EDU HACK .EU

The EduHack Toolbox

Introduction to the

Course and Toolbox

The EduHack project, supported by the European Commission, has designed an innovative learning offer aimed at helping educators in higher education to produce digitally-supported learning experiences. This offer in the form of an free online course and a guide to running EduHackathons helps educators work with creative models and approaches with a focus on fostering collaborative learning and student engagement.

The EduHack course is:

- Complete and comprehensive – built on the **DigCompEdu Framework**

- Action-oriented – participants can assess their digital competences with the **DigCompEdu Check-in** tool and immediately try out what they have learned

- Easy to begin – participants can start with just one or two activities

- Suitable for a wide range of participants – from newcomers to more experienced practitioners

- Built around a community – participants can access a 'safe' environment for reflection and practice

- Highly flexible – can be made available 24/7 to suit busy academics

- Suitable for assessment and accreditation – through the open badging system

This toolbox contains some practical guidelines on how to replicate the EduHack learning experience in your university by customising the EduHack activities to your context. These activities can then form part of your training offer to teaching staff in your institution.

The EduHack learning experience is composed of a preparatory online course and an EduHackathon targeting academic teaching staff.

The online course is based on the **EduHack content**, which is freely available in English, Spanish and Italian. Learners can choose among 19 different activities in four core areas: content, teaching strategies, assessment and engaging learners. Each activity takes around one hour to complete through practical work, most of the time by using a specific online tool (such as **Wikipedia, Socrative, Kahoot, Padlet, Answer Garden** etc.). Once they have completed one activity, learners are encouraged to reflect on their learning experience in an open way, either through individual blogging or through a common blogging space that is provided by EduHack called the **EduHack Wall.**

We suggest that the minimum duration of the course should be 8 hours, corresponding to 8 activities.

Before starting the activities, we recommend you to use the **DigCompEdu Check-In Self-Assessment tool** to learn more about your personal strengths and the areas where you can enhance the ways in which you use digital technologies for teaching and learning.

Complete the self-assessment questionnaire and receive detailed feedback with useful tips and suggested milestones on your personal roadmap to innovating teaching.

Please enter the following participation codes depending on your affiliation:

- Coventry University: cov-eduhack
- Politecnico di Torino: polito-eduhack
- UNIR: unir-eduhack
- Other: eduhack

Following the online course phase, learners are invited to gather face-to-face for an **EduHackathon.** This is a hands-on event where participants work, ideally in small interdisciplinary groups, on some specific ideas to improve their teaching through digital means. During the event, participants are expected to collaborate, plan and possibly produce mock-ups or beta versions of the applications they intend to develop. The EduHackathon methodology developed in EduHack is one whereby the hackathon approach is adapted to fit within the constraints of Continuing Professional Development (CPD) within universities.

Online alternative
As an alternative to a face-to-face EduHackathon, the partners have been experimenting with the organisation of an online version, partially in response to the Covid-19 pandemic. You can find out more about how such a learning opportunity can be organised **here.**
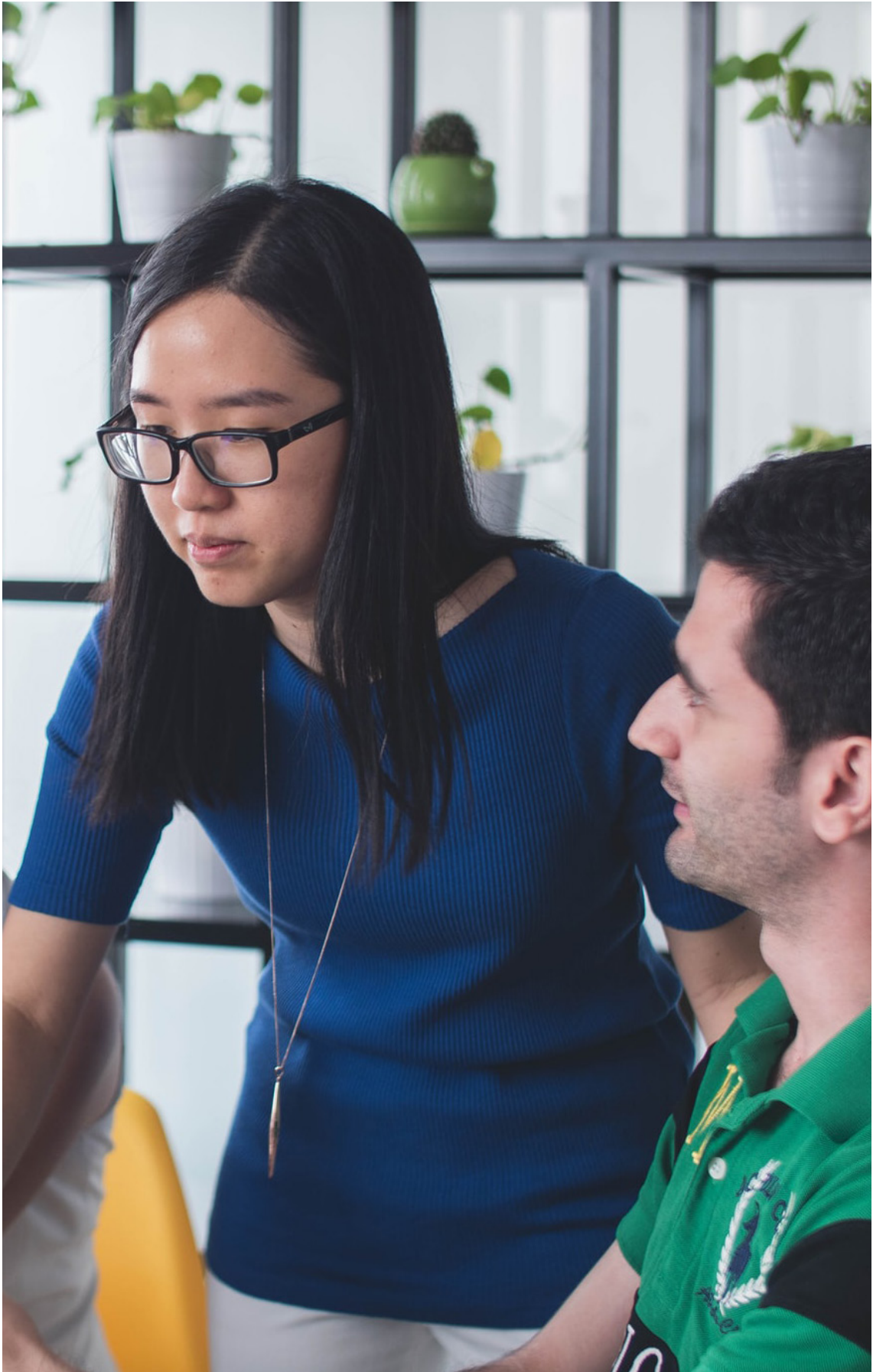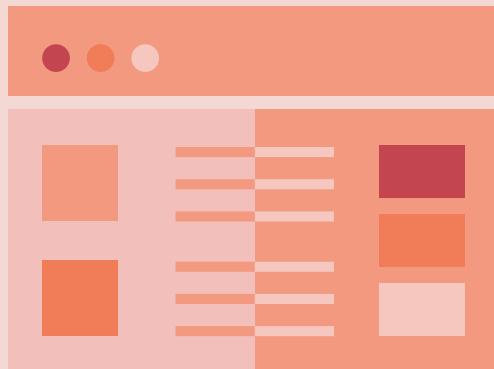
The EduHack

