = Flickr for videos.		List your path to customers (inbound or outbound),	EARLY ADOPTERS  List the characteristics of your ideal customers.
COST STRUCTURE List your fixed and variable costs.			REVENUE STRE List your sources of revenue.		15 LIFE ON LAND





1. WHAT are you planning to do?



2. WHY do you want to do this project? WHO will benefit?

3. W	HEN	and	WH	ERE
will	the	activ	ity	
take	pla	ce?		

Date:\_\_\_\_\_

Time:\_\_\_\_\_

Location: \_ \_ \_ \_



4. WHAT funds are needed to do this activity?

#### THE 5 WHYS OF BUSINESS PLANNING





5. WHO needs to approve this project?

## 8 WHAT kind of publicity is needed? WHEN?

Type of publicity. When needed?

- 1.
- 2.
- 3.
- 4.

#### 7. WHO will do the WORK?

1 Task 3 Task

Person Responsible Person Responsible

Date Due Date Due

2 Task 4 Task

Person Responsible Person Responsible

Date Due Date Due

#### 8. We're Done!! Was it Worthwhile?



WHAT went well? WHAT didn't go well?

WHAT would you do differently next time?

WHO needs to receive a thank you note? Name WHO will write it?

#### THE 5 W'S OF BUSINESS PLANNING

# 15 LIFE ON LAND

#### WHAT WHY WHO WHEN WHERE



1. WHAT Is the problem?

Give 3 reasons for your solution, product or service.

2. HOW does your solution 'fix' the problem?



3. WHO will use your solution?
Think of 2 - 3 users.



4. WHY should anyone buy / use your solution?



5. WHERE / HOW will you reach your customer?



6. WHAT resources do you need for your business?

#### THE 5 WHYS OF BUSINESS PLANNING



#### WHAT WHY WHO WHEN WHERE



8 WHAT is the investment?
How will you make the money you need to fund your solution?



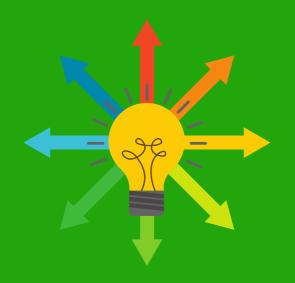
9. WHEN should this be done?



WHEN / HOW will you know you are successful?



11. WHAT do you need to do next?



## **SDG 15 Problem to Pitch Project Managment**

Lesson 8
Design Thinking Test 2.0
Pecha Kucha 1

Design, Technology, Environment, Science, Sustainability



#### Lesson Title and Summary: Preparing to Pitch-Pecha Kucha 1

A Pecha Kucha ('chit chat' in Japanese) is a presentation format that encourages presenters to be concise and use the relationship between image and text. The Pecha Kucha format is 20 slides with a 20 second limit – 400 seconds.

In this lesson, learners will be introduced to the Pecha Kucha format and begin to analyse what makes a good presentation so they can prepare to create their own Pecha Kucha presentation.

Vocabulary: Outline; Pecha Kucha; Pitch

#### In this lesson, the learner will:

- learn about the Pecha Kucha format
- · develop research and analysis skills
- share ideas and opinions
- develop an understanding of what makes a good presentation
- · develop an awareness of presentation skills

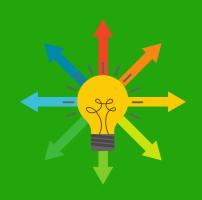
#### **Materials**

- · Video: A Pecha Kucha About Pecha Kucha
- Video: Bad Presentation 1
- Video: Bad vs Good Presentation
- Worksheet: Pecha Kucha Analysis
- Internet
- Paper
- · Pens, pencils or markers









#### **Activity Instructions**

#### Activity 1 What is a Pecha Kucha? (25 mins)

- 1. Watch Video: 'A Pecha Kucha About Pecha Kucha' and ask learners to answer the following:
  - a. What is different between a Pecha Kucha and a traditional presentation?
- 2. Visit www.pechakucha.com in pairs and select 1-2 Pecha Kucha presentations to watch and complete Worksheet: Pecha Kucha Analysis.
- 4. As a whole class, discuss responses in the Pecha Kucha Analysis worksheet.
  - a. Does this feel easier or harder as a format for a presentation?
  - b. Did you notice anything interesting about the presentations?
  - c. What did you like about the format?
  - d. Was there anything you didn't like?

