iTEC

Designing the future classroom

D3.4 Edukata Participatory Design Model – Facilitator Guide for Designing Learning Activi

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Credits

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D3.4 Edukata Participatory Design Model

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ABSTRACT	This document corresponds to Deliverable D3.4 "Teacher's guide to innovative tools for education". It is essentially a visually laid out guide book that is available in 15 languages, online and as printed, coil-bound copies. The guide book is meant as an aid to people facilitating participatory design work with groups of teachers.
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RELATED ITEMS	

EXECUTIVE SUMMARY

This deliverable is the Edukata facilitator guide book, a core part of the Edukata design model, which became the final output of WP3. Edukata is a packaged model that encapsulates the core aspects of the design process used by Aalto University designers during the first 4 cycles of iTEC. The guide book is also available online at http://edukata.fi along with other supporting materials.

Abstract

This document corresponds to Deliverable D3.4 “Teacher's guide to innovative tools for education”. It is essentially a visually laid out guide book that is available in 15 languages, online and as printed, coil-bound copies. The guide book is meant as an aid to people facilitating participatory design work with groups of teachers.

Introduction

Reminder of the context

iTEC (Innovative Technologies for an Engaging Classroom) is a four-year, large-scale and pan- European project that takes an informed look at the potential classroom of the future. Its key aim is to develop engaging scenarios for learning in the future classroom that can be validated in a large-scale pilot, and can subsequently be up scaled. This will be achieved through an increased understanding of the ways in which new and emerging technologies can support more effective forms of learner engagement.

iTEC WP3 uses future classroom scenarios provided by WP2 to find design challenges and opportunities that can be addressed and build on with current technology. WP3 selectively develops and designs classroom scenarios into working prototypes, including learning activities that can be piloted in large scale by WP4.

This document is the final output of WP3, intended for dissemination and mainstreaming of a significant project output, the Edukata design model.

Purpose and scope of the task T3.6

Task T3.6 was the task of producing a teacher's guide. The initial plan from the DoW was altered early in year 2013 to focus on turning the design model itself into a usable product, instead of just presenting design outcomes to teachers.

Relationship with other tasks

None.

Structure of the document

The document is the laid out Edukata facilitator guide book. It is also available online at http://edukata.fi along with other supporting materials.

Impacts of the deliverable on the iTEC project

None

Ethical issues

None.

IPR issues

None.

Edukata

Participatory Design Model

FACILITATOR GUIDE FOR DESIGNING LEARNING ACTIVITIES

iTEC Future Classroom Lab

Edukata

PARTICIPATORY DESIGN MODEL

Facilitator Guide for Designing Learning Activities

Anna Keune, Tarmo Toikkanen, Teemu Leinonen

Aalto University School of Arts, Design and Architecture
Department of Media - Media Lab Helsinki, 2014

www.edukata.fi

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Version 3.0

Acknowledgements

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We warmly thank the teachers who tested an early version of Edukata during the Oulu Winter School in March 2013, and the teachers and students who participated in the iTEC pilot studies testing and commenting on the Edukata model and the learning activities design with it.

About the authors

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TARMO TOIKKANEN is an educational psychologist and teacher trainer, with a degree from Helsinki University, Finland. He studies communication patterns in collaborative learning scenarios at the Media Lab Helsinki, Aalto University, Finland, and is heavily involved in the OER movement and Creative Commons licensing.

TEEMU LEINONEN is a Professor of New Media Design and Learning at the Media Lab Helsinki, Aalto University School of Arts, Design and Architecture, where he leads the Learning Environments research group. Teemu loves the web – the small pieces that are loosely joined. Right now he is interested in how this approach is changing the global intellectual landscape.

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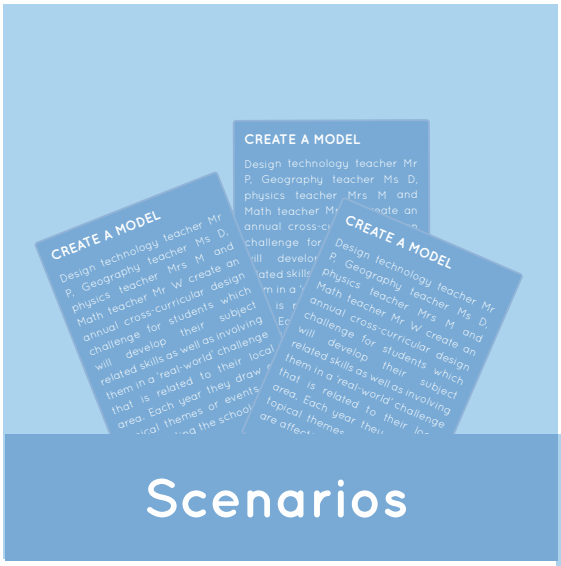
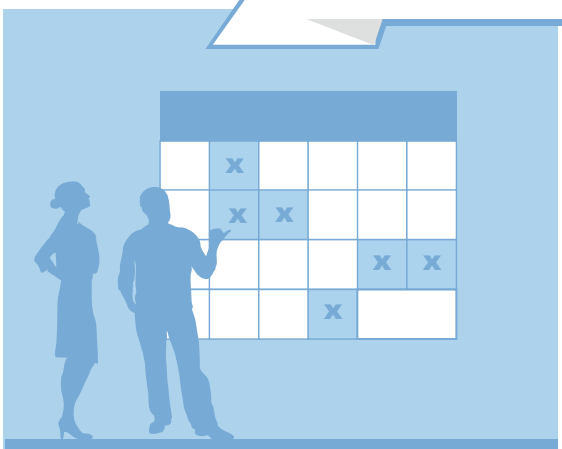

CREATE A MODEL
CREATE A MODEL
CREATE A MODEL
Scenarios

Edukata


Course planning


Teaching

Part 1: Introduction to Edukata

Edukata is a model for educators to facilitate a participatory design process in collaboration with other educators and students at school. The design process starts with a scenario, an innovative and challenging idea of what learning and teaching could look like in the future. Scenarios are inspiring, but turning them into realistic classroom practices is often not easy. Through the design process you will take the scenario and design new learning activities, detailed descriptions of how to perform learning and teaching in the classroom that incorporate new ideas, techniques, teaching methods, and tools into upcoming courses and lesson plans. This guide explains how to do that by presenting the Edukata model. It is primarily written for educators and certified Edukata facilitators, but everyone is warmly invited to use the guide and to practice participatory design based on the Edukata model.