steps and tools

The Five-Step Process

These are the steps we suggest you should take to organise the online course. For each step, we have prepared a checklist that can help you consider all important aspects. In addition, an EduHack toolkit has been created to facilitate the implementation of EduHack course in different institutions.

Step 1. Get familiar with the EduHack content and tools

Checklist

- Take a look at the **online course** we have prepared, getting to know what is involved in the different modules

- Visit the **EduHack Community hub** to see the kinds of messages participants have posted in past iterations of the EduHack course

- Read about what **EduHack partners have done** and how they have organised EduHack Online Courses and EduHackathons

- Understand what a Hackathon is:

"A hackathon (also known as a hack day, hackfest or codefest) is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers,

project managers, and others, often including subject-matter-experts, collaborate intensively on software projects. The goal of a hackathon is to create usable software. Hackathons typically start with one or more presentations about the event, as well as about the specific subject, if any. Then participants suggest ideas and form teams, based on individual interests and skills, then the main work of the hackathon begins. At the end of hackathons, there is usually a series of demonstrations in which each group presents their results. There is sometimes a contest element as well, in which a panel of judges selects the winning teams, and prizes are given" **https://en.wikipedia.org/wiki/Hackathon**

"As a melting pot of creativity, ideas, and skills, hackathons have helped in building some of the coolest apps of our times. Hackathons offer the opportunity to meet like-minded people, mentors, and potential investors. This makes it easy for participants to test and validate their product. The hackathon environment has led to the invention of many successful business ideas. Hackathons have helped solve pressing issues and business challenges, worldwide." **https://dzone.com/articles/6-hackathon-ideas-that-turned-into-million-dollar**

Step 2. Create overall plan of action

So now you have taken the decision to run an online course and EduHackathon along the lines proposed by EduHack. There are various different ways in which you can organise the learning experience depending on your local circumstances and needs. Your best chance of success is to prepare well and so we suggest you read some of the background material we have prepared in order to decide what the format of your EduHackathon should be.

We suggest you use design thinking methods to design your EduHack learning experience (see **Tool #1**).

Here is a checklist with a list of aspects we suggest you consider:

- Set up a meeting with all relevant stakeholders – academic as well as non-academic – to decide the format of your Online Course and EduHackathon.

- Agree exactly to whom your course and the EduHackathon is directed, complete newcomers vs. early adopters? the number of participants you want and can expect and the extent to which participants chose themselves to take part as well as the incentives you will use to attract participants.

- Consider the question of certification/recognition.

- Create a timeframe for the course and EduHackathon making sure to allow enough time for participants to complete the online course before

participating in the EduHackathon – we recommend that a period of between 4 and 8 weeks for the online part should be sufficient.

- Consider the amount of time you can set aside for the face-to-face EduHackathon aspect, taking into account the availability of your target group balanced against what it is you hope to achieve during the EduHackathon. If your purpose is simply to work on ideas in an EduHackathon then you could organise this as a single day event, however if you really want to work on prototypes, then at least 2 days are necessary.

- Discuss and agree how best the community aspect will be supported by exploiting the various options available.

- Consider overall institutional planning in terms of agendas and priorities to ensure you attract the numbers and profile of participants that you require.

- Consider the people power your Online Course and EduHackahon will require, at a minimum you will require an overall online course coordinator with sufficient technical expertise to support participants' queries. The expertise and resources required for the EduHackathon aspect will depend on your participants' skills, the availability of the necessary expertise and what it is you expect to achieve.

- Consider how you will evaluate the success of your online course and EduHackathon in order to refine and improve your offer for future iterations. At a minimum consider sharing a simple, possibly anonymous, questionnaire with everyone who takes part.

- Inform and connect stakeholders with the DigCompEdu framework and consider using the **'DigCompEdu Check-In'** survey to assess the skills and requirements of your participants before they take part.

The circumstances presented by the Coronavirus global pandemic in 2020 have created the need for the EduHackathons to be held online rather than in a physical space. An online EduHackathon should not be much different than a face-to-face in terms of the aims and objectives. However, there are some things than need to be prepared and carried out differently. The EduHack project partners have held online EduHackathons and thee were very successful. The following is one example, **held in April 2020 for Italian educators:**

The Eduhackathon was held on two days. The idea has been to keep the original structure of the EduHackathon in presence, in which the groups would work in parallel to their project. For this reason, five virtual classrooms were created within which each group was able to work on their idea.

In addition, five facilitators were involved, chosen on the basis of their skills in the field of teaching methodology and their IT technical skills. The role of the facilitators was to guide the workgroup and to support them regarding the technical and methodological aspects of the projects.

A total of three group working sessions were held. Around them, three plenary sessions were planned to discuss and facilitate the work: an introduction was made at the first plenary session and the use of the tools was clarified, in the second, feedback and questions on the method and the work done were collected and in the third the final presentation of the project ideas was held.

Plenary sessions and team works took place on **Jitsi**, a free and open source platform that does not require installation of any application and does not require to register or provide an email address.

The template for the development of the project idea was provided on a Microsoft PowerPoint file that contained some useful points to focus on to develop the project idea and has the aim of facilitating dialogue and collaboration. The template was intended to be therefore the starting point to elaborate, during the three team work sessions, the draft of the «identity card» of the project idea (to be transferred then in the slides for the final presentation).

Padlet was used as an alternative tool to the template that promotes interaction and allows co-creation of the draft project directly online. Each group had its own **padlet board**.

The slides for the final idea were created in a Microsoft PowerPoint file. This document contained a report with the result of the work developed in the template for the development of the project idea or Padlet. This presentation was delivered during the final plenary session of EduHackathon.

Step 3. Launch of Online Course and EduHackathon

Once you have decided on the format and structure of your Online Course and Eduhackathon, it's time to finalise the planning and launch the call for participants. By now you know who it is you want to take part and what it is you hope to achieve. Here is a set of points to consider to ensure you are on the right track.

