



Lesson 4: Turning Ideas Into Reality

How to use the lesson plans

These lesson plans are for the use of teachers (or an adult representative), to help guide the students through the GSTEP Challenge. Lesson plans 1-6 should be completed in order.

Each lesson plan includes:

- A list of materials needed
- The learning objectives
- A lesson summary with teacher notes
- A worksheet for students to fill in (optional)

All lesson plans and supporting materials can be downloaded for free from the GSTEP Challenge website: www.gstep.org.gh.

The lesson is outlined over the next few pages. However, this is just an example schedule. You can choose the activities and lesson plans to meet the needs of your group and your timetable. You can also adapt the time spent on activities to make them shorter or longer.

Students will need paper and pens / pencils and should be guided by your instructions. Alternatively, there is a worksheet that can be printed out for students to fill in, if this is easier and you have access to a printer (no problem if not!).

Overview

Learning objectives:

- To develop enterprising and business development skills

Time:

- 40-50 minutes

Materials needed:

- Large sheets of paper (preferably A3 and / or A2 paper), plus A4 paper
- Pens / coloured pens / pencils / coloured pencils
- Lesson worksheet (optional)

Introducing today's lesson (5 min)



Start with a brief recap of the the previous session.

Notes for teachers:

In the previous lesson, students developed lots of imaginative ideas, before deciding on their best idea.

Ask them if they remember the key guiding principles to generating ideas.

Answer:

- a. *No idea is a bad idea.*
- b. *The more the better.*
- c. *Work together.*
- d. *Think big.*

Next, introduce the aims of this session.

Notes for teachers:

The aim of this session is to develop their ideas further by learning more about enterprise and business development skills.

Activity 1 (10 min): The order of business



In their groups, ask the students to put these 8 categories into chronological order.

Analysis of product or solution

Prototype development

Discovering a problem & definition

Market research and design iteration

Business case development

Design & development

Marketing and communications

Idea generation

Notes for teachers:

This exercise aims to increase their understanding of the key steps involved in developing a business and the order that these steps should go in.

Answer:

1. **Discovering a problem & definition:** Think about a problem first. This is what they did in Lesson 1 and Lesson 2.
2. **Idea generation:** Come up with lots of creative ideas for a solution. This is what they did in Lesson 3.
3. **Design & development:** Think about how the idea might work in practice and what it would look like.
4. **Market research and design iteration:** Validate your idea through market research. This includes understanding which other solutions already exist and asking the intended target audience what they think of your idea. Be prepared to iterate (or change) the idea following this feedback.
5. **Prototype development:** Create a model of your solution / idea.
6. **Business case development:** Think about costing, planning and scheduling.
7. **Marketing and communications:** Let other people know about your solution. Understand how you can reach them most effectively.
8. **Analysis of product or solution:** Work out if the product or solution is working successfully. Following this analysis, you may need to iterate (or change) the idea and / or develop this further.

You should explain that this the development of businesses, including products and solutions, is not always the same. So, some of these categories could be swapped around. But generally, this is the order in which these activities occur, so it's important to start to think about what this might look like for their own ideas.

Activity 2 (25 min): Turning ideas into reality



Ask the students to answer the four questions below.

1. Target audience:

Who is your invention aimed at? List 3 reasons they will buy this.

2. Prototype materials:

What materials do you need to build your prototype?

3. Marketing and communication:

How will you advertise or market your idea?

4. Your next steps:

What are the 3 next steps you need to take to turn your idea into a reality?

Notes for teachers:

These questions will help them answer the ENTERPRISING and COMMUNICATIONS sections in the application form.

A few notes on the categories:

- **Target audience:** This is the group of people that they expect to buy their product or solution. This may also be the group that will benefit from it, although not necessarily.
- **Prototype materials:** This is a model of the product or solution that they would eventually build. If they reach the finalist stage of the GSTEP Challenge, they will have the opportunity to build these prototypes with the support of expert mentors and trainers.
- **Marketing and communications:** This is the strategy through which they will advertise and sell their inventions. This could include online advertising (such as through social media), television, the radio and / or print media. It doesn't matter what they choose - they just need to have a reason for this.
- **Your next steps:** When thinking about making their ideas a reality, they should think about the steps they need to take next. This might include further research, some experimentation, the development of a business plan or the building of a prototype.

Activity 1 (10 min): The order of business



In your groups, put this list of 8 categories into chronological order.

Analysis of product or solution

Prototype development

Discovering a problem & definition

Market research and design iteration

Business case development

Design & development

Marketing and communications

Idea generation

Answer:

1.
1.
1.
1.
1.
1.
1.
1.

Activity 2 (25 min): Turning ideas into reality



In your groups, please answer the questions below.

1. Target audience

Who is your invention aimed at? Please list 3 reasons they will buy this.

.....

1.....

2.....

3.....

2. Prototype materials

What materials do you need to build your prototype?

.....

.....

3. Marketing and communication

How will you advertise or market your idea?

.....

.....

4. Your next steps

What are the 3 next steps you need to take to turn your idea into a reality?

1.....

2.....

3.....



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