#### Activity 2 What makes a good presentation? (25 mins)

- 1. Watch Video: Bad Presentation 1 review in pairs.
- 2. Share your thoughts with your partner, then share your comments with the whole class.
- 3. Repeat Steps 1 & 2 with Video: Bad vs Good Presentation and watch up to up to 1:24 min.
- 4. Compare the two bad presentations. What was similar between the two?
- 5. After the comparison and discussion, begin the video from 1:24 min and watch the good presentation example.
- 6. Compare the good presentation with the bad ones.
  - a. What made it good?
- 7. Ask learners to thing about anything else that is important for a good presentation.

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

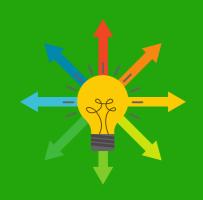
- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One opinion they have about the tasks











#### **EXTENSION / REDUCTION ACTIVITIES**

`Reduction: For a shorter lesson, complete Activity 1 only and follow up with Activity 2 in the next lesson, or set it as an at-home task.

Extension: For a longer lesson, encourage learners to explore the Pecha Kucha presentations and find an example they'd like to present to small groups. Extend discussion time in Activity 1 & 2.

Learners could look at other videos for tips on presentations- see Media Box.

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

A Pecha Kucha about Pecha Kucha' (6:48min) - https://www.youtube.com/watch?v=jJ2yeplaAtE

'Pecha Kucha' https://www.pechakucha.com

'Bad Presentation 1' (2:01min) https://youtu.be/KgObza4ek1U

'Bad Presentation vs Good Presentation' (2:28min) https://www.youtube.com/watch?v=S5c1susCPAE

'Pecha Kucha Presentation' tips (6:58min) <a href="https://www.youtube.com/watch?v=zAZ8UJUpno">https://www.youtube.com/watch?v=zAZ8UJUpno</a>

'Using PowerPoint for your presentation' (4:26min) https://www.youtube.com/watch?v=g0XWIPbXmVY

'How to give a great presentation' (7:04min) <a href="https://www.youtube.com/watch?v=MnIPpUiTcRc">https://www.youtube.com/watch?v=MnIPpUiTcRc</a>

<u>'</u>7 Presentation structures used by the best Ted' Talks (11:22min) https://www.youtube.com/watch?v=hMk5s1y486I

#### Local Trip / Expertise / Additional Work and Assessments

Stakeholder mapping worksheet supports learners to focus on their local audience - see Lesson 2.

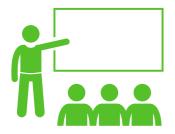
Develop the project across subject areas through multiple outcomes such as video, poster, Interviews or Podcasts.

- SDG 8 Media Communication supports the development of the 4Cs skills Creativity, Communication, Critical Thinking and Collaboration, sign in using your school email https://www.codesres.ie/\_files/ugd/92a067\_a8f108ce0a6448e9851a5b03dd2e8d40.pdf
- SDG 4Supporting Skills https://www.codesres.ie/sdg-4-supporting-resources sign in using your school email.

## **LESSON 8 PECHA KUCHA ANALYSIS**

Pecha Kucha (pe cha ku cha) means 'chit chat' in Japanese and was devised as a presentation format to get presenters straight to the point.





Team:	
Date:	



Watch the following presentation and answer the questions below <a href="https://www.youtube.com/watch?v=jJ2yeplaAtE">https://www.youtube.com/watch?v=jJ2yeplaAtE</a>

- What did you like about the format?
- Was there anything you didn't like or thought was boring?
- What stood out most for you about the presentation?
- Does this feel easier or harder as a format for a presentation?



Visit www.pechakucha.com and select 2 contrasting presentations. Use the questions in box 2 and 3 to make notes about the presentations.

