CHARM-EU
CHallenge-driven Accessible Research-based Mobile European University

4eu+ EUROPEAN UNIVERSITY ALLIANCE

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

Conference on Educational and Research Infrastructure Collaboration in European University Alliances

Parallel session 3. Practitioners in educational infrastructure
What we do - concrete practices and developments within European University Alliances

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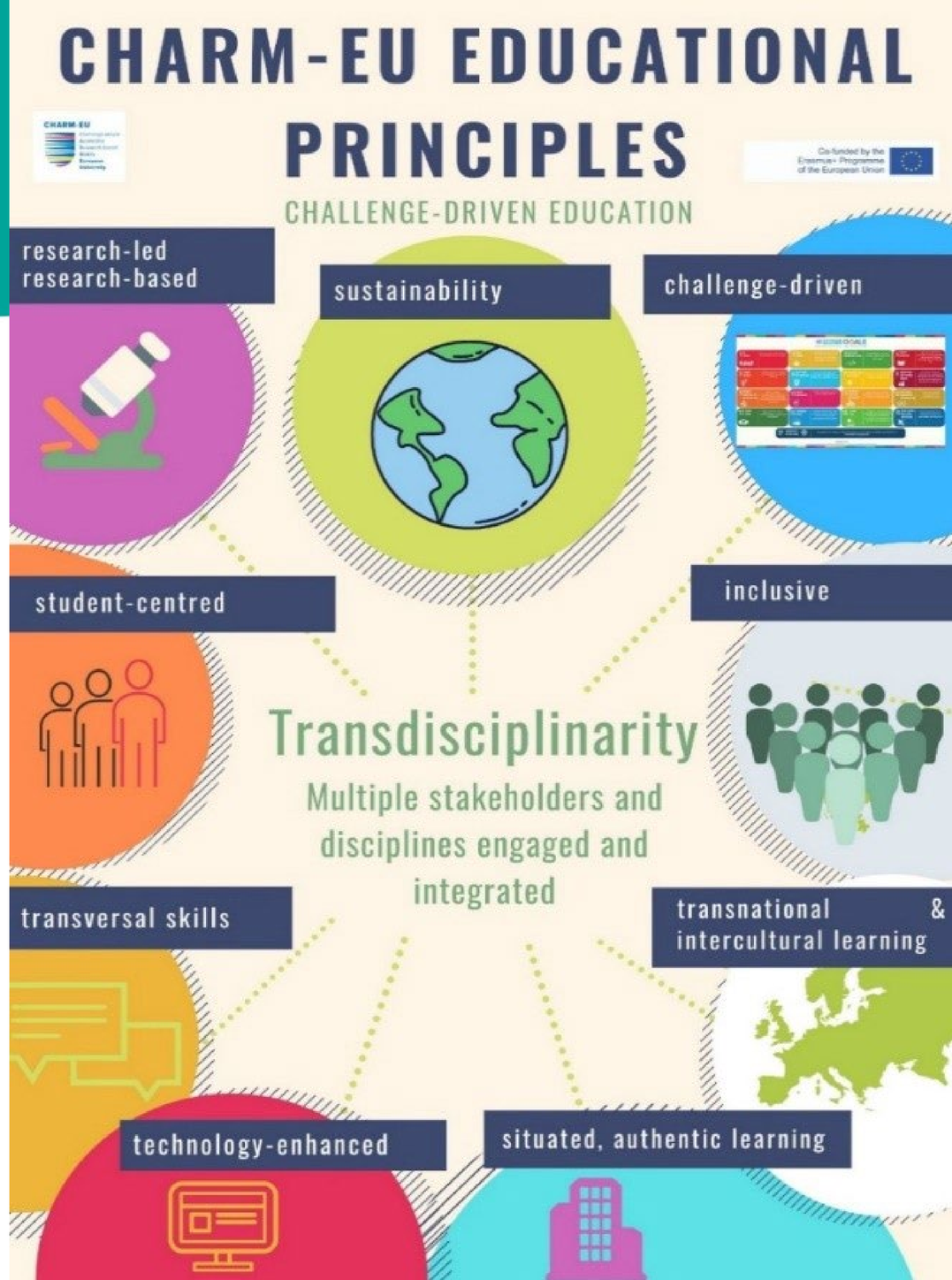
Universitat de Barcelona · Trinity College Dublin, Coláiste na Tríonóide, Baile Átha Cliath, The University of Dublin · Utrecht University · Eötvös Loránd University Budapest · Université de Montpellier