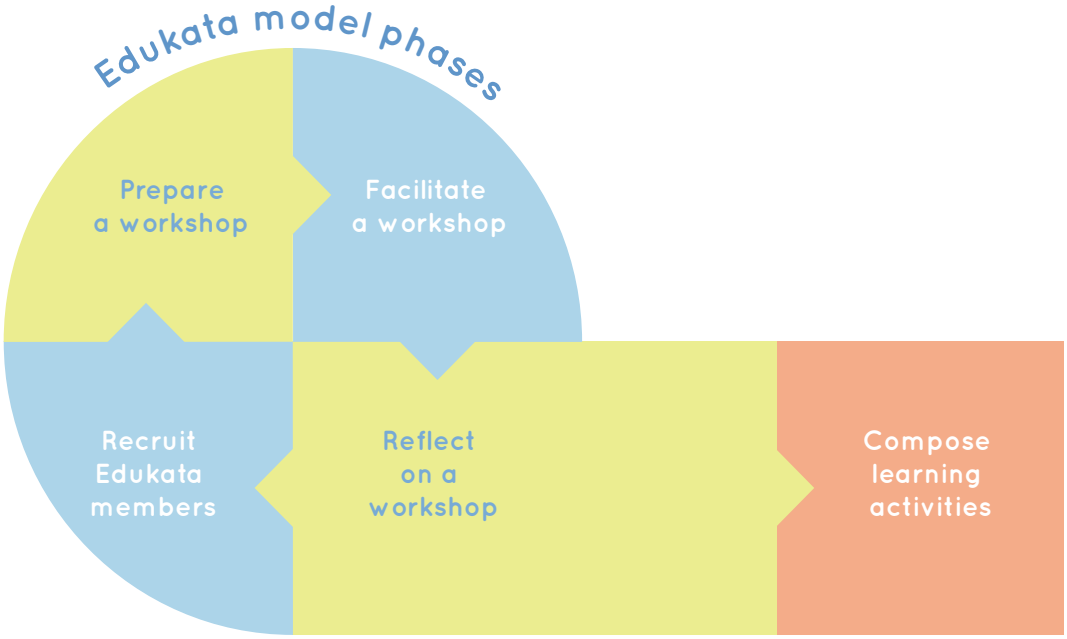
Students learn at different speeds and are drawn to different subject areas. To support learning, one school may be equipped with state-of-the-art workshop resources, while another struggles to keep the computer lab going. Every school context is different. Similarly, one design process that works for one school and one educator does not necessarily work for another. This is why the Edukata model is flexible for your specific contexts. It is not a step-by-step guide with guaranteed success. One person is the facilitator, who should understand Edukata thoroughly and help the participants through the design process with good results. You recruit members, prepare for a workshop, facilitate a workshop, reflect on a workshop and compose learning activities. While one phase can be performed after another, following a linear process, we recommend iterations of the phases. Your time schedule, the availability of the people you work with and other factors may constrain the number of iterations you can perform. We encourage you to shape the Edukata Participatory Design model to make it work for you, your classroom and school in close collaboration with your colleagues and students.

Participatory design means that the people who are likely to be affected by a design are invited to participate in the design. Participation refers to having a voice and being able to have a say in how the learning activities are made. You can include the voice of those affected in different ways, ranging from asking for comments to taking part in shaping the design process. Participatory design is not only a nice way of doing things; we also think that better learning activities result from this collaboration because the learning activities build on their concerns, needs and wishes. Participatory design is always collaborative. Educators who have facilitated Edukata say that it gave them a unique opportunity to collaborate with colleagues, to share ideas about using digital tools in educationally meaningful ways and to shape the teaching and learning culture at their school.

The Edukata model is based on an empirically tested design methodology, a research-based design approach, developed by the Learning Environments research group at Aalto University, Media Lab Helsinki. During the years 2011 to 2013, learning activities designed with the Edukata model were piloted in over 2,500 classrooms in 16 European countries. Through feedback from teachers, we found that these activities positively impact teaching, learning and attainment, and foster 21st-century skills, such as creativity and innovation, critical thinking and problem-solving, communication and collaboration, and the new literacies. During the school year 2013-2014, teachers across Europe used the Edukata model to independently perform participatory design at their schools. We built on their experiences to design the facilitator guidebook of the Edukata model, passing on the lessons learned.

Pragmatically, facilitating a participatory design process based on the Edukata model requires several hours of work stretched across a longer period of time. Allocating 45 minutes for each iteration of a phase is a good starting point. A good time can be just before a semester starts, but work can also happen during the school year. Space-wise, you need a wall or a table that you can occupy for the duration of the process.

The guidebook is structured in three parts. Part 1 (this part) introduces Edukata along with important terminology used in this guide. Part 2 presents the Edukata model and its iterative phases and offers ideas on how to facilitate Edukata. Part 3 includes useful facilitation materials, such as a glossary and a template for composing learning activities. A digital copy of the guidebook and information about Edukata, including facilitator certification procedures and other materials, are available online at edukata.fi. Edukata is an invitation to dream and to take a new perspective on your teaching. We hope that your design process will be an enjoyable experience.



People involved

Edukata is a collaborative, participatory process. At the core is a team of educators who are working to improve their upcoming teaching activities.

1 FACILITATOR, preferably a certified Edukata facilitator, drives the design process and leads workshops. Facilitators are the main responsible party for the design process, identifying stakeholders and recruiting members. They also make an initial suggestion on the level of engagement that members will be asked for. This is also dependent on the availability of the full-time and part-time members and may change over time. The facilitator needs to carefully listen to members and be flexible in relation to the progression, activities of the process, and the involvement of the members throughout the design process.

1-2 FULL-TIME MEMBERS who are committed to the work throughout the design process and join all phases. The full-time Edukata members join the facilitator in performing the design process. They join all Edukata phases to help the facilitator, especially during workshop reflections. Ideally, they care about the design of learning activities and are stakeholders, such as fellow educators, students, school principals and parents.

3-5 PART-TIME MEMBERS are those affected by the designed learning activity and are asked to join workshop phases. Part-time Edukata members are also stakeholders of the design of learning activities. They may change or remain the same throughout the design process and take part in the design process at different levels. For example, they could be asked to join the workshops and reflections of workshops or only workshops. Their involvement depends on availability, context and intentions of the facilitator and the full-time members. If time is available and everyone is motivated to participate, we recommend accommodating higher engagement and extending involvement opportunities to part-time members.

Artifacts created

During the Edukata design process, you recognize design challenges, identify design opportunities to address these challenges, and locate useful resources to design inspiring and context-specific learning activities. Examples of all artefacts are online at edukata.fi

SCENARIOS

Innovative and challenging ideas of what learning and teaching could be.

LEARNING ACTIVITIES

Detailed description of how to perform learning and teaching in the classroom.

LEARNING STORIES

Examples of how learning activities could be used together in a course.

DESIGN CHALLENGES

Circumstances that hinder learning and that can be addressed through activities.

DESIGN OPPORTUNITIES

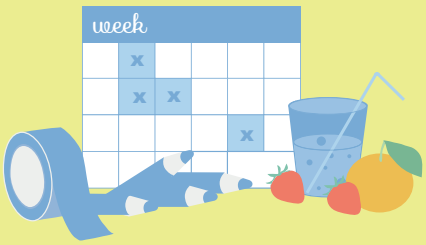
Circumstances that support learning and that can be highlighted through learning activities.

USEFUL RESOURCES

Tools, services, people, and events that may be useful for learning activities.