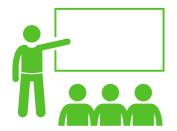
Peach Kucha #1 Title: \_\_\_\_\_

- What was the presentation about?
- What stood out to you about their images?
- Did the image and words work well together?
- What did you learn from the presentation?

#### LESSON 28 PECHA KUCHA ANALYSIS

Pecha Kucha (pe cha ku cha) means 'chit chat' in Japanese and was devised as a presentation format to get presenters straight to the point.





Team:	
Date:	



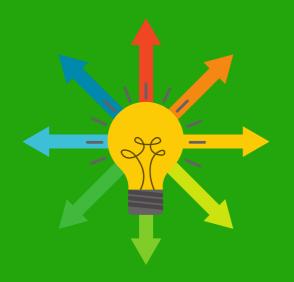
Pecha Kucha #2 Title: \_\_\_\_\_

- What was the presentation about?
- What stood out to you about their images?
- Did the image and words work well together?
- What did you learn from the presentation?



Think about your answers above - use them to start thinking about your presentation.

- Who is your audience think about their age and interests or what might interest them about your topic.
- What style will you use drawings, photos, collage?
- What information do you want them to know?



## **SDG 15 Problem to Pitch Project Managment**

Lesson 9 - 10
Design Thinking Test 2.0
Pecha Kucha 2

Design, Technology, Environment, Science, Sustainability



## Lesson Title and Summary: Creating a Pecha Kucha

In this lesson, learners will continue to plan, create and present a Pecha Kucha on their marine plastic waste project.

The lesson and its resources support learners to create their outline and begin to develop their presentation step-by-step. Using the lean canvas and the 5 Ws of business planning, they will gather the information to present their project

Vocabulary: Outline; Pecha Kucha; Pitch

#### In this lesson, the learner will:

- summarise work done (to date)
- create an outline for their presentation
- begin to gather their images and set up their presentation template
- develop team skills
- develop presentation skills
- create a Pecha Kucha presentation
- · deliver a Pecha Kucha

#### **Materials**

- · Worksheet: Pecha Kucha Planning Guide
- Worksheet: Pecha Kucha Outline
- Worksheet: Pecha Kucha Checklist
- Worksheet: 5 Ws Business Planning
- Worksheet: Lean Canvas
- Internet
- · Computer or tablet access
- Paper
- · Pens, pencils or markers











#### **Activity Instructions**

#### **Activity 1 Planning an outline (20 minutes)**

Before the lesson, give each team a copy of the Pecha Kucha Planning Guide and ask them to read through it before the lesson. They can underline words or phrases they aren't sure of. Learners will work through the creation of their Pecha Kucha as a team and will divide the work between them.

- 1. Give learners 5-10 minutes in their teams to review the Pecha Kucha Planning Guide. As they should have read through it before the lesson, they can use this time to summarise the key points and check understanding of unknown vocabulary. Monitor and support.
- 2. Ask learners to complete worksheet: Pecha Kucha Outline using their vision boards and worksheet: vision board support from lessons 21 22 to help define key elements of their idea.

#### **Activity 2 Develop the Pecha Kucha template (30 mins)**

- 1. Using worksheet: Pecha Kucha Template, allow learners to work through developing their ideas and plans for their Pecha Kucha. They can also use this time to begin gathering images and sourcing information.
- 2. Monitor and check each team's template and encourage learners to refer to the Planning Guide and their Outline for support.
- 3. Encourage learners to keep asking themselves about the image / script relationship and to ensure minimal text on their slides.

There are two structured sessions to support the learners' development of their Pecha Kucha, with an additional session proposed for finalising the activity, allowing approx 3x 1hr classes. However, teachers may elect to offer more time depending on class length and learners' needs. To help learners' ensure they have all the information required for their pitch, they can also use the lean canvas and 5 Ws of Business Planning to help them gather the information.