CHARM European University

- Aims: to build a new and innovative university model and didactic concept, including all aspects of operation
- Pilot it with one full master's programme
- New partners:
  - University of Würzburg;
  - Åbo Akademi University;
  - Hochschule Ruhr West



European joint degree master 90 EC
September 2021 (70 students)
September 2022 (100 students)

CHARM-EU

CHallenge-driven Accessible Research-based Mobile European University

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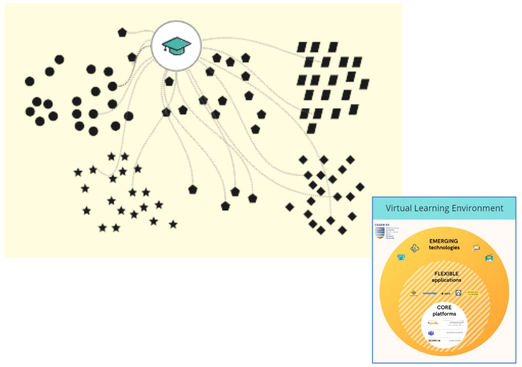
- Virtual campus (physical mobility)
- Virtual Learning Environment
- Hybrid classroom
- Technology enhanced
- Programmatic assessment

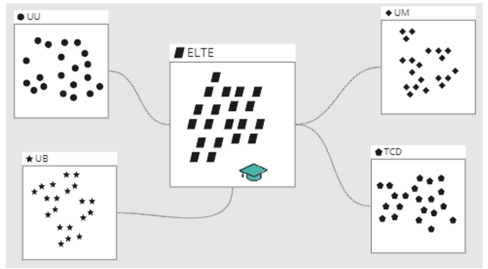
Virtual Campus and Teaching modalities
Online – In class

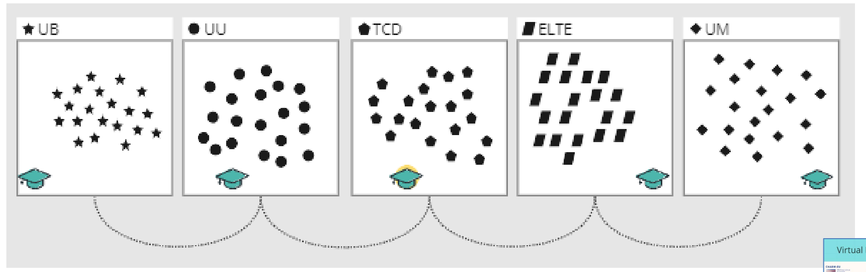
ONLINE

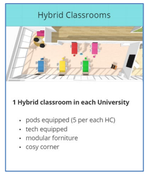


- Just the VLE in use

IN CLASS – 5 locations (synchronically and asynchronically)







- VLE and Hybrid Classroom in use
- 5 uni’s – 5 HC
- Students divided over 5 locations
- Virtual mobility
- Physical short term mobilities optional
- Physical long term mobility is mandatory

Building the pilot version of the VLE

OUR OBJECTIVE

- Explore what the ideal VLE for CHARM-EU is
- Realize a pilot version of the VLE

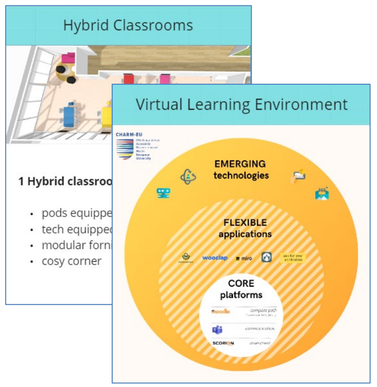
BUILDING ON

- Pedagogical requirements
- Educational principles

Challenge-based
Research-led Research-based
Sustainability
Technology Enhanced
Student-Centred
Situated Learning
Transversal Skills
Trans-disciplinarity
Transnational & Intercultural
Inclusivity

ALIGNING WITH

- Emerging technologies
- Hybrid Classrooms (added later)



