CLASS NOTES TO UNIT: INNOVATIONS (Video lesson + Class + Portfolio assignments)

In this unit we are going to:
-Introduce the engineering activity of prototyping (1).
-See the basics about prototyping (2).
-Elicit the basic rules for oral presentation skills (3).
-Describe a first attempt for a prototype (4).

Parts 1-4 will be dealt with in the video lesson and in class, including exercises a and b. Part 5 must be done after the class and included in the students' portfolio

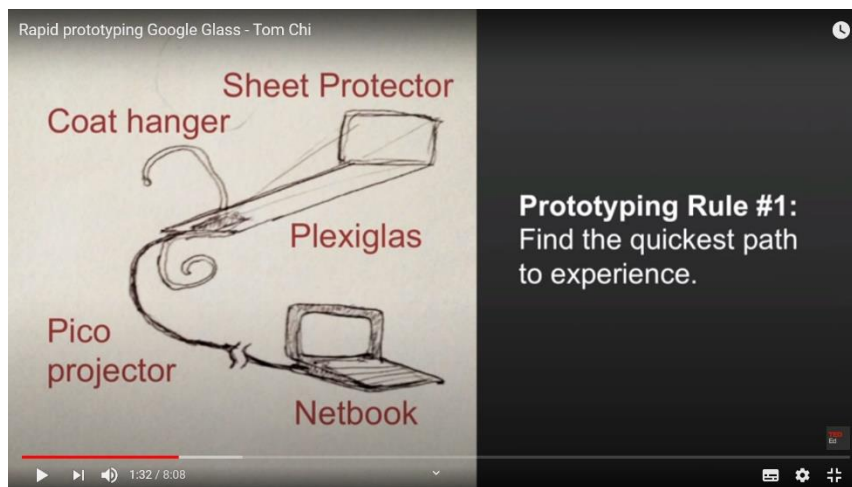**1. Introduction:** Let's discuss the following questions:
What is a prototype? / What is it made of? / How long does it take to make a prototype? / What kinds of prototypes are made in the telecommunications design industry? / What can be prototyped?

2. Listening: Let´s watch the following TED talk, with the subtitles in English (**Exercise a:** in which way does the video content differ from your initial ideas for part 1?)

https://www.youtube.com/watch?v=d5_h1VuwD6g

3. Oral presentation skills: **Exercise b:** Watch the video again and answer the following questions (in class, we will discuss to what extent the answer to these questions appeals to the practice of oral presentations):
Coat hanger, fishing line, plexiglass, chopsticks, hairband… / a lot of, figure out, it turns out that…, / scientists-scientific, available, to develop… / this device allows you to visualize things simultaneously.
To rehearse, to practise, to plan…

a) Which type of visual elements (slides, props) does the speaker use?

b) What does he show in the slides (text, pictures, bullet points…)?

c) What is the speaker's language like (formal, colloquial…)?

d) How does the speaker call the attention of the public (e.g. addressing them, creating suspense…)?

e) How is the talk structured (e.g. is there an initial particular anecdote from which we move onto the general…)?

f) Does the speaker "read" text or slides, or does he simply speak?

g) Is the presentation long or short? Is there any random content, or is everything relevant? Which are the main ideas the speaker highlights with regard to a) prototyping, b) learning?

From the answers to the previous questions, let's elicit together a set of rules for oral presentation skills (some clues are already introduced):
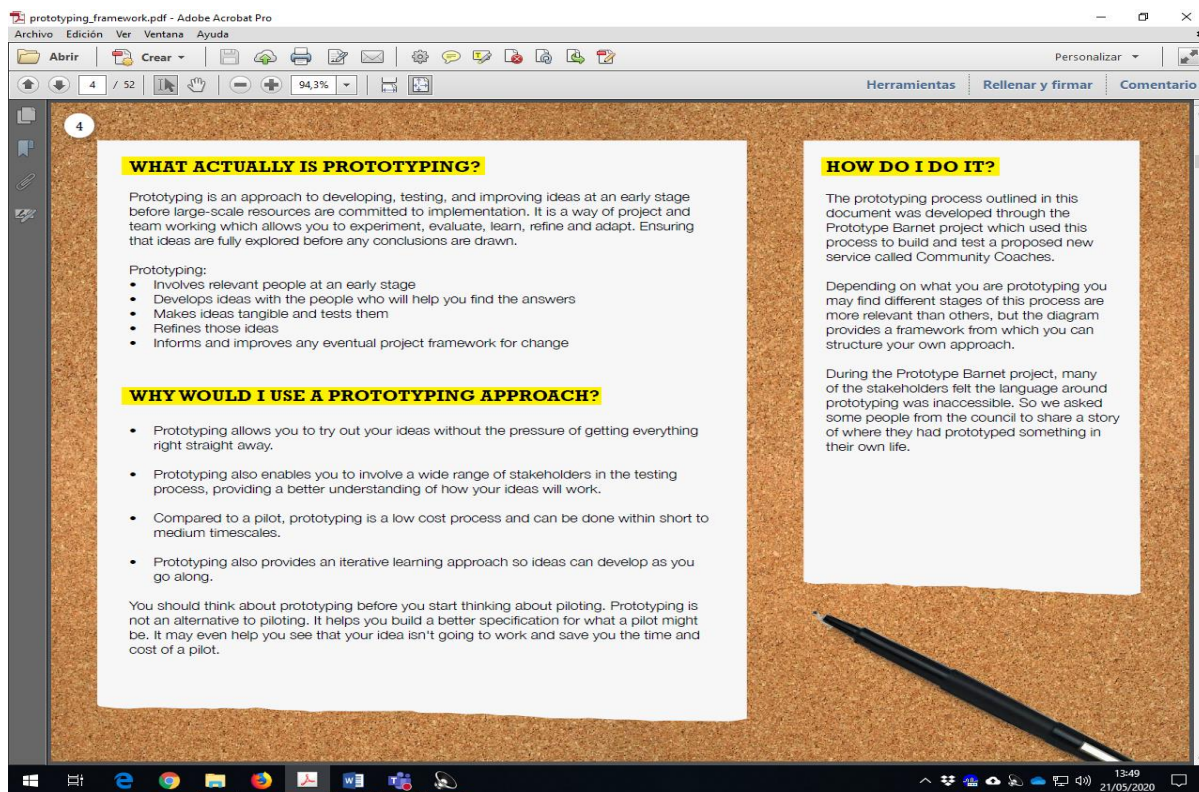
a)

b) Drop the bullet points!

c) Beware of jargon

d)

e)

f)

g)

4. Speaking: quite spontaneously, let's think of a prototype of our own. Here are a few brainstorming questions that may help us focus it:

Is it a product/ a device / an app / a service?   *What is the prototype made of?*
What problem/issue will it help to solve/improve?   *Who will be the end-users?*
Which would be the main feasibility/viability issues?

The information on the screenshot bellow may help you:

5. Assignment for your portfolio: Write a paragraph about the prototype you thought of in part 4. Include as many drawings or photos as necessary, showing its functioning with simple materials.