CREATE A MODEL
CREATE A MODEL
CREATE A MODEL
Scenarios
Edukata
Course planning
Teaching

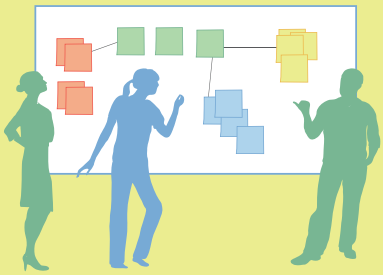
Prepare a workshop



Facilitate a workshop

Recruit Edukata members

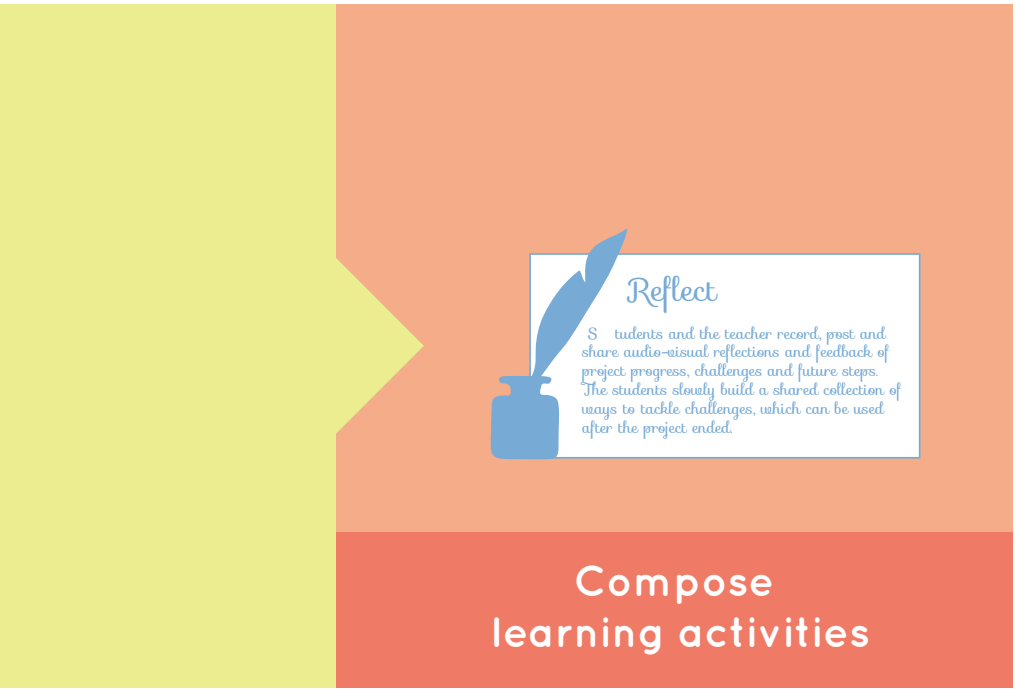
Reflect on a workshop



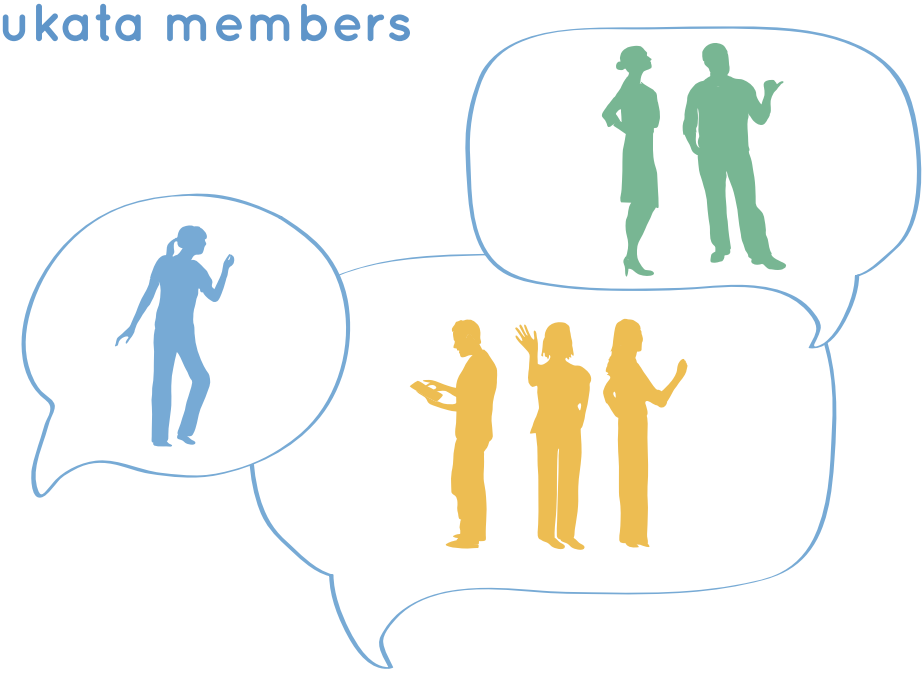
Part 2: Edukata model phases

Edukata is a model of a participatory design process for educators. The model includes five phases. You can assemble the phases to create a unique design process that fits the context of your school.

We recommend performing 2-5 iterations of the phases that are shown in the illustration. They may take place one after the other, or in another order that better serves your context. The number of iterations depends on the chosen timescale and scope of the design process. Some of the parts may be skipped in later iterations. For example, there may not be a need to recruit additional members in later iterations. The process finishes with composing and documenting designed learning activities.



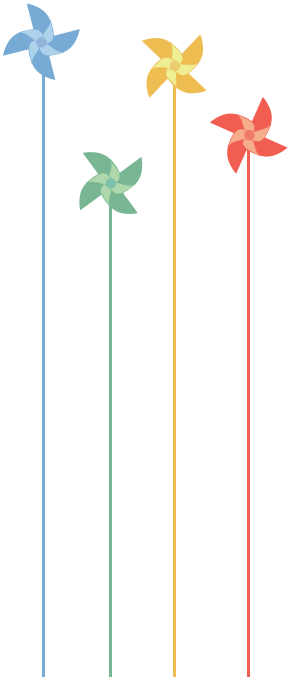
Recruit Edukata members



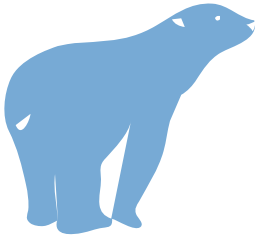
During this phase you recruit full-time and part-time members, the people you will collaborate with in the design of learning activities. Although their engagement in the process may change over time, you will make an initial estimation of how much and for how long part-time members will be involved with the work, and how their involvement can be sustained and valuable for everyone involved.

RECRUIT FULL-TIME MEMBERS – Carefully consider whom to invite to join as dedicated full-time members: fellow educators, members of the school board, students, parents or a mix of these. Reach out to one or two people who you would want on your team. They will regularly join the Edukata phases.

