Digital Destiny

Ideate

Now you will be inviting your students into the creative process of ideation, the third step in the Design Thinking Process. This process includes ideation of possible solutions that address the problem being addressed, drawings of 2-3 possible solutions and a selection of one to work on in the prototype step (fourth step of Design Thinking process). During this session students will gather, with an open mind, in a judgement-free learning environment to think of as many ideas as they can to address a problem (already having worked through an Empathy Map, a Problem Analysis Tree and in creating a Problem Statement). Ideation offers several methods for generating ideas.

In addition to this Digital Destiny principle, these activities support "Learning through dialogue and interaction", "Learning through thinking," and "Learning through reflection and evaluation."

Expected Outcomes – students will:

- ✓ be able to explore multiple ideas to address a problem
- ✓ be able to build upon each other's ideas
- ✓ be able to use knowledge and information gathered during problem framing to build new solutions to a problem and achieve the desired change
- ✓ be able to apply a set of criteria to support their decision making
- ✓ be able to demonstrate active listening behaviours

Timing

The timing of this activity is dependent on many factors: experience, age, classroom culture, and how you implement it, etc., the minimum amount of time you should plan for each method is 20 minutes. Effective brainstorming often needs enough time to develop. The selecting will take at least 20-30 minutes.

Material

Brainstorming through a large board and sticky notes, digital space where you can brainstorm on like Miro or Padlet.

Prepare yourself

After completing the empathy map, problem analysis tree and problem statement working method, choose a problem statement to work on with the students for developing a solution on.

Blended

- Create a wall on Miro, make a Padlet template.

Step-by-step or course

Erasmus+

1 Brainstorming

Brainstorming is a popular method to help students generate ideas. In this case you will be working with your students to come up with ideas to solve an identified problem.

1. Review the problem statement with your students (you already have one from the previous working methods) and ask them: How might we solve this problem? You can follow up at time with why not? Or what if? Ask the students to reflect on the user identified in the problem statement and their obstacles, needs, and wants.

   It is important to have clearly defined parameters for your brainstorm to be effective.

2. Set a time limit – Depending on the problem's complexity, 15–60 minutes is normal.
3. Begin with a target problem/brief – Students should approach this with a sharply defined question, plan or goal and stay on topic.
4. Refrain from judgment/criticism – No-one should be negative (including via body language) about any idea.
5. Encourage weird and wacky ideas – Further to the ban on killer phrases like "too expensive", keep the floodgates open so everyone feels free to blurt out ideas (provided they're on topic).
6. Aim for quantity – Remember, "quantity breeds quality". The sifting-and-sorting process comes later.
7. Build on others' ideas – It's a process of association where members expand on others' notions and reach new insights, allowing these ideas to trigger their own. Say "and"—rather than discourage with "but"—to get ideas closer to the problem.
8. Stay visual – Diagrams and Post-Its help bring ideas to life and help others see things in different ways.
9. Allow one conversation at a time – To arrive at concrete results, it's essential to keep on track this way and show respect for everyone's ideas.
10. You can also generate ideas by looking at the problem from a different perspective. Think of fictional characters like cartoon heroes, characters from movies, stories … etc. The features of the characters support to think of possible approaches, solutions … see Cartoon hero to the rescue.
11. Love the problem, not the idea! – spend as much time as you feel needed on generating ideas for a possible solution.

<u>**Alternatives:**</u>

1. **Brainstorming**
→ Can begin as a **silent** individual process in which the students write down as many ideas as they can on sticky notes. They can also work in pairs.
   o You can kickstart the brainstorm with prompts to start the ideation, for example with statements like "How Might We" (address the user, his/her needs and wants and obstacles
   o "How Might We" … help (user/other stakeholder) solve/capture/fulfill (challenge/need/opportunity) to (impact/goal/outcome)?
   o "How might we" … redesign (specific experiences) for (user/stakeholder) to (impact/goal/outcome)?
→ Then the students share the sticky notes to the whole and see what more they can generate as a group.
→ Once all ideas are on the table you can group them.
→ Following the grouping you can have the groups either vote on the ideas they like the best (give each student three sticky dots to use) or they can agree on which 2-3 to explore further.
→ Explore the 2-3 ideas a bit further by elaborating on them in a group. The group can again vote on the idea to create a prototype or just select it.
→ The students can also work in a group from the start of the process. You can put a large piece of paper on the table where everyone can reach it and have everyone write ideas at the same time. Remember to share your idea verbally to inspire others, and when building on other ideas, write that thought next to the one that inspired the new idea.

2. **Brainwriting** is another method to use.
→ each student begins writing down ideas on his/her own (3-5) ideas, and then passes those ideas on to the next person. Then that person reads the ideas and builds on to the list.
→ You can do this for a few rounds and then collect all the ideas on a large board.
→ group the ideas and vote on which 2-3 to move on with.

2 Down selecting ideas

Once the students have created a long list of ideas it is time to use a set of criteria to determine which of the ideas they will choose to pursue. Using the Bullseye method is suggested for this activity.

Another way is to vote on favorite ideas. Each student gets 3-5 votes that they can put on any idea of their choice, or all votes on one idea. To find their personal favorite ideas ask them to think of the following, depending on their age and experience:

- **Desirability**: Do people want this? Does it fulfill a need? Is it appealing?
- **Feasibility**: Can we do this? Can we make this happen (Sometimes there are technical requirements which we cannot meet in the classroom)?
- **Viability**: Should we do this? Does it align with our goals? (e.g., SDGs) Can we develop, fund, and sustain this?

3 Reflection

Offer your students some time for reflection after they have undergone this long process. Consider giving them an exit-ticket on either a sticky note or through an online form with one of the following questions:

→ How did you feel about the brainstorming? Idea selecting? Developing and refining?
→ What helped you think of more ideas?
→ Did any ideas surprise you?

4 Bring it Home

Have the students write down the final chosen solutions to take home to share with their families. Have them present the ideas and explain why the class decided on those final ideas.