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

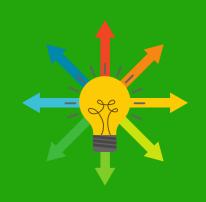
- Three things they feel they have learnt from the tasks
- Two things they found most interesting and would like to explore more
- One opinion they have about the tasks











#### **EXTENSION / REDUCTION ACTIVITIES**

Reduction: For a shorter class, complete Activity 1 only and extend discussion time. Complete Activity 2 in a follow-up lesson.

Extension: For a longer lesson, allow learners to continue to work on developing their ideas and planning. Also, spend more time discussing the additional worksheets - Lean Canvas and 5Ws.

Flipped Classroom: Learners are encouraged to look at other presentations for their styles and delivery. Ask learners to visit https://www.pechakucha.com for inspiration.

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

How To Improve Communication Skills? (10 min 28s) https://www.youtube.com/watch?v=v3DiMAPolls

Tips on giving oral presentations (2:06min) https://www.youtube.com/watch?v=QKOO99UjsSE

Dos and Don'ts of making presentations effective (2:55min) https://www.youtube.com/watch?v=X50StnWVh9I

Be a confident public speaker:

- Video (4:49min) https://www.youtube.com/watch?v=tShavGuo0\_E
- Public speaking worksheet https://static.tumblr.com/nw2r6wp/2LAmj0c61/publicspeaking.pdf

Nine habits that are destroying your confidence (6:50min) https://www.youtube.com/watch?v= RtUt0RsGMc

#### Local Trip / Expertise / Additional Work and Assessments

Stakeholder Mapping worksheet supports learners to focus on their local audience - see Lesson 3.

Develop the project across subject areas through multiple outcomes such as video, poster, Pecha Kucha, interviews or podcasts.

- SDG 8 Media Communication supports support the development of the 4Cs skills Creativity, Communication, Critical Thinking and Collaboration - sign up using your school email https://www.codesres.ie/ files/ugd/92a067 a8f108ce0a6448e9851a5b03dd2e8d40.pdf
- SDG 4 Supporting Skills https://www.codesres.ie/sdg-4-supporting-resources sign up using your school email.





1. WHAT are you planning to do?



2. WHY do you want to do this project? WHO will benefit?

3. W	HEN	and	WH	ERE
will	the	activ	ity	
take	pla	ce?		

Date:\_\_\_\_\_

Time:\_\_\_\_\_

Location: \_ \_ \_ \_



4. WHAT funds are needed to do this activity?

#### THE 5 WHYS OF BUSINESS PLANNING





5. WHO needs to approve this project?

## 8 WHAT kind of publicity is needed? WHEN?

Type of publicity. When needed?

- 1.
- 2.
- 3.
- 4.

#### 7. WHO will do the WORK?

1 Task 3 Task

Person Responsible Person Responsible

Date Due Date Due

2 Task 4 Task

Person Responsible Person Responsible

Date Due Date Due

#### 8. We're Done!! Was it Worthwhile?



WHAT went well? WHAT didn't go well?

WHAT would you do differently next time?

WHO needs to receive a thank you note? Name WHO will write it?

#### THE 5 W'S OF BUSINESS PLANNING

# 15 LIFE ON LAND

#### WHAT WHY WHO WHEN WHERE



1. WHAT Is the problem?

Give 3 reasons for your solution, product or service.

2. HOW does your solution 'fix' the problem?



3. WHO will use your solution?
Think of 2 - 3 users.



4. WHY should anyone buy / use your solution?



5. WHERE / HOW will you reach your customer?



6. WHAT resources do you need for your business?

#### THE 5 WHYS OF BUSINESS PLANNING



#### WHAT WHY WHO WHEN WHERE



8 WHAT is the investment?
How will you make the money you need to fund your solution?



9. WHEN should this be done?



WHEN / HOW will you know you are successful?



11. WHAT do you need to do next?

#### **LESSON 9-10 PECHA KUCHA CHECKLIST**

# 15 LIFE ON LAND

#### 1. Start With an Outline - All presentations should start with an outline

What is an outline – this is the structure of the story you are going to tell. Stick to one idea per slide then have 1 or 2 sentences about that idea / slide – Remember you have only 20 seconds per slide.