RECRUIT PART-TIME MEMBERS – As with your team of full-time members, carefully consider whom to invite to join part-time: fellow educators, members of the school board, students, parents or a mix of these. Part-time members may change over time, and recruitment can happen more than once and can continue until the design work comes to a close. All part-time members should have a stake in the design and should be motivated to participate. Support by school leadership can be helpful in facilitating the Edukata model at school, especially in schools where collaboration of educators is not common yet, or when you are planning to raise classroom level designs to the school level.

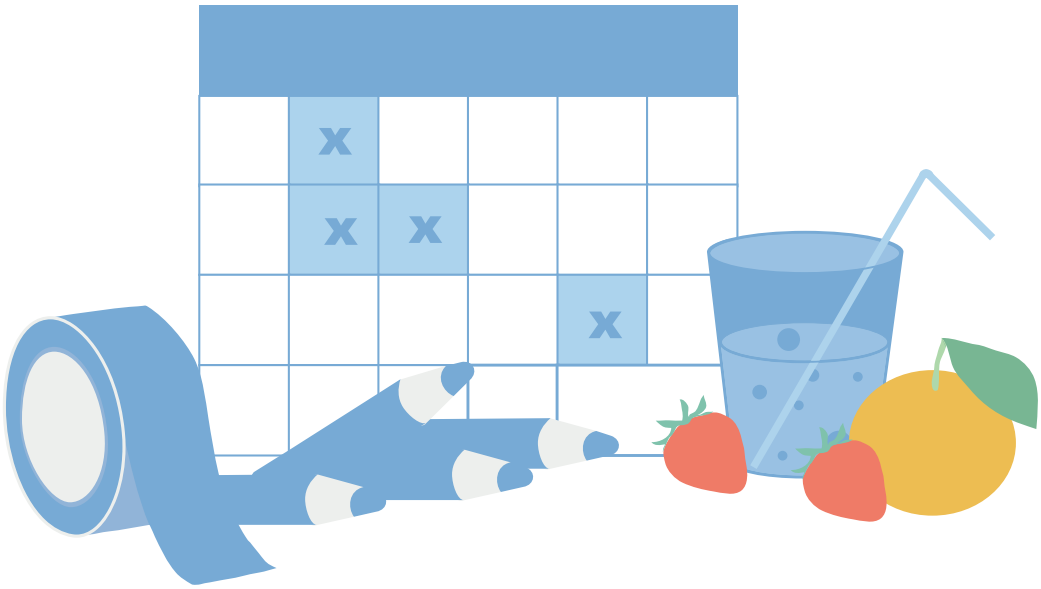


LEVELS OF PARTICIPATION – To ensure good design outcomes, you need to hear the voice of those who are likely to be affected by the design, and find a way of channelling their voice into the design process. Consult with the full-time members about how long and when part-time members should be involved. Also consider how to involve the part-time members and how to make their voices heard. On a sliding scale, minimum participation would be commenting on work in progress, and maximum participation would be involving part-time members in the planning of the design work. We recommend aiming for the latter to bring about the most genuine participation. You could, for example, open workshop reflections to part-time members or offer them to view and comment on documentation of workshop reflections. Deciding on the minimum hoped-for involvement before entering recruitment for part-time and full-time members is a good idea, so you can clearly communicate your expectations to them.



SUSTAINING PARTICIPATION – Provide value to full-time and part-time members. Think about what you would like to learn from them and what they could learn from participating before approaching potential members. For example, students could learn that the activities performed in school are created by educators and are based on different teaching and learning approaches. You could learn from them about their preferred modes of engagement. Together you could find ways of connecting youth practices with curriculum requirements. A process that serves their needs generally motivates people to continue to participate. Make your and the prospective members' potential learning visible when recruiting. Support ownership over the process throughout your process, and make your intentions to listen to and acknowledge the members' interests and goals known when recruiting. Additionally, if you set up in a public place, such as the teachers' lounge, others can see what is going on. This can foster and sustain ongoing participation and can be a way to recruit additional members.

Prepare a workshop

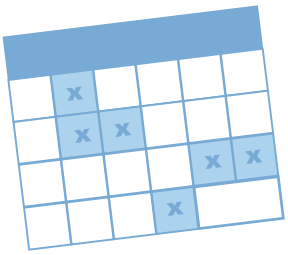


Getting ready for facilitating a workshop involves selecting an inspiring scenario, a guiding idea, or other inspiration, that you want to keep returning back to and which motivates and energizes design work. Practical aspects also need to be considered, for example, when and where the workshop takes place and the kinds of materials you will need for facilitating a workshop.

CREATE A MODEL

Design technology teacher Mr P, G eography teacher Ms D, physics teacher Mrs M and Math teacher Mr W create an annual cross-curricular design challenge for students which will develop their subject related skills as well as involving them in a 'real-world' challenge that is related to their local area. Each year they draw on topical themes or events that are affecting the school ...

INSPIRATION – Ask colleagues, browse repositories, or search online for an idea, a scenario, a story, an experience of another teacher, or an existing learning activity as inspiration. Look online at edukata.fi for inspiration. You may also first estimate the school's or teachers' current level of pedagogical and/or ICT maturity and then find scenarios that slightly exceed that level of maturity. Look online at edukata.fi for tools and techniques that can help in estimating the maturity level. You can first find an inspiration and then recruit interested colleagues, or first assemble your team and then agree on the inspiration together.



SCHEDULE – We recommend facilitating between 2 and 4 workshops with part-time and full-time members and the same number of workshop reflections with the full-time team members. Everything should not be done in one day. Intermissions between iterations can be useful for letting ideas mature. Pass on invitations well before the scheduled workshop. Reminding potential members about activities, also shortly before the workshop, shows your interest, commitment and investment in them and their contributions. You may schedule all workshops and workshop reflections ahead of time, alternating between facilitation and reflection. Alternatively, you could consider whether and how you would like the part-time team members to have a say in the design of the schedule and activities. A teacher who facilitated Edukata suggested: "give teachers more say in deciding the agenda. It is more motivating this way, and more likely to continue." In any case, plan the first interactions with the part-time members together with the full-time members. Any following workshops may then be planned in collaboration with the part-time members, offering them a say in the agenda design.

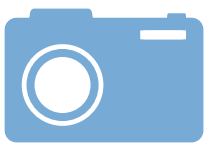
PLACE – Find a location, such as a whiteboard, a notice board, a plain wall, or a table that you can attach sticky-notes and papers to. You can turn any smooth wall into a whiteboard with antistatic whiteboard paper. If possible, try to leave work in progress untouched until the next workshop. Obtain the basic tools needed for design work (see left).

