After school lesson

**Instructional time**: 2 hours

**Summary**: On this lesson, the participants explore one technique and two technologies for creation of stories: what would happen if...? question, white paper and pencil, and Fabstory blocks, reflecting on the pros and cons of each one, and a critical analysis if it is worth to use them for a workshop like this.

**Areas**: Arts, Technology, Theater

**Grade**: 7-9+
**Fabtools:** Laser cutter, 2D Design concepts

**Tags:** Intro to fab, Imagination, 2D vector graphics, sculpture, geometry, arts, humanities, Literature, Storytelling, Creativity

**Materials:**
- This guide
- **Fabstory blocks design** (15 cards for every group of participants is the suggestion)
- Laser cutter
- 3mm Cardboard or MDF (The cards are small, so maybe you can reuse some residual materials from the Fab Lab)
- White paper (They can come from reused source) (2 per team of participants)
- Pencils and/or pens (2 per team of participants)

Optional
- Personalized presentation based on [this Presentation template](#), computer and projector (optional)
- Some acoustic instruments
- Music player
- Other storytelling helpers

**Participant work at completion:**
At the end, the participants create two stories with two different technologies, a traditional one, and a digital fabrication one, also they learn one simple, but very powerful mental technique for create stories.

[Here some examples of creations](#)

**Learning objectives:**
- Practice tools and strategies for the individual and collective creation of stories.
• Get some experience and knowledge of how technology (new and old) can help us on our daily tasks, and discover that the final objective of them is the human aptitudes and attitudes we get from that practices.

Steps:

1. **Make the Fabstory Blocks**
2. **Initial story.** Tell to the participants an initial story using the Fabstory blocks
3. **Technique 1: What would happen if…** On a brainstorming ask 3 questions than starts with: What would happen if…?
4. **Reflection on Technique 1.** With all the group, make a reflection about the nature of this kind of questions
5. **Story constructions.**
   a. **Explanation.** We gonna use two different methods to create stories and in some parts of the activity we are going to reflect about them and finally they are going to share the stories with all of us
   b. **Technology 1: White paper and pencil**
   c. **Technology 2: Fabstory blocks**
6. **Share the stories.**
7. **Final reflection.** Observe the materials they use on the creation of stories and reflect about how do they think they were made, after some participants reflections, share some information about the Fab Labs and similar concepts
8. **Close the activity.** Thanks to everyone for their participation with your personal style.

Detailed steps:

1. **Make the Fabstory Blocks.** On a previous moment or session, if it is possible with all participants of the workshop, go to the laser cutter and make the Fabstory blocks, try to generate questions about how the laser cutter works, how was the file designed and translated to machine language, if it is possible to modify the file, what else you can make or design, etc. But do not give the answers you know, instead of that try to they gave what they think are the answers and why they think that is the answer, and what new questions are generated. You can complement this
session with a social activity while the materials are been cut, it can be a meal, an art show or a game, finally, store the blocks and prepare for the workshop.

2. **Initial story.** Tell to the participants an initial story using the Fabstory blocks, you can be helped by acoustic or digital music or sounds.

3. **Technique 1: What would happen if…** On a brainstorming ask 3 questions than starts with: What would happen if...? here are some examples, but if want more examples think on any film that you have watched and try to find what is the what happened if behind.
   a. ... lost our memories?
   b. ... meet life from other planets?
   c. ... dive to the bottom of the ocean?

4. **Reflection on Technique 1.** With all the group, make a reflection about the nature of this kind of questions, what do these questions have in common? what do they create? how the questions always starts and finish? what other same-type of question you can make? which one is your favorite? do you remember an experience, a book or a movie that match with one of these questions, and close the reflection asking them: does this question helps to create stories?

5. **Story constructions.**
   a. **Explanation.** We gonna use two different technologies to create stories and in some parts of the activity we gonna reflect about them.Consider make groups by the method you choose, it depends on the number of participants, the number of fabstory blocks you have, and obviously the nature of the group and the infrastructure of the space. Do they already know each other? Do they have tables?
   b. **Technology 1: White paper and pencil.** Ask them: If i give you a white paper and a pencil and i ask you to create a (Choose a topic or challenge, for example: Science fiction) story, how much time will take you? have you ever tried this before? how easy it is? Let’s try it. Give to every group a white paper, a pencil and a certain time (for example 10 minutes) to create a story. Then ask to them. Was it easy? Was it fun? What would you do to make this process better, easier or popular? the people use to create stories in this way? what other strategies do they use?
c. Technology 2: **Fabstory blocks**. Now we are going to create a story like the one you saw at the beginning, using instead of paper and pencils, the **Fabstory blocks**. Distribute the blocks equitably on all the groups and ask them to create another (topic you choose before (Science fiction)) story in the same time that the last activity (for example 10 minutes).

6. **Share the stories.** Now that all the groups have created two stories, one by one, they are going to share with the group both stories, and telling us which method they prefer and why, and also what are the pros and cons of every method.

7. **Final reflection.** Ask them to observe the materials they use on the creation of stories:
   a. Paper
   b. Pencils
   c. Fabstory blocks

Then, ask them how do they think they were made, what machines the humans need to create these objects, how many energy, water, plastic, wood, metal, is used on the creation of them? how many similar objects exist in the world? and finally if it is worth to create them for what we actually use? how much garbage we generate? how many stories/experiences/happiness we create together? how many human aptitudes and attitudes you get thanks of using them?

If they did not experience making the Fabstory blocks, maybe in this part of the lesson they can come to the laser cut and learn how one is fabricated.

Also, one last question can be: what other characters or situations would you engrave in the fabstory blocks? Can you make them? How? Reinforce that using digital fabrication tools can be easier to make their ideas come true.

8. **Close the activity.** Thanks to everyone for their participation with your personal style.