

ASK



Teams meet with 2–4 people, who could be future users of the prototypes, and communicate their prototypes and design ideas using prints, drawings or models. These participating people are considered to have an expert understanding of the domain the student designs are framed within. Expertise may be interpreted broadly, for example, a construction site worker can be considered to offer deep insight into the everyday practices of people on a building site. The expert participants are encouraged to use pens and post-it notes to modify and comment on the prototype. After the workshop the students analyze the comments and decide how to interpret them for their re-design. They then refine their design brief, especially in relation to the design challenges, context and added value of the result, record a reflection and update their documentation. This activity can happen more than once at varying time investment. Students can collect feedback on their work by asking experts, potential future users as well as from other student teams and the teacher. Classroom time: Approximately 2-3 lesson(s)

Ideas for using technology:

- **functionalities: 1. media recorder, note taking**
- **tools:** audio recorder, video recorder, post-it notes

You may look forward to...

- let students be in charge of facilitating a workshop
- get to know your students better
- thoroughly consider the appropriate participants for the workshop
- building collaboration with outside experts
- connecting school to other parts of society
- providing students with the opportunity the learners how their personal interests matter
- Taking advantage of the opportunities reality may provide and acting creatively with the context.

Your students may learn to...

- empathize with others and work with different people
- contact experts and ask for collaboration
- present ideas to people who have not followed the project progression
- discuss and negotiate with teachers and experts
- receive criticism and incorporate expert views into their project
- create paper prototypes

1. Prepare / Listen

- Listen carefully to the student comments, and shape the activity according to their needs and interests.
- Develop your competence and expertise by using the insights you learned from listening to the reflection recordings for identifying suitable people to ask to comment on the prototypes.
- People working in academia often have a flexible schedule and find it motivating to pass their expert knowledge on to young learners. You may also consider to contact and invite university students.

2. Inspire

- Introduce the activity of facilitating a workshop to the students.
- Teams brainstorm possible experts to invite and open ended questions to ask them. In case they cannot think of anyone, make a few suggestions.
- Each team invites 3–4 people to their workshop and arranges a place and time for it. It is important to thoroughly and seriously consider appropriate participants, and to be able to say how each participant can inform the project. The workshops may happen outside of school, for example at the office of a non-governmental organization, an elderly home etc.
- It might be exciting for the students to contact the experts. Practice with the teams how to approach potential participants.

3. Coach / Question / Support

- Coach the teams by practicing the workshop and providing them with the [workshop guidelines of the iTEC project](#) as an example of this activity within a large scale European project. Support students that exhibit difficulties.
- Ensure that each team has access to workshop material (cameras, notebooks, microphone, post-it notes and pens) and their prototype (or a representation of it).
- Students present their design brief and prototype design to the participants and ask for their comments and ideas. The people may alter the prototypes or draw on them to express themselves better. Students take notes and pictures of the activities and the discussion.
- The teams analyse their notes and the drawings of the people. They may use the MAP activity for this. Prompt them with open ended questions and coach them to go beyond the obvious.
- The teams decide how their prototype and design brief should change based on the analysis.
- The teams record a reflection and document their progress online. Prepare students for receiving constructive criticism and to deal with potentially arisen negative emotions and accepting of criticism as constructive feedback. Questions for that this reflection session could address include: (1) What in our results was good? (2) What needed improvement? (3) What in our way of working needs improvement?

4. Assess



- Review the work of each team, their reflection recordings and blog entries, to ensure everyone is on the right track. Then record audiovisual feedback for them. Your feedback might include suggestions and questions.
- In case the expert followed the progression of the teamwork, their expert view on the learners' performance should be considered. The expert may be involved in defining the assessment criteria. The participants may be asked to record an audio-visual message to the students after redesign their prototypes with the suggestions of the participants in mind.