You can browse some promotional resources in Tool #2.

Checklist

- Prepare a concise description of the online course, explaining what participants will learn and what they are expected to do, consider a minimum number of units/completion of each element – read, watch, do...indicating the expected number of hours' work participants are expected to put in.

- Make sure you state clearly the level of technical expertise you expect on the part of participants.
- Ensure that the community aspect is well supported based on the decisions you have taken in choosing whether to use individual blogs, the community blog and/or a Splot.

- Prepare a concise description of the EduHackathon, when and where it will take place, what the expected outcomes are expected to be, the necessary preparation.

- Make the 'ground rules' explicit, e.g. can participants only take part in the online course without taking part in the EduHackathon and vice versa?

what support – technical and content – can they expect? what about accreditation – what can they achieve and what other incentives are there to take part?

- Launch the call for participants in all relevant channels, giving contact information for people who wish to know more and dates for final inscription, make sure you give enough time for participants to register and consider further rounds of publicity should this be necessary.

- Consider including supplementary measures to support both the online course and preparations for the EduHackathon, these can include setting up a closed Facebook Group for participants, organising webinars at key moments, arranging times for a Twitter Chat- at a minimum make sure you provide an email address for potential participants to find out more about your offer.

- Seek champions (leading leading academics, senior staff, community thought leaders) who agree to take part and once confirmed, use such champions to encourage others to take part.

- Make sure you clarify what the follow up steps will be from the EduHackathon, will ideas and/or prototypes be further developed after the EduHackathons, and if so, how will this process work?

- Include a closing date for registrations if at all possible, you can always consider accepting late registrations but it is important to give a fixed time by which people should register so you know who is interested in taking part.

Step 4. Running the Online Course and EduHackathon

Actually making operational the Online Course and EduHackathon and bringing them to a successful conclusion requires considerable effort, particularly the first time round. You have already decided on your delivery team so now you need to make sure participants are well supported and that the EduHackathon achieves the results you expect. Here are a number of aspects that are worth bearing in mind:

Checklist

- Systematically track the amount of time and support your delivery team invest into both the Online course and the EduHackathon, this will help in your evaluation and plans for repetition.
- Check regularly with the delivery team to identify issues that may be occurring and try to react as quickly as possible to participants' requests for support.

- Check all online communications in the community service you have chosen, make sure to recognise participants effort as soon as it becomes visible.

- Make sure the EduHackathon is well prepared from a practical point of view, ensure the working area is suitable with adequate equipment, networking and power access. Flexible furniture is a 'must', participants need to be able to move around easily forming small sub-groups and also working on their own at times – ensure you have

adequately foreseen what is necessary for a comfortable, fun and interactive working environment.

- Take the catering aspect for the EduHackathon carefully into account. Having enough warm and cold drinks throughout can help to generate a cosy working environment. Consider how meals will be served, close by the working space is a help as it ensures you keep everyone in the same place.

- Consider having a showcase moment at the end of the EduHackathon and what this entails in terms of timing and presentation. Much of what is created in EduHackathons is by its very nature 'draft' and so consider carefully the pros and cons of inviting external – including senior – staff to this event as doing so may have a detrimental effect on the overall success of the event.

- Make sure that in using any of the community services, participants are made aware of potential copyright restrictions in relation to images.

- Systematically log all support staff interactions with participants as this will help you in your overall assessment of the activity later.

Step 5. Follow-up to the EduHackathon

Once your Online Course and EduHackathon are over, you will need to take some time to consider all aspects of what you offered from initial planning through to realisation, particularly if you are considering organising such activities in the future. Here is a list of aspects we recommend you consider at this stage.

Checklist

- Assuming you have carried out an evaluation with participants take time to go through this carefully with the delivery team noting not only what is mentioned but also what is NOT mentioned, e.g. participants choosing not to refer to having gained valuable skills and competences.

- Compare the outputs with what you expected and agreed with your team at the outset – did the Online Course and EduHackthon achieve what you expected? where there unexpected outcomes – positive and/or negative.
- How did the EduHackathon work as an event? did the available timing work and what about the staff support that you provided – was this adequate? was it a smooth operation or were there issues in terms of the location, the catering, the technology?

- Consider the time and effort the overall activity took, was there more support needed than you had anticipated for the Online Course part – how quickly could you react to participants' posts online or their requests for help.

- What about the number, level, gender, background and experience of the participants that took part, was it as you had planned?

- What about the promotional aspect and the extent to which you were able to reach the people you needed to reach, did you use the right tools and channels? was there enough time between launching the activity and the closing date for registrations.

- Make sure to prepare a report as soon as you can after the event, include pictures and preferably some indication of the ideas and/or prototypes that were developed and share this as widely as possible but particularly with decision-makers and potential champions.

- Ensure that whatever follow-up you have promised participants in respect to the outputs that they created is delivered in the timescale and format that was agreed.
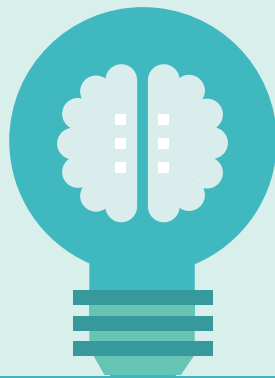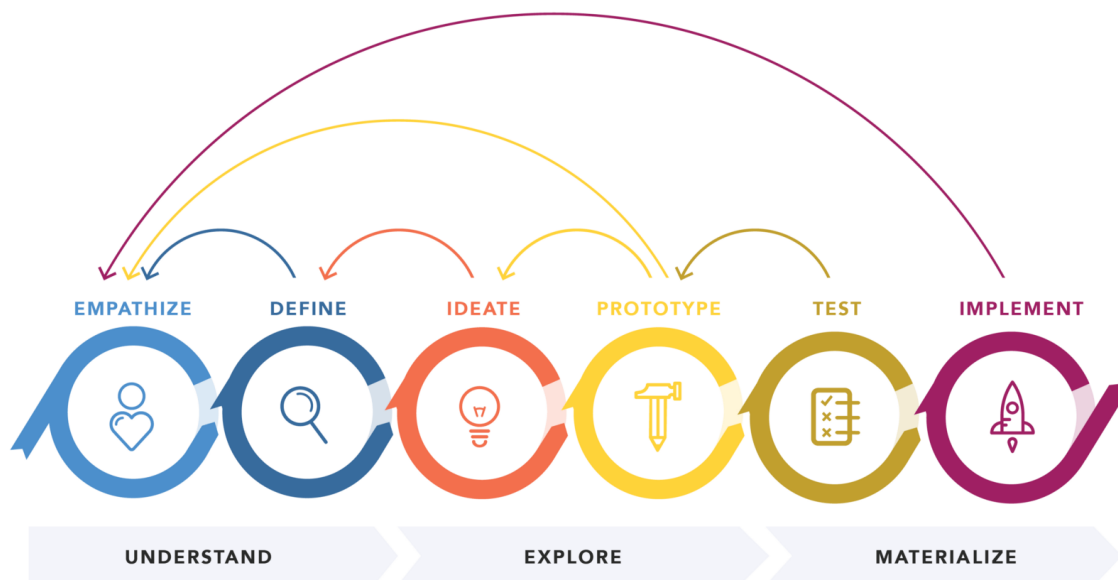
Design Thinking