- Use the points below to help you order your outline
- Think about how many people are in your group
- Think about how many slides that is each per person
- Divide your content between your group
- · You should always have an introduction slide
- · You should always have an summary slide at the end
- You can use paper, post-its, the outline function in Powerpoint, or a digital notebook or Microsoft Word to plan your presentation.



#### 2. Tweak Your Outline

- Play around with the order of your information and slides to tell your story. Remove details or slides if they don't help you say what you want to say.
- You might separate some of your sentences / ideas or combine them depending on what you want to say you only have 20 slides x 20 secs each slide.
- Think about your audience try to make it interesting for them. Keep playing with the order of your ideas and your story / message.

3. Make your template and add your pictures - Once you have your 'story' then find strong visual images for your 20 slides that help tell your story. Work together – think about your image choices and how they fit with your text.

Let your images be the tip of the iceberg – as presenters you will explain what's 'behind' your image.



- You will have to import images into your Pecha Kucha template instructions are in the Pecha Kucha planning guide.
- You should limit the text on your slides try to keep them as only images / graphics or images / graphics with titles.
- The most successful Pecha Kuchas don't use much if any text. No more than 5 words per slide is a good reference.

#### **LESSON 9-10 PECHA KUCHA CHECKLIST**



#### 4. Practice - Practice as much as you can. And practice again.

- Speak your text out loud with your slide show running more than once and time it –
  you will see that even with your 1 or 2 sentences per slide you might have too much.
- Keep practicing your slides with the text you want to speak do they tell your story well? Keep re-doing them until you are happy.

'The 7Cs of Effective Communication': <a href="https://www.youtube.com/watch?v=xXz1oZONUIM">https://www.youtube.com/watch?v=xXz1oZONUIM</a>

- You can also have a number of slides for each idea or sentence to help slow things down or improvise. Be careful when improvising – it is easy to run over time.
- Tips on giving oral presentations <a href="https://www.youtube.com/watch?v=QKOO99UjsSE">https://www.youtube.com/watch?v=QKOO99UjsSE</a>

#### 5. To Animate or not?

Animations and transitions can be distracting and also mess up your timings. General
advice is not to animate as the slides are only 20 secs long.

#### 6. Practice your masterpiece again

- Yes, time to practice again. With less than 7 minutes to present, you can afford to practice
  more often. The slideshow runs automatically so you will run out of slides or have images
  that do not connect to your ideas / spoken text if you're timing isn't right.
- Remember add your own personal flair, humour and interest.
- · Oh, did I mention practice?
- 7. Finally, don't forget your audience! Make eye contact, be warm, be human.



#### **LESSON 9-10 PECHA KUCHA OUTLINE**



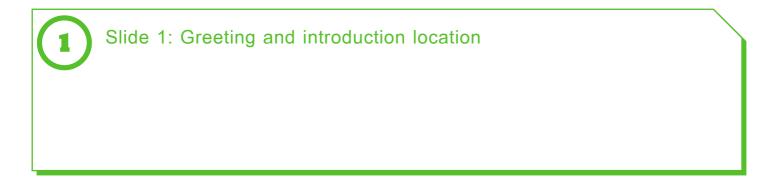
Pecha Kucha (pe cha ku cha) means 'chit chat' in Japanese and was devised as a presentation format to get presenters straight to the point.



	Team:	
	Date:	

#### Planning Your Slides

What are the most important things you want people to learn from your presentation? Use the boxes to help you plan your outline.



Slide 2: Introduce the problem or your topic



## **LESSON 9-10 PECHA KUCHA OUTLINE**



Pecha Kucha (pe cha ku cha) means 'chit chat' in Japanese and was devised as a presentation format to get presenters straight to the point.

Team:

Date:



4	Slide 3 - 18 continued : The Core of your presentation
19	Slide 19: Conclusion - Start to talk about the main message you want to leave with your audience. End with a strong image and thank your audience for listening



Slide 20: References - It is important to reference all the sources you used for the Pecha Kucha. This includes all images, and websites that you used to get your information from.

