NextGeN ENTREPRENEURS

Education Package

Lesson 4 - DREAM

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LESSON 4 - DREAM

Dream

A great innovation has many iterations.

We dream deeper in this lesson as we plant solution trees. More lesson time is given over to project work from this point on.

Overview

Learning Areas: English, HASS, HPE, Technologies, Science

Year Levels: 5-10

Teaching Time: 55 mins.

Resources required:

- Wooden cubes, pop sticks, paper cups
- Device capable of presenting a video to the class
- Black/white board or chart paper
- Word wall
- Journal (exercise or scrapbook) 1 per student
- Student conference notes (formative assessment)
- Final assessment rubric, one per student.

Level of teacher scaffolding:

- Medium - facilitate class discussion
- Model solutions tree creation
- Conference with students regarding project development

Learning Intentions

A solution is visualized and agreed upon that is feasible and. The solution is within the abilities and constraints for the learners to develop and demonstrate.

Keywords: Iterate, Viable

Carbon Zero Future - The Challenge (remind students)

Create a new idea or innovate on an existing sustainable solution. You do not need to make the product nor know how to design it - just come up with an innovative idea. Develop your idea to the pitch/presentation stage. Include a poster or slide. You can present your idea in person or via video, 3 minutes in length. A panel of judges will provide feedback.

Refer to the 6 Stages of Solutions Thinking.

Innovation Challenge

5 minutes

Cube, cup and stick structures

Small groups (3-4 students) build an interesting structure from your collection.

How many different ideas for construction did the class come up with?

Solution Thinking Focus: Dream

10 minutes

DREAM : How do you iterate ideas?

When creating something new, iteration describes the process of refining your idea or concept. The spirit of entrepreneurship urges us towards iterating in small steps towards "better" instead of hoping one large step gets us to "best."

Activity: Teacher models example below on board while students copy into journal.

Create a Solution Tree

In journals, students draw a large tree with roots, trunk and branches.

Low on the base of the trunk write the problem (e.g. too many people drive cars in the city adding to carbon emissions).

The roots can represent the underlying causes (e.g. burning of fossil fuels, reliance on cars, lack of alternatives, people prefer to travel in air-conditioned comfort)

Higher up the trunk before the branches splay out, write a possible solution (e.g. free community electric scooter station).

On the branches write the sustainability benefits, (e.g. less pollution, more space for tree parks instead of car parks, less fossil fuels needed for manufacturing cars, healthier population, etc).

On the leaves you could record other desirable benefits from your solution as offshoots. For example, (fun, people are in better moods, more productivity at work, more family time, healthier population, tourist attraction).

Create your own Solution Tree for your sustainable solution.

Industry Partner

10 minutes

Industry partner incursion or video (videos will continue to be made available on our website).

Encourage students to focus on iterations of this project. Were there many? Ask your guest. Can you think of any iterations for their product?

Journey Map

5 minutes

Before you complete your Journey Map today, revisit your Dreams & Concerns T-Chart.

Can you add any points to either side?

It's time to DREAM! Add your wildest and your most viable ideas to your journal. Record ideas with a quick summary, keyword or a thumbnail sketch.

Word Wall

5 minutes

Review understanding of existing vocabulary.

Add *Iterate & Viable* to the word wall.

Carbon Zero Journey

20 minutes

How many iterations of your idea can you come up with? Perhaps you can plant more Solution Trees and see which one grows.

Conclusion

5 minutes

Chart where you spent your project time on your Journey Map.

Present students with the final assessment rubric.

Sleep on it

Try communicating your possible sustainable solution to your family. Perhaps they can come up with a further iteration, or other branches of your solution.