VLE - Core requirements

Sustainable

Re-use what we already have

Secure and GDPR compliant

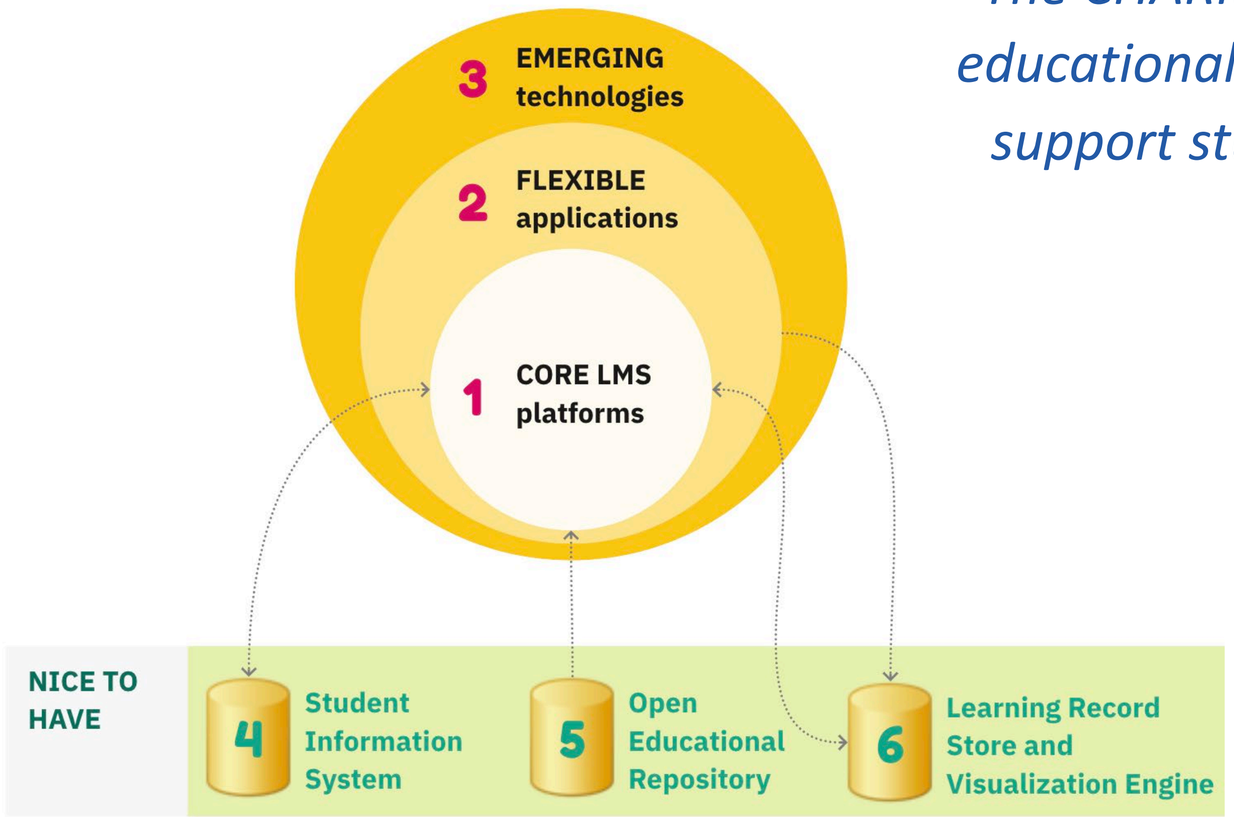
In line with EU policies

Open source

Where possible

User-friendly and digitally accessible

Summary of the VLE



*"The CHARM-EU VLE is a **digital ecosystem** consisting of various educational **tools and services** that work seamlessly together to support students and lecturers in their educational activities"*

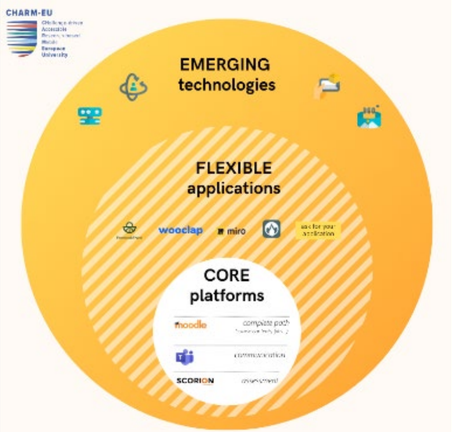
1. **A core LMS platform** offering functionality every teacher will need

2. **A toolbox of applications** that is effective and can optionally be used.

3. **Emerging technologies** that can be used stand-alone.