4 COLOR STICKY-NOTES

HIGHLIGHTERS / PENS

ADHESIVE TAPE

SCISSORS



CAMERA

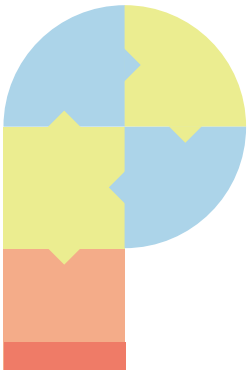
REFRESHMENTS / SNACKS

Facilitate a workshop

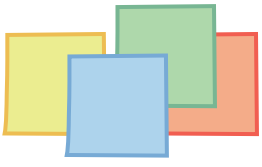
The facilitation of a workshop is a crucial part of Edukata, as this is how stakeholder voices are heard. Facilitate a workshop with full-time and part-time members. Ideally each workshop iteration has a different focus: design challenges, design opportunities, useful resources and learning activities. Start with an inspirational scenario to guide the iterative process to learning activities. Make the aims and motivations of each workshop clear. Use differently colored sticky notes to keep work organized and accessible. Document each workshop.

BE PREPARED – The aim of a workshop is to identify design challenges, design opportunities, useful resources, and ideas for learning activities together with all members, full-time and part-time. Arrive well before a workshop starts with a selected focus for the workshop: recognizing design challenges, identifying design opportunities or useful resources and/or coming up with learning activities. When part-time members arrive, explain the workshop focus and the goal of the overall design process. Discuss the terms "design challenge", "design opportunity", "useful resources", "scenario" and "learning activity" with everyone. In the resource corner, you can find a glossary of frequently used terms. You may paste the glossary to the wall space for everyone to return to at any point during the workshop.

DURING A WORKSHOP – Start with the inspirational scenario you chose previously. While the scenario is intended to inspire and guide you through your design work, portions of the scenario may be removed and new ideas may be included. This depends entirely on what works for you and your context. Listen to your team members and the context, and be open for changes. Encourage opinions, accept and record everything with as little judgement as possible.



ITERATIVE PROGRESSION – Progressing from scenario to learning activities requires you to adopt different foci. You need to look for design challenges, design opportunities, useful resources and learning activities. We recommend performing several iterations of the Edukata model phases. For each workshop, we recommend adopting one focus. Move the focus gradually from one workshop to the next, focusing first on design challenges, then design opportunities, then useful resources, and lastly learning activities. While guiding the team to focus on one particular aspect, also allow other types of ideas to emerge.

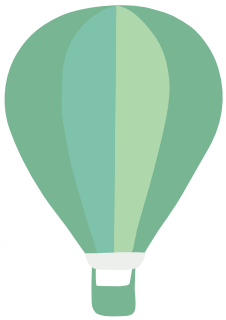


KEEP WORK ORGANIZED AND ACCESSIBLE by using differently colored sticky-notes for each focus. Color coding is a useful shortcut for seeing the overall picture. In the resource corner is a sticky-note legend with colour code recommendations for the four foci (design challenges, design opportunities, useful resources and learning activities). Paste it to the wall space for easy access and reference for all during a workshop.

DESIGN CHALLENGES are obstacles you can foresee if you would adopt the scenario. To identify design challenges, ask: Why would you or a colleague say 'no' to a scenario? Note that design challenges are not the same as learning challenges or learning goals. Here are a few example challenges we saw during our design process (find more online at edukata.fi):

- Student teams are formed based on friendship rather than interest, and free-riders are on teams.
- Individual assessment is time-consuming.
- Media production processes are complex.

Sometimes, particular challenges seem impossible to overcome. Move them to one side and imagine what the situation would look like if you would remove those parts of the scenario that bring impossible challenges. Document design challenges using red sticky-notes. (See template in the resource corner.)



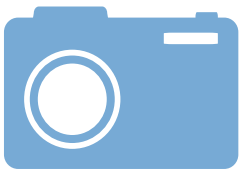
DESIGN OPPORTUNITIES are ways to get over, around and through design challenges. These can be existing practices of another educator or simple workarounds that guide the composition of learning activities. Here are a few examples of the kinds of design opportunities we identified (find more online at edukata.fi):

- Form teams based on student interests.
- Visualizing learning achievements and learning journeys.
- Support guided and fast documentation.

There is always more than one way to address a design challenge. Be creative when identifying design opportunities, and ask: How could the environment change so a certain challenge is no longer relevant? Use green sticky-notes to document design opportunities. (See template in the resource corner.)

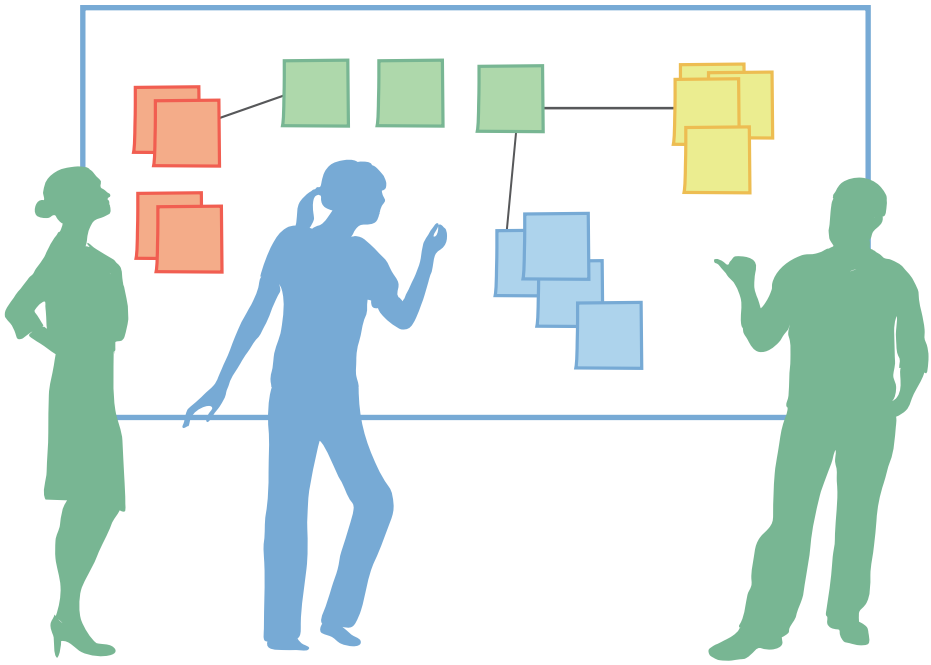
USEFUL RESOURCES are tools and other resources that are available to you and can be useful for making a scenario a realistic classroom practice. Examples of these may be a close relationship with a science museum or an observatory, a wood workshop of the school or the personal digital tools of students, such as smartphones and tablets. Focus at least one workshop on identifying useful resources that are available to you. Rather than creating an inventory of all available useful resources, focus on those that you consider useful for making the scenario a staple component of teaching and learning in your classroom and/or school. Use yellow sticky-notes to document resources. (See template in the resource corner.)