Mini Guide

Design Thinking is a methodology used by designers to solve complex problems, and find desirable solutions for clients. It's a human centered and collaborative approach to problem solving that is creative, iterative, and practical. It's the essential ability to combine empathy, creativity, and rationality to meet user needs and drive business success. A design mindset is not problem-focused, it's solution focused and action oriented towards creating a preferred future.

Design Thinking draws upon logic, imagination, intuition, and systemic reasoning, to explore the possibilities of what could be – and to create desired outcomes that benefit the end user.

Design Thinking offers a structured framework for understanding and pursuing innovation in ways that contribute to organic growth and add real value to our target audiences' work. The design thinking cycle involves observation to discover unmet needs within the context and constraints of a particular situation, framing the opportunity and scope of innovation, generating creative ideas, testing and refining solutions.

For this reason the Design Thinking Process is an excellent starting point for EduHackathons because it prompts participants to think about different aspects of the issue, challenge or idea they are working on.

EMPATHIZE   DEFINE   IDEATE   PROTOTYPE   TEST   IMPLEMENT

UNDERSTAND   EXPLORE   MATERIALIZE

The 6-step design thinking process

01

Empathize

The first step of the design thinking process is to empathize with our target groups, i.e. academic teaching staff, decision makers and support staff. To understand what they desire or feel, we have to engage with them, one simple way of which is to conduct special surveys. In order to gather further crucial information and discover the subtle details of every-day stories, we should schedule one-on-one interviews with as many target group representatives as possible, as that can help us deliver tailor-made EduHackathons and find out responses to various real-life situations.

02

Define

Combine research findings and survey results and articulate where the most crucial problems are.

03

Ideate

Generate a vast range of uncensored creative ideas (even if they sound crazy or silly).

04

Prototype

Build real, tangible artefacts (e.g. an OER or a strategy draft) to address some of the ideas selected from the brainstorming stage.

05

Test

Get feedback from an extended group of users, representing the same viewpoints and needs as the event participants. Rank and evaluate the proposed solutions and select the winners.

06

Implement

Introduce the strongest, best elaborated and most highly rated outcomes of the EduHackathon to the participants' institution's practice. Let them run for a while outside of the testbed in real life and come back to evaluate and fine-tune them.

|	When does it need to happen?	What needs to be done under this step?	What decisions need to be taken under this step?	What is the output of this step?
Empathize	Initial work by partners in collaboration with other partners and possibly 2-3 critical friends from within the target group	Self-assessment interviews focus groups narratives	Definition of the target audience, determining the sampling pool	Description of target audience and their experience
Define	Pre-event work by partners within their own institution	User-survey to create a clear point of view regarding the concept and duration of the EduHackathon based on user needs and insights	User feedback regarding interest and availability	Definition of a specific Hackathon ChallengeDefinition of Time and Format of EduHackathon Launch of call for Hackathon
Ideate	EduHackathon	Brainstorming by participants	Which ideas should be prototyped?	Selection of Ideas and of Teams to Prototype those Ideas
Prototype	EduHackathon	Elaboration of solutions, based on the ideas produced by the brainstorming, to needs/problems identified in the "Define" stage	All design decisions to create the prototype, should be taken by the team developing it	Initial version of prototypes (e.g. OER, MOOC, strategy, etc.)
Test #1	Initial validation of solutions/products at Edu-Hackathon	Hackathon participants assess the viability and value of prototypes	Which ideas are the best?	'Winner' of HackathonBlog Posts describing each idea to the general public
Test #2	User testing can happen 'in the wild' after Edu-Hackathon	Market testing of prototypes	Is this prototype good enough to be further developed? What feedback should be incorporated to get it there?	Follow-up Blog Posts describing plans for the prototype based on market testing
Implement	Follow-up	Introduction of the best prototypes in real institutional practice	All institutional stakeholders agree on the value, and support the use, of prototype	Fine-tuned version of prototypes (e.g. OER, MOOC, strategy, etc.)

Course

Facilitation

Course organisers have different possible facilitation strategies, some of them used and tested by the EduHack project partners. For example, while at UNIR the facilitation happened purely online (until the EduHackathon), the Coventry University has planned drop-in sessions where participants can come together to do the activities at the same time and get face-to-face support.