#### **LESSON 9-10 PECHA KUCHA PLANNING**

Your task: Create a basic Pecha
Kucha on your game and its development
20 SLIDES X 20 SECONDS =

6 MINUTES & 40 SECONDS!

You can access Powerpoint through Office 365

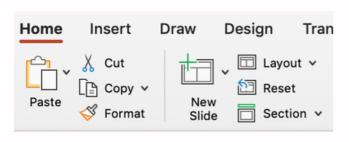
How to make a Pecha Kucha





 Using powerpoint for a pecha kucha https://www.youtube.com/watch?v=q0XWIPbXmVY

https://www.youtube.com/watch?v=32WEzM3LFhw



- 1. Open PowerPoint. In slide view, right-click on the first slide on the left and select 'Layout' then 'Blank' on the dropdown menu. This creates a blank canvas.
- Right-click again on the slide and select
   'Duplicate'. This creates another slide just like it.
- 3. Since the duplicate command is already in PowerPoint's memory, use the shortcut Ctrl-Y to repeat the duplicate (or just right-click duplicate again)
- 18 more times, for a total of 20 blank slides.
- 4. Use Ctrl-A to Select all slides in the left, and then go to 'Transition', advance slide and set it to 20 seconds. If you didn't select all slides then apply timing to all slides.

L Duration	: 00.20	<b>^</b>
(小)) Sound:	[No Sound]	<b>\$</b>

5. You can also select transition styles and speed here. The simplest is the best. Maybe nothing more than a simple fade, particularly as you only have 20 seconds per slide.

#### Tips on creating a Pecha Kucha

- Most important, keep it simple as you have less than 7 minutes. Focus on the most important points.
- Remember your slides should be images only with your text spoken / read out
- Your images You can resize your images to your liking. Best is to fill the
  whole slide with your image unless you have a reason for using space, e.g.
  emphasising something.



#### PECHA KUCHA PLANNING

#### 20 SLIDES X 20 SECONDS = 6 MINUTES & 40 SECONDS!



 Also limit the text on your images and superimpose your text over the image use colour to make your text standout.

#### Free presentation software

- https://prezi.com/
- <a href="https://www.canva.com/">https://www.canva.com/</a>
- <a href="https://www.libreoffice.org/">https://www.libreoffice.org/</a>
- https://pc.wps.com/
- Google Slides <a href="https://www.youtube.com/watch?v=dYOLZuw-b00">https://www.youtube.com/watch?v=dYOLZuw-b00</a>

#### **Getting Free images**

In public domains such as Wikimages or Pixabay often you just have to credit the photographer or they are free for non-commercial or educational use. Remember to check and credit!

- https://pixabay.com/
- https://www.flickr.com
- <a href="https://en.wikipedia.org/wiki/Wikipedia:Public domain image resources">https://en.wikipedia.org/wiki/Wikipedia:Public domain image resources</a>
- <a href="https://blog.hubspot.com/marketing/free-stock-photos">https://blog.hubspot.com/marketing/free-stock-photos</a>
- https://blog.snappa.com/free-stock-photos/

#### **Examples of Pecha Kuchas**

- <a href="https://www.pechakucha.com/presentations/daily-acts-of-creativity">https://www.pechakucha.com/presentations/daily-acts-of-creativity</a>
- <a href="https://www.pechakucha.com/presentations/random-acts-of-courage">https://www.pechakucha.com/presentations/random-acts-of-courage</a>
- <a href="https://www.pechakucha.org/cities/dublin/presentations/fenced-in">https://www.pechakucha.org/cities/dublin/presentations/fenced-in</a>
- https://www.pechakucha.com/presentations/changing-the-rules-of-our-reality-with-technology
- <a href="https://www.youtube.com/watch?v=FHuB4my">https://www.youtube.com/watch?v=FHuB4my</a> UT4
- <a href="http://www.pechakucha.org/presentations/time-based-art">http://www.pechakucha.org/presentations/time-based-art</a>

## Remember to share with your peers anything that helped you and your group.

- What tips would you add?
- How would you explain to someone what a Pecha Kucha is?
- How would you explain how to design a Pecha Kucha?