LEARNING ACTIVITIES are detailed descriptions of how to perform learning and teaching in the classroom. The detailed descriptions address the foreseen design challenges by building on the identified design opportunities and useful resources. Learning activities include an overview of the activity, ideas for using technology, motivations for teachers and learners, and a detailed description of the aspects of the activity. A template for composing learning activities is in the resource corner of this guide, and you can find examples of high-quality learning activities online at edukata.fi. Allocate at least one workshop to structuring learning activities with those affected, before moving onto composing learning activities. Start by splitting the scenario into small pieces. What are the smallest tasks that the scenario is made up of? Prioritize those that you consider most important and that are reasonably challenging for your context. Use blue sticky-notes to document learning activities. (See template in the resource corner.)

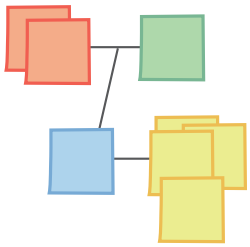


BEFORE CLOSING A WORKSHOP – Sticky-notes may fall off the wall, or someone else might need the wall space before your next workshop. Take a picture of the wall after each workshop. If the next workshop has not been scheduled yet, ask everyone when to meet next. Then talk about what to do during the next workshop and how to prepare for it. Also, ask the part-time members if they recommend others to join the design work. In case you want to give part-time members the opportunity to participate in the design process beyond workshop participation (for example, by joining workshop reflections or commenting on online summaries of workshops or workshop reflections), invite them before closing a workshop.

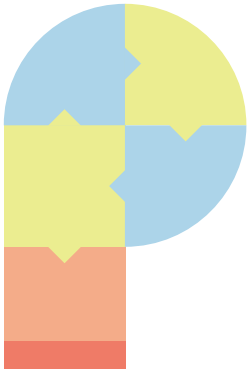
Reflect on a workshop



Reflecting on a workshop is as important as a workshop because it lays the foundation for the next workshop and the composition of learning activities. You take a step back, think about, and summarize a workshop in collaboration with the full-time team members. Summarize and cluster the design challenges, design opportunities, useful resources and/or learning activities that were documented during the previous workshop. This work is iterative and progresses through the four foci: challenges, opportunities, resources and learning activities. Document and share your work with the part-time members to ask for feedback before facilitating another workshop or composing learning activities.



SUMMARIZE AND CLUSTER – Meet with the full-time team members to reflect and summarize the previous workshop. We recommend meeting as soon as possible after the workshop, when memories are fresh and you can easily recall conversations. Read and sort the documented notes, for example, by clustering similar design challenges, design opportunities, useful resources and learning activities together. Draw connections between the clusters, for example by connecting the design opportunities to the design challenges that these address.



ITERATIVE PROGRESSION – Similar to how you shift foci in workshops, you shift foci in the reflection on a workshop. Your work is iterative and always progressing. Work your way through from recognized design challenges to design opportunities, to useful resources, and finally to learning activities. Here are a few things you should consider for each:

Separate for distinction by spreading apart those design challenges that are unique and contrasting. Especially in relation to useful resources, think about whether a certain type of resource is dominate. If so, consider whether other resources that were not mentioned but could be useful.

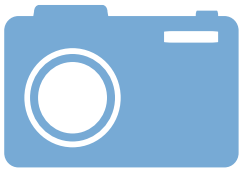
Group for similarity by bringing those sticky-notes with similar or supplementary design challenges closer together.

Create short and precise titles for each group of challenges, opportunities, useful tools and learning activities. This supports effective work progression, because these titles will help you refresh the minds of the part-time team members about the previous workshop when approaching them again. Replace the sticky-notes with the title. If you are interested in affecting change on a school level, it can be useful to document how many times the same kind of challenge, opportunity, supply or activity was mentioned, and/or how many mentioned aspects were grouped under the same title. Note the number next to the title before removing the old sticky-notes.

Decide for or against elaboration by considering whether you need further information or clarification about a design challenge, design opportunity, useful supply or learning activity from full-time and/or part-time team members.

Rank and prioritize the likely large number of challenges, opportunities, useful resources and activities you come up with. Move forward with the highest ranked ones.

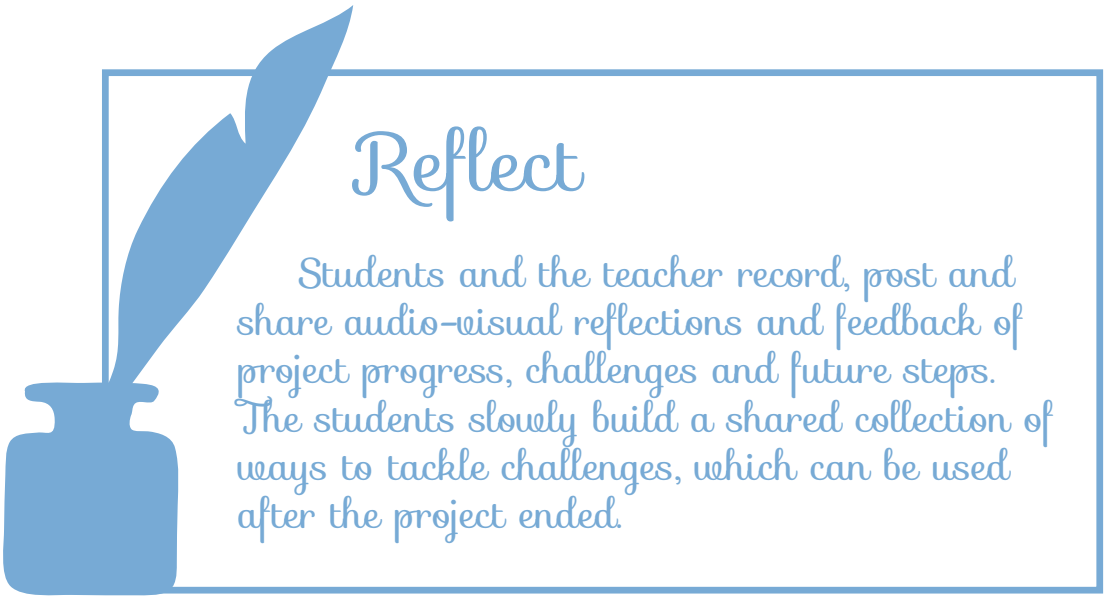
These tips are not exhaustive. Create your own techniques and find more online.



DOCUMENT AND SHARE YOUR WORK – To keep track of your work, take a picture of your work in progress. You could also enter the titles of design challenges, design opportunities, useful resources and learning activities into a spreadsheet. We recommend using collaborative online editing tools for this, because this way you can split the work effort among the full-time members and easily share your work in process with the part-time members.

ENGAGE PARTICIPANTS – Pass on the summaries to part-time members for comments. Include the agenda for the next workshop, and encourage everyone to add to and edit it. Ask if there is anyone else who could join or would be good to invite to join the process. Online collaborative editing tools are good for sharing workshop documentation and reflection because they can be edited synchronously and asynchronously by many people and the history of comments and edits can be stored.

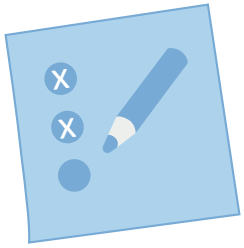
Compose learning activities



Reflect

Students and the teacher record, post and share audio-visual reflections and feedback of project progress, challenges and future steps. The students slowly build a shared collection of ways to tackle challenges, which can be used after the project ended.