The EduHackaton space

To collect ideas for your EduHackathon and to work on them during your events, you can ask us to create a EduHackathon web space for you (see the screenshot below which shows how this was set up by UNIR). Alternatively, you can use any online sharing space such as a Google document.
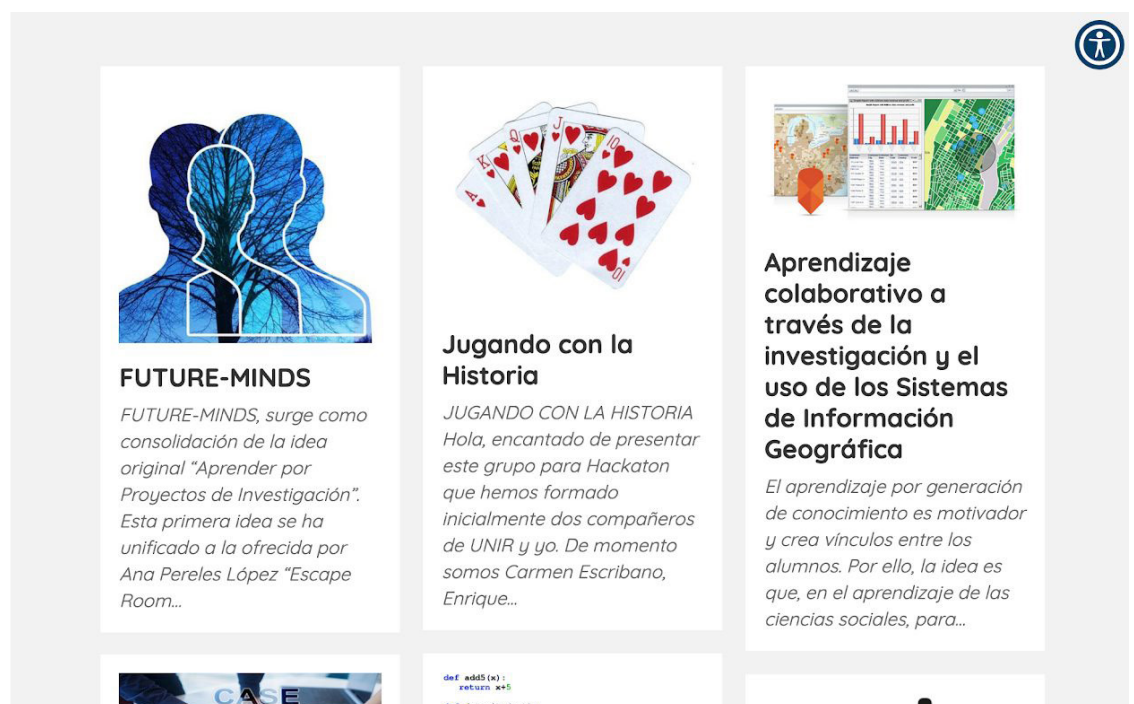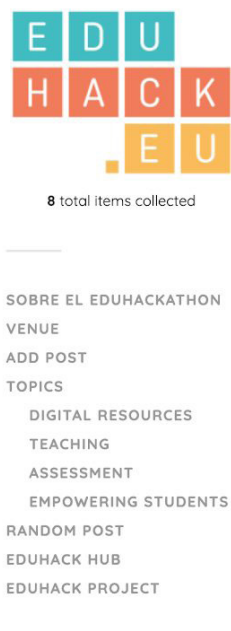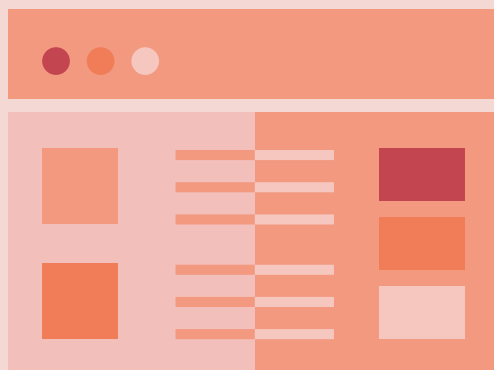
Event

Challenges

Depending on your context you need to take some decisions:

You can require your learners to run more or less activities ...

We piloted the course by requiring that every participant should run at least 8 activities (out of the 19 available ones), ideally two in each of the four course areas.

You can provide a more or less definite time frame ....

We piloted the course by giving 6 weeks between the start of the course until the EduHackathon.

You can organise a general EduHackathon or select one specific challenge...

In our pilot, we experimented both with a general EduHackathon (where participants could select any way to improve their teaching through ICT) and with one focussed on a specific challenge (Authentic Assessment). A list of examples of possible challenges is presented in the Toolbox.

You can organise a shorter or longer EduHackathon ...

We piloted the course by organising a one-day Hackathon, prepared through an online ideas discussion phase.

You can accredit the course or not ...

We piloted the course by providing a certificate to every participant who had completed at least 8 activities and who had attended the EduHackathon.

### Examples of EduHackathon challenges

EduHackathons can be general or focussed on a specific challenge. The list of the examples below goes from fairly general to more specific challenges. Please note, that the more general the concept, the more complex the hackathon is to organise and the longer it requires to prepare.

- Design and Deploy EdTech Strategies for your Institution – Such an EduHackathon would involve senior management creating digital mainstreaming strategies for their institutions.

- Identify and Rollout New Digital Tools for Learning – These EduHackathons will involve teaching and administrative staff identifying tech tools to deliver high quality learning and to provide state-of-the-art learner support. The hackathon would focus on identifying the right tools to meet specific challenges and making a plan for an initial deployment of such tools.

- Create-a-MOOC Hackathon – This EduHackathon involves having participants design a MOOC-outline and produce a first module of a MOOC during the prototype phase.

- Enhance Assessment – This would involve participants building different tech-enabled assessment tools or strategies. This is a crucial part of e-Learning and could include tools for digital assessment of learning processes, learning outcomes and learners' newly
acquired skills and competencies.

- Create New Forms of Contemporary Multimedia – Such an EduHackathon would see teachers deciding on different multimedia to include in courses and creating the media on-site as prototypes.

- Examples of other possible challenges: Using ICT in large classrooms, Implementing authentic assessment in university teaching, Implementing gamification in university teaching, Opening up resources and practices in university teaching.
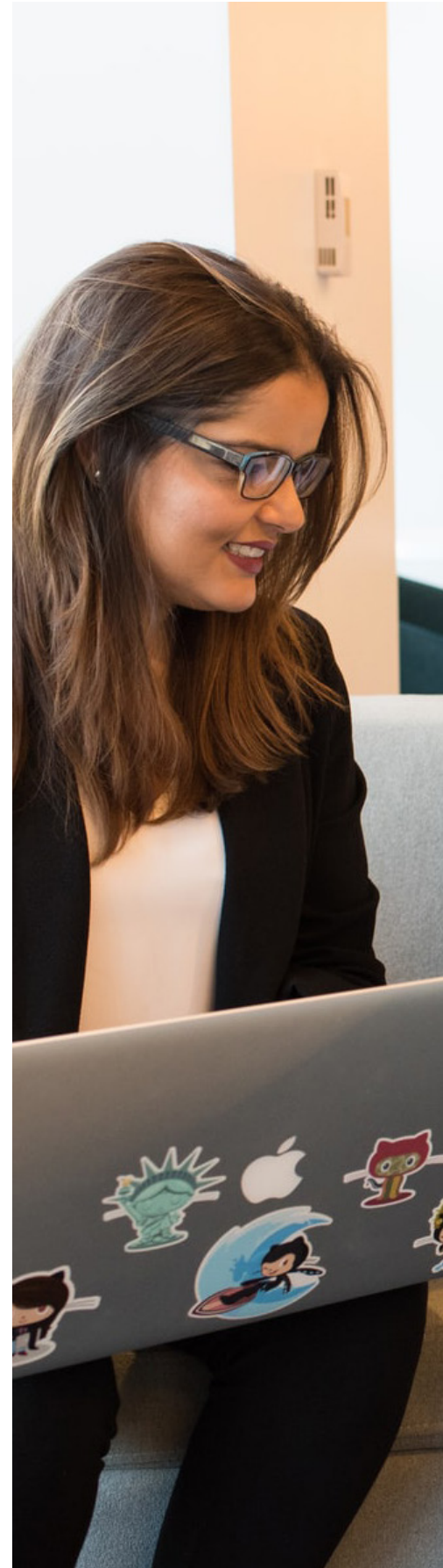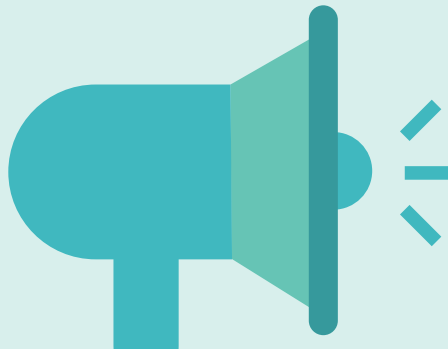
Course

Promotion

Here are some promotional tools and materials that you can emulate, adapt and re-use to promote the EduHack course and related initiatives.