Learning activities are detailed descriptions of how to perform learning and teaching in the classroom. They are the main artifacts developed during the collaborative and participatory design process based on the Edukata model. Overall, learning activities are considered to be larger than one single task or lesson, but smaller than an entire course. They can be cross-cutting and a way of working that affects many aspects and tasks of a course. Each learning activity should describe one challenging activity that can be carried out in an educational context. They should be composed so that they can be used by others and by you long after the design process. A learning activity template is in the resource corner of this guidebook, and you can access the digital learning activity template online at edukata.fi. The template is a guiding frame. Use it unless you have a reason for doing things differently. The resource corner also includes one example learning activity, and you can find additional examples online at edukata.fi. This phase includes useful tips for composing learning activities.



PREPARE FOR WRITING and sharing the workload, for example, by asking everyone who participates in the writing process to write one activity, or write each activity collaboratively through online editing tools. We recommend planning for frequent sharing and commenting on work in progress. Use the learning activities template in the resource corner to ensure that the sticky-notes plan developed during the workshop(s) and reflection(s) on a workshop include all important aspects before starting the writing process. In case aspects are missing, try to expand your ideas using the learning activity composition checklist in the resource corner.

THE BASICS – Include a descriptive title, a clarifying image for each learning activity, and a 2-3 sentence-long overview presenting the highlights of the activity. This helps people to understand what your activity is about right from the start. Write clear and understandable text, and write learning activities so they can be used independently, without other learning activities that you may have written. Encourage full-time members to write well so they will happily publish and share their learning activities. To further support sharing of your learning activity, try to write the activity as generally as possible (non-specific as to subject and grade). For example, the resource corner includes an example learning activity called "reflect", which may be used in a diverse range of subjects, e.g. mathematics, design and technology or language learning subjects.

IDEAS FOR USEFUL RESOURCES – List useful resources, including digital tools that you find useful for an activity. You can also list useful resources that you are not planning on using, but know other teachers might like to try. Mention affordances of the listed resources, meaning how the resources could be used in the activity. Sometimes resources can be deciding criteria for whether or not to perform an activity. You can group the listed supplied into different categories, ranging from required to important to nice-to-have.

TEACHER MOTIVATION – Write motivational aspects for educators to perform the learning activity in this section. When expanding on motivations, ask yourself why educators would perform the activity. Include benefits of performing the activity in relation to individual students, the whole classroom and the school. Mention the relevance of the activity to educator's continuing professional development.

STUDENT MOTIVATION – List student motivations in the section, emphasising the relevance of the activity to the students' development. Ask yourself why students would perform the activity. Also include any additional points that may be useful for other educators to convince students to participate in the activity.

PREPARE – Write the preparatory steps for the activity here. Consider the role of the teacher carefully. How could the activity remain flexible to students' learning needs? Also include tips for where educators could find more information and further resources about the topic, and possibly advanced tips.

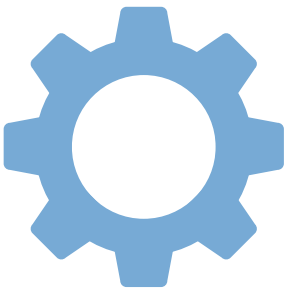
INSPIRE – Write about the way in which you will present the activity in the classroom. In particular, focus on how you would inspire students and increase their motivation. Also include tips to ensure proper understanding of the activity. For example, describe common challenges and how these could be overcome. Mention which tips may be considered advanced.

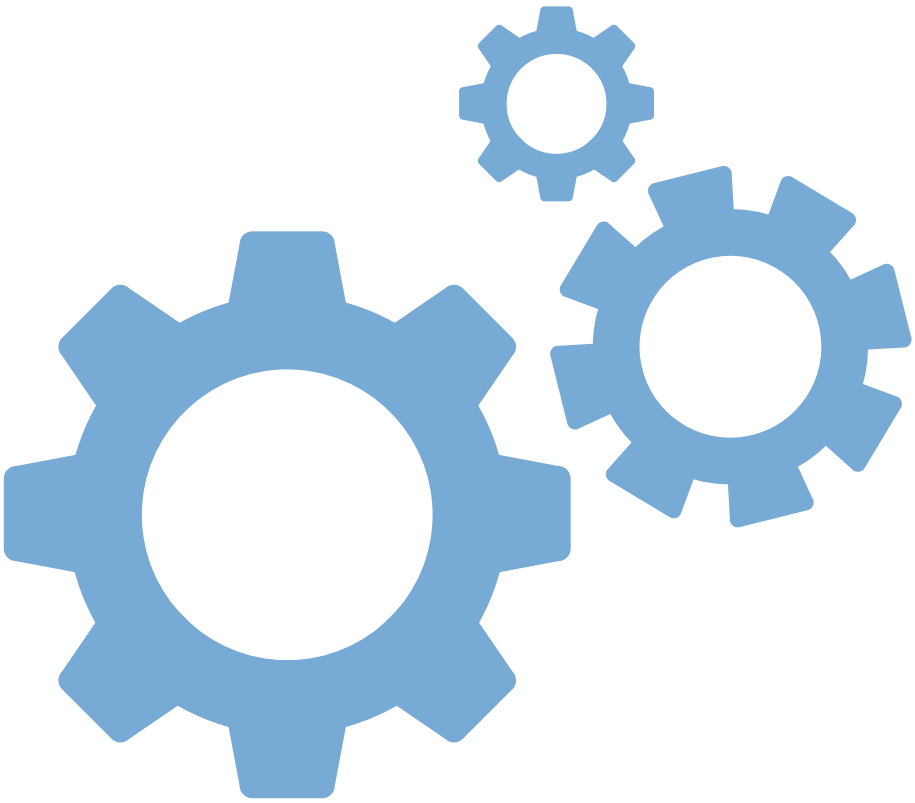
COACH – Write how the activity would continue. This includes what students would do and how you would coach, question and support the students. List the steps or tasks of the activity clearly and include alternatives where applicable. Mention how much time the activity may take and where the activity may take place, e.g. during or after classroom time. Again, offer alternative and advanced tips if applicable.

ASSESS – Document how you would assess the students' learning achievements. What do you think would be a good way of understanding the students' development? Try to think of individualized assessment approaches rather than traditional exams.

AFTER WRITING – Use the learning activities composition checklist in the resource corner to evaluate whether and how well aspects of good learning activities are addressed in your designs. Share your learning activities with fellow educators at your school, across your country or with the wider international educator community. Remind full-time members that they can claim a Learning Activity Designer badge at edukata.fi. As facilitator, submitting the results of your workshops can give you more advanced levels of Edukata Facilitator certificates. See edukata.fi for more details.

LEARNING STORIES – If the learning activities seem too abstract and your participating members feel they want to create something more concrete or something that addresses their specific courses or subject areas, ask them to write learning stories that provide an example narrative of what their learning activities would look like when performed together in a course. See example stories online at edukata.fi.