It is very important that your course and EduHackathon is promoted to attract the necessary number of participants, explain its benefits, and disseminate the good practices experienced in these training initiatives.

This presentation by UNIR (an EduHack project partner) – **EduHack: a new approach for university educators' capacity building in the digital world (EN)** – explains the general approach of the course based on the need to promote digital competencies amongst academic teaching staff based on the DigCompEdu Framework.

This presentation by Coventry University (an EduHack project partner) –**Hacking Education with Digital Pedagogies (EN)** – explains the online course available on the EduHack website and the EduHackaton and provides ideas on their implementation. **A similar presentation by** UNIR is also available in the Spanish.

UNIR used this **flyer/poster/mailing** in the Spanish language promoting the EduHack course offer in Spring 2019. This **flyer in the Italian language** was used by RALF promoting the course delivered in conjunction with the Politecnico di Torino (an EduHack project partner).
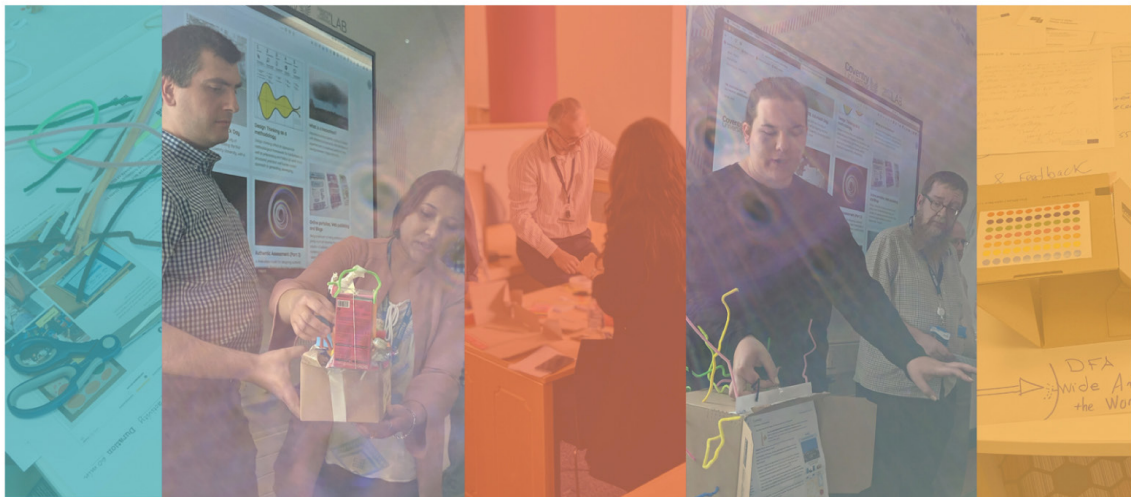
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Hacking education with digital pedagogies

Co-funded by the Erasmus+ Programme of the European Union
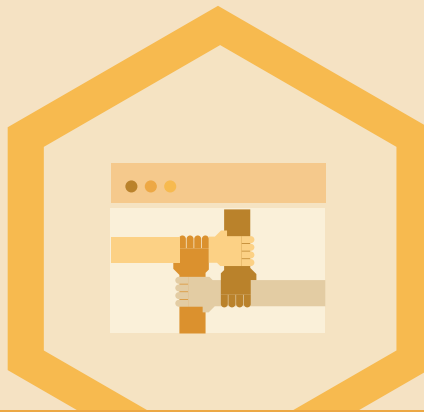
Open

Badges

The EduHack project has adopted Open Badges, the system originally launched by the **Mozilla Foundation** that recognises the achievements of learners, however small they may be.

A promoter of this system, **OpenBadges. org,** defines Open Badges as " "verifiable, portable digital badges with embedded metadata about skills and achievements. They comply with the Open Badges Specification and are shareable across the web. Each Open Badge is associated with an image and information about the badge, its recipient, the issuer, and any supporting evidence. All this information may be packaged within a badge image file that can be displayed via online CVs and social networks. Thousands of organizations across the world issue badges in accordance with the Open Badges Specification, from non-profits to major employers to educational institutions at all levels."

EduHack Open Badges

Learners who successfully conclude individual activities and not just the full **EduHack Online Course** can apply for a digital badge. The course is divided into four areas: Digital Resources, Teaching, Assessment and Empowerment. Badges are awarded at activity level, at area level and upon completion of the full course.

Here is an example of badges awarded at different levels:

This badge is awarded to learners who have completed the activity **"Search for Open Educational Resources (OER)"** in the "Digital Resources" area of the EduHack Online Course unit.

This badge is awarded to people who successfully completed all the activities of the **"Digital Resources"** area of the EduHack Online Course.

This is the course completion badge. The earner of this badge has clearly demonstrated his/her ability to successfully conduct a knowledge co-creation exercise amongst his/her students supported by a digital tool, and publicly shared evidence of his/her understanding of the content.

Assessment and evidence of achievement

To earn a badge the learner must provide proof of achievement in accordance to specific learning outcomes. The following table describes the expected workload and learning outcomes for each activity of the EduHack online course:

	Activity	Workload	Description of learning outcome (what a learner is expected to know, understand and be able to do)
1.1.	**Search for Open Educational Resources (OER)**	60 minutes	The owner of this badge has demonstrated his/her ability to search and select Open Educational Resources (OER) deemed useful to different learning contexts.
1.2.	**Modify existing digital content by using Wikis**	60 minutes	The owner of this badge has demonstrated his/her ability to use Wikis to modify existing digital content and promote collaborative and active learning among his/her students.
1.3.	**Create digital educational resources**	75 minutes	The owner of this badge has demonstrated his/her ability to use specific tools and applications for the creation of stimulating online resources that facilitate learning for his/her students.
1.4.	**Curate and organise digital resources**	60 minutes	The owner of this badge has demonstrated his/her ability to organise the materials and information of the digital resources created according to the referred audience and the specific learning goals.
1.5.	**Apply open licenses to your resources**	30 minutes	The owner of this badge has demonstrated his/her ability to recognise the terms of use of the selected educational resources and to correctly apply open licences to the digital resources created.
2.1.	**Design your own eLearning intervention**	60 minutes	The owner of this badge has demonstrated his/her ability to adapt an existing course delivered via traditional means to one suitable for online delivery.

Activity	Workload	Description of learning outcome (what a learner is expected to know, understand and be able to do)
2.2. **Implement ICT-supported collaborative learning**	60 minutes	The owner of this badge has demonstrated his/her ability to select and apply a digitally supported approach, technique or tool that can realistically foster and promote collaboration amongst his or her students.
2.3. **Guide and support students through e-moderation**	60 minutes	The owner of this badge has demonstrated his/her ability to critically evaluate a moderated discussion taking place in a learning context and to set up and successfully manage such a discussion online.
2.4. **Foster knowledge co-creation among students**	30 minutes	The owner of this badge has demonstrated his/her ability to successfully conduct a knowledge co-creation exercise amongst his/her students supported by a digital tool.
2.5. **Create and select video resources for your teaching**	60 minutes	The owner of this badge has demonstrated his/her ability to create a simple video clip of acceptable video and sound quality based on something that he or she has learned during their engagement with the EduHack course.
2.6. **Use games to improve learners engagement**	60 minutes	The owner of this badge has demonstrated his/her ability to apply an element of gamification to their course.
3.1. **Explore digitally supported assessment strategies**	60 minutes	The owner of this badge understands the core characteristics of (1) initial or diagnostic, (2) final or summative and (3) formative assessment methods, and has demonstrated his/her ability to identify the appropriate type of assessment and execute the chosen strategies for different pedagogical purposes, including the listing of assessment objectives. To prove the comprehension of the course unit, the owner of this badge presented a digital assessment strategy in a public blog post.

	Activity	Workload	Description of learning outcome (what a learner is expected to know, understand and be able to do)
3.2.	**Experiment with different technologies for formative assessment**	90 minutes	The owner of this badge familiarised him/herself with a wide range of formative assessment technologies in (1) Multi-Modal, (2) Video-Based, (3) Quizzing and (4) Open Form assessment areas and has demonstrated his/her ability to choose appropriate programmes and apps to implement assessment in practice. To prove the comprehension of the course unit and a practical attempt to use formative assessment technologies, the owner of this badge wrote a blog post about his/her user experience with a selected tool.
3.3.	**Analyse evidence on learning activity, performance and progress**	60 minutes	The owner of this badge can recognise the importance of the frequency and substance of data gathering, and has demonstrated his/her ability to analyse evidence on learning activity, performance and progress. To prove the comprehension and practicability of the course unit content, the owner of this badge shared his/her plan and indicators, as well as any thought on using learning analytics in his/her teaching, in a blog post.
3.4.	**Use digital technologies to provide targeted feedback to learners**	60 minutes	The owner of this badge has demonstrated his/her ability to use digital technologies to provide targeted feedback to learners, understanding that this feedback should be timely, intimate and individual, empowering, manageable and worded with care and precision. To put the learning into practice, the owner of this badge has created a set of instructions for students on how to give peer feedback, and shared these instructions in a public blog post.
4.1.	**Critically evaluate online tools**	60 minutes	The owner of this badge has demonstrated the ability to critically assess online tools, taking into account ethical and social implications.

	Activity	Workload	Description of learning outcome (what a learner is expected to know, understand and be able to do)
4.2.	**Discover the cost of "free" commercial social media platforms**	60 minutes	The owner of this badge has demonstrated awareness of how most social media platform monetise the online behaviour of users.
4.3.	**Appreciate opportunities and risks of personalization in learning**	60 minutes	The owner of this badge has reflected on key pedagogical and ethical implications of personalised learning.
4.4.	**Check technical accessibility of platforms and resources**	60 minutes	The owner of this badge has become familiar with key principles of web accessibility.

The following are the suggested conditions for the award of a badge. These conditions have been approved by the EduHack project but institutions who would like to make changes to the learning outcomes and assessment are free to do so.

Required conditions of badge provision in the EduHack online course:

- EduHack Course completion online + published blog post

- EduHack Course completion online + blog post evaluated by teacher

- EduHack Course completion online + blog post evaluated by peers

- Attendance of face to face EduHack Course + published blog post

- Attendance of face to face EduHack Course + blog post evaluated by teacher

- Attendance of face to face EduHack Course + blog post evaluated by peers

- Participation at an EduHackathon (at a PLACE, on a DATE, for DURATION IN HOURS as prescribed the course provided)

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Learners can create **their own blog** as part of the EduHack project to publish the posts needed to earn the badges. These blog posts can be used as evidence(s) of activity/course completion.