Part 3: Edukata resource corner

The materials included in this section are intended to support the facilitation of a workshop and the composition of learning activities. All materials included here are also available online at edukata.fi

THE STICKY-NOTE LEGEND is a graphic with colour code recommendations for the four foci (design challenges, design opportunities, useful resources and learning activities). It can be pasted to the wall space for easy access and reference for all during a workshop.

THE LEARNING ACTIVITY TEMPLATE is a guide for composing learning activities. It includes all aspects that were considered important for learning activity, including motivations for educators and students to perform the activities, suggestions for digital tools and technology, and a breakdown of the activity into small steps. An example activity is included following the template.

THE LEARNING ACTIVITY QUALITY CHECKLIST may also be useful when working on composing learning activities. Use the list to evaluate the strength and weaknesses of your learning activities. It helps you see which part of your learning activities may be improved and how.

THE GLOSSARY is a list of important concepts and terms used in the guidebook with a short explanation.

Sticky-note legend

Circumstances that hinder learning

Examples
Teams are formed based on friendship
Individual assessment is time-consuming
Media production processes are complex

Circumstances that support learning

Examples
Form teams based on student interests
Visualizing learning achievements
Support guided and fast documentation

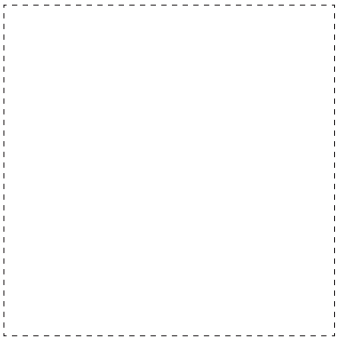
Tools, services, people, and event

Examples
TeamUp to record student reflections
Student's personal smartphones
Video chat to talk to experts

Ideas for how to learn and teach

Examples
Sharing audio recorded reflections
Student teams interview experts
Collecting data outside of school

Learning activity



SUGGESTED TIME

IDEAS FOR USEFUL RESOURCES

TEACHER MOTIVATION

STUDENT MOTIVATION

PREPARE

INSPIRE

COACH

ASSESS

Learning activity "reflect"

Students and the teacher record, post and share audio-visual reflections and feedback of project progress, challenges and future steps. The students slowly build a shared collection of ways to tackle challenges, which can be used after the project ends.

SUGGESTED TIME Approximately 10 minutes

IDEAS FOR USEFUL RESOURCES

Audiovisual reflection tools: TeamUp, ReFlex

TEACHER MOTIVATION

- reviewing team progress quickly and comfortably
- providing personal feedback to teams
- a more fair distribution of support beyond the classroom
- spending less time recording feedback for students
- providing students with personal feedback through tone of voice and gestures
- using the recordings to better communicate with parents about school activities
- developing a collection of comments to your students
- building a resource of reflections made by students
- using novel tools
- develop technical, organizational and pedagogical competence
- acquire a repertoire of using reflection for multiple purposes

STUDENT MOTIVATION

- summarize, communicate, present and plan work in progress
- reflect on work
- provide and receive criticism

PREPARE

Develop your competence and expertise by exploring how often and by whom reflection and feedback could be used in the learning story and by deciding on the reflection tool that you would like to set up and use. Before recording another feedback or reflection, listen to the previous one.

INSPIRE

Motivate the students to reflect on their work by expressing the benefits and reasons for reflection, for example, easier review of the last steps, catching up after an absence, and receiving direct feedback from the teacher. Tell your students that in design-related learning projects, regular reflection can support letting go of initial, not very good, ideas and to develop the feeling of ownership.

COACH

Teams reflect on what they did, what they plan to do, and the challenges they encountered or foresee. The first reflections may not be a smooth recording. Coach students to overcome initial feelings of frustration or inconvenience. Be assured that, after recording a few reflections, you will start to recognize the value of your investment. Teams listen to the recordings by others and record questions and tips for them. Coach and support them in doing so. Listen to the recordings and adopt your teaching to the needs of the students. Record audio-visual feedback for the teams, including questions and suggestions that may inspire the teams to think further, based on the student reflections. Experts may be invited to record feedback to the student teams. Their feedback may become ubiquitous and a source of inspiration for the students in the years to come.

ASSESS

You may assess based on the student's ability to listen and react to your constructive comments, or based on the depth or relevance of their reflections. Additional ideas for assessing partially completed projects: Review all work. Compare everyone's progress updates with their presentations to see if all important steps are included in the presentation. Review all reflection recordings and discuss the process with the students. What was their experience like? What have they learned? What would they like to explore further? Student work can be used for open feedback and reflection. You could assess documentation as resources for exam preparation.

Learning activities composition checklist

	INCLUDED	COULD BE BETTER	NOT INCLUDED
THE BASICS			
descriptive title			
clarifying image			
2-3 sentence-long overview			
clear and understandable text			
subject-independent			
larger than one lesson			
IDEAS FOR USEFUL RESOURCES			
used resources			
recommended resources			
affordances			
categorized importance			
TEACHER MOTIVATION			
student benefits			
classroom benefits			
school benefits			
teacher relevance (CPD)			
STUDENT MOTIVATION			
student relevance			
ways to increase student motivation			

	INCLUDED	COULD BE BETTER	NOT INCLUDED
PREPARE			
preparatory steps			
sources for additional information			
advanced tips			
INSPIRE			
how to increase motivation			
how to support task understanding			
common problems and remedies			
advanced tips			
COACH			
breakdown of tasks in steps			
time-management tips			
location			
common problems and remedies			
alternative strategies			
ASSESS			
focus points			
assessment approach			
alternative strategies			
common problems and remedies			

Glossary

SCENARIOS	Innovative and challenging ideas of what learning and teaching could look like in the future.
LEARNING ACTIVITIES	Detailed description of how to perform learning and teaching in the classroom.
LEARNING STORIES	Examples of how a number of learning activities could be used together in a course.
DESIGN CHALLENGES	Circumstances that hinder learning and learning activities, and which can be addressed through designing better activities.
DESIGN OPPORTUNITIES	Practices or circumstances that support learning and that can be highlighted through learning activities, such as good practices that are in place at the school or classroom.
USEFUL RESOURCES	Tools, services, people, and events that may be useful in carrying out a learning activity.
FACILITATOR	Person in charge of the design process, and who preferably has experience or training in participatory design methods. Each Edukata process should have one facilitator.
FULL-TIME MEMBERS	2-3 people who are committed to the design process and attends workshops and reflections of workshops.
PART-TIME MEMBERS	3-5 people who comment on the design work and participate in workshops or additional Edukata phases.
BADGES	Certificates that are awarded for sharing high-quality Learning Activities and for facilitating successful Edukata workshops.
CERTIFIED EDUKATA FACILITATOR	People trained by experienced Edukata professionals and who have sufficient understanding of participatory design and Edukata to facilitate successful workshops.

Notes

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