The organisation delivering the courses needs to issue the badgers to the learners. Each badge needs to carry the following details: the name of the institution, the website of the institution, and the date of badge issue in the DDMonthYYYY format.
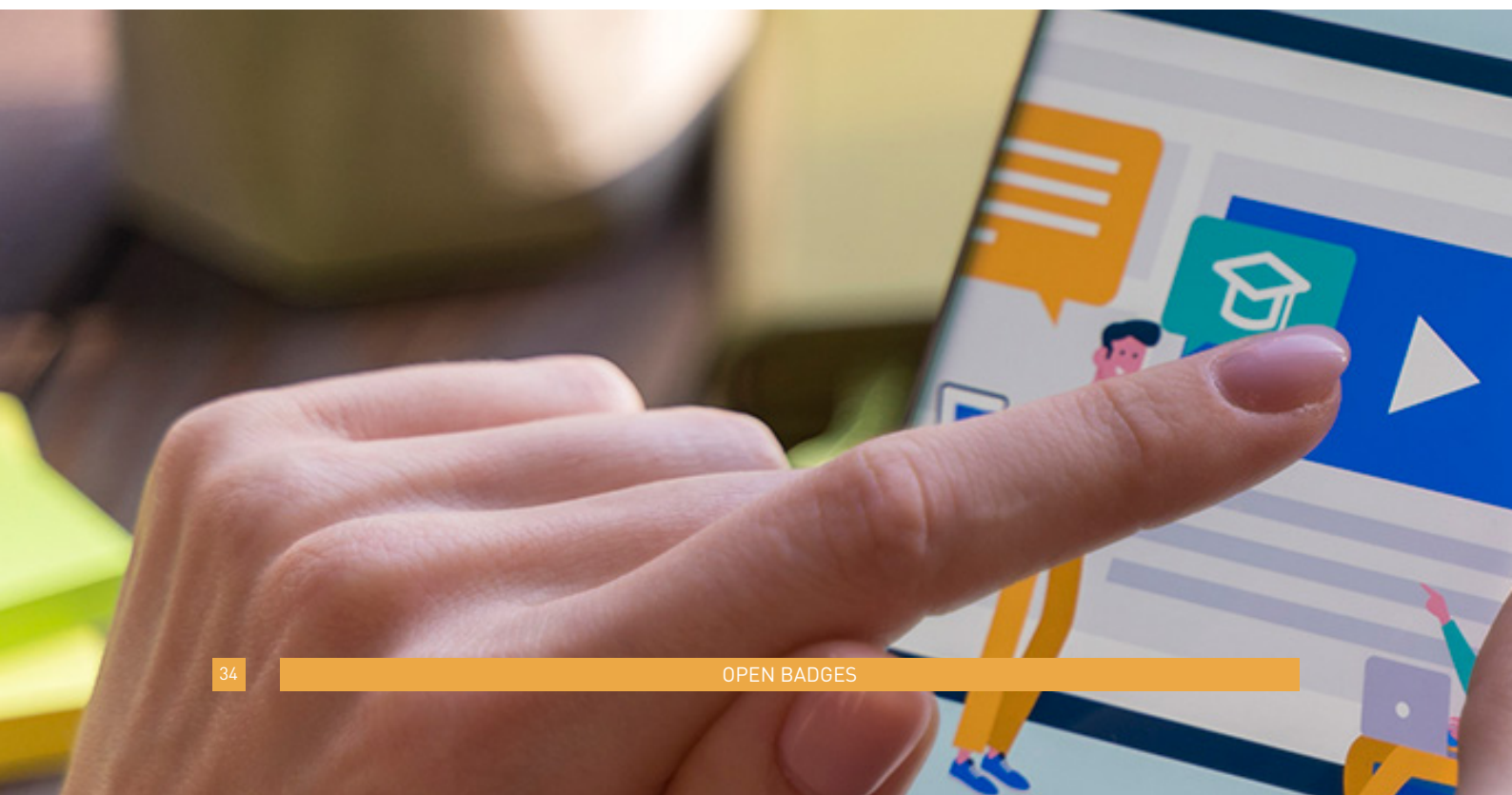
This is a sample badge issued to a learner: **https://www.credential.net/ y3xlybqs**. The learner has successfully completed the activity "Explore Digitally Supported Assessment Strategies" and can download the achievement certificate. The relevant badge will also be awarded for the learner to display with pride.

Please find read **the guidelines** on how to insert issuer names on the EduHack badges.

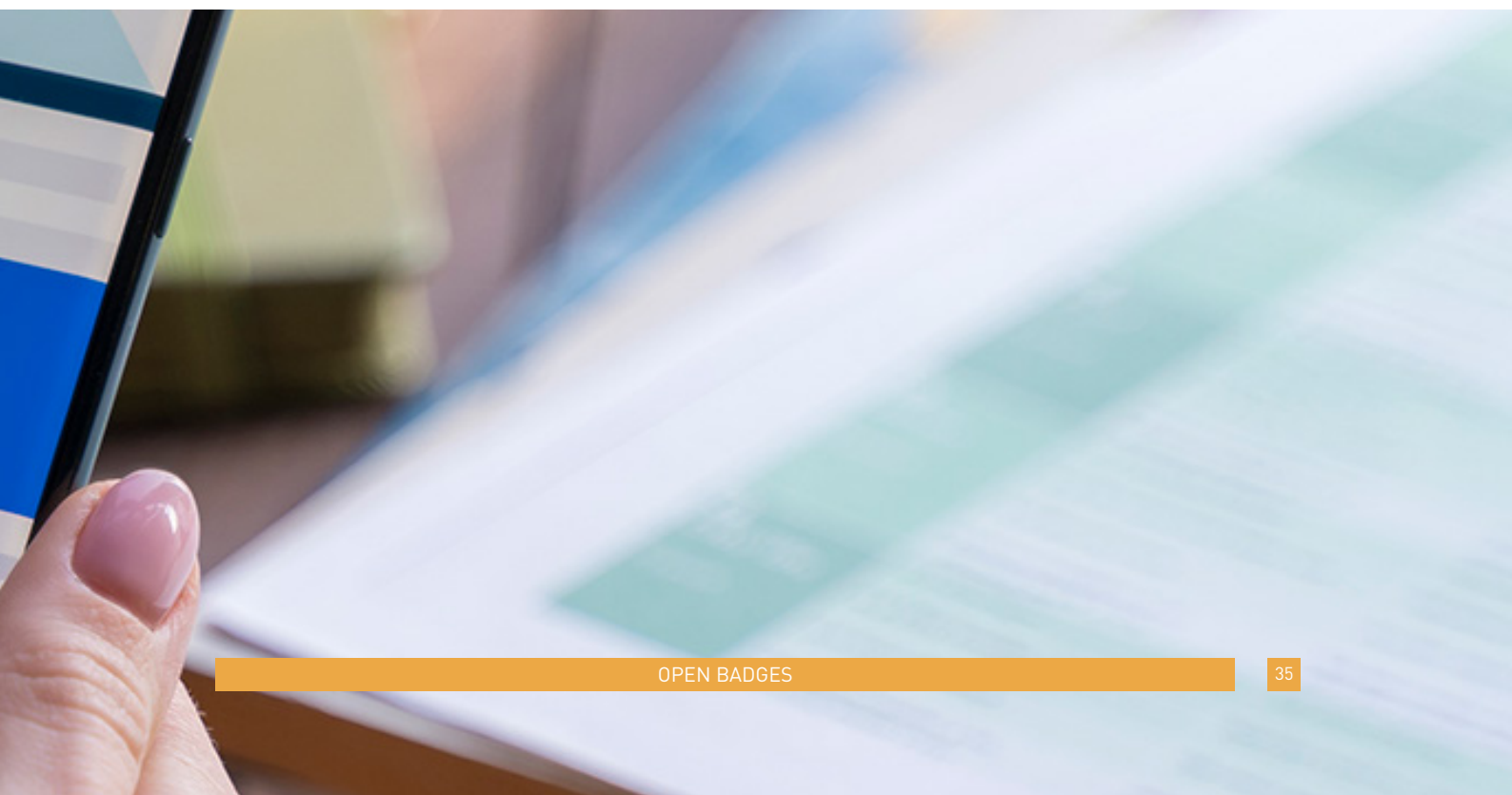The digital badges are available for download here:

Digital Resources
Teaching
Assessment
Empowering Learners
Overall course badges
EduHackaton participation

There are two version for each badge: one has the space for the name of the learner who has earned it and the other does not have this space.