Overview of the teaching and learning environment

Virtual Learning Environment



Hybrid Classrooms

1 Hybrid classroom in each University

- pods equipped (5 per each HC)
- tech equipped
- modular forniture
- cosy corner

VLE + Emerging technologies + Hybrid Classrooms

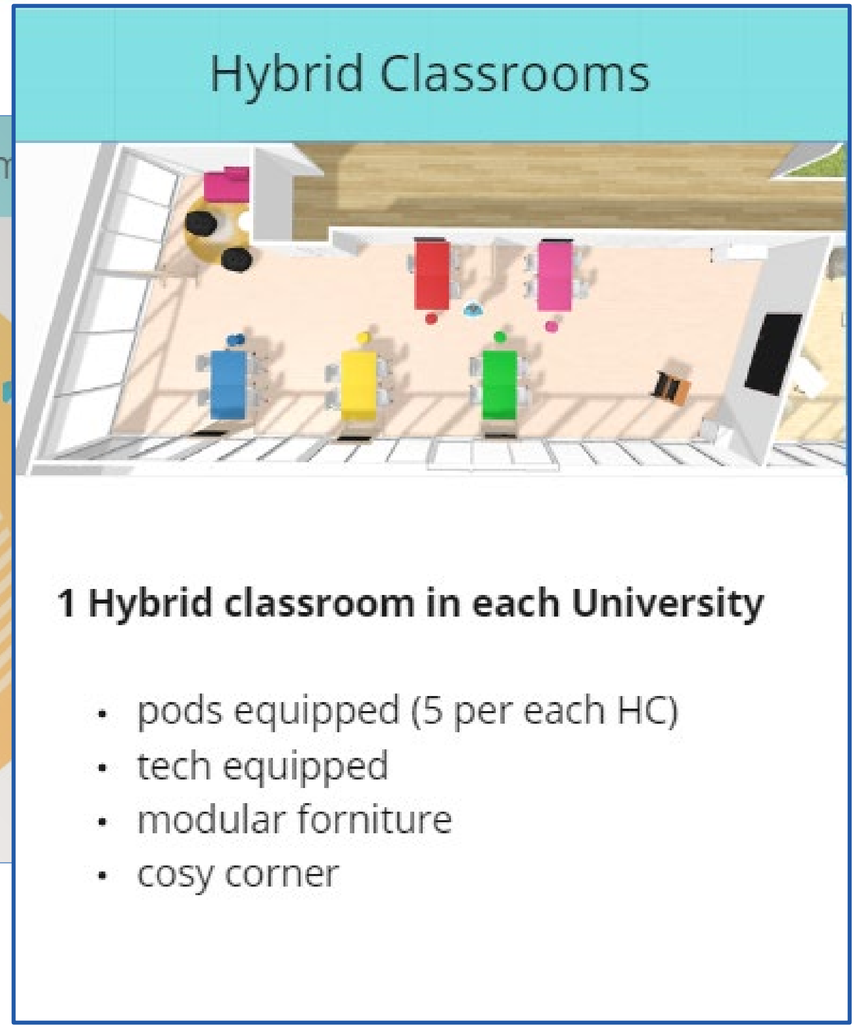
Earpods (with microphone)

Personal computer

- With intgrated camera
- HDMI or USB-C output

Student and teachers personal equipment.

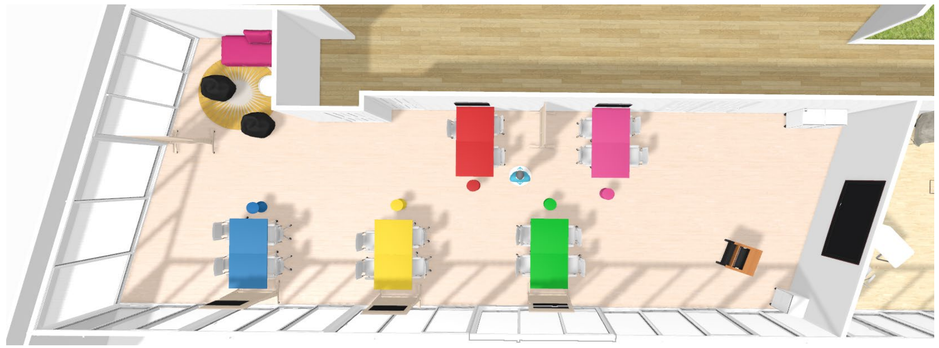
Overview of the teaching & learning environment



In CHARM-EU, each partner university has a dedicated classroom to welcome CHARM-EU students and to run activities.

5 hybrid classrooms (1 in each university), each class accommodates up to 25 students.

What will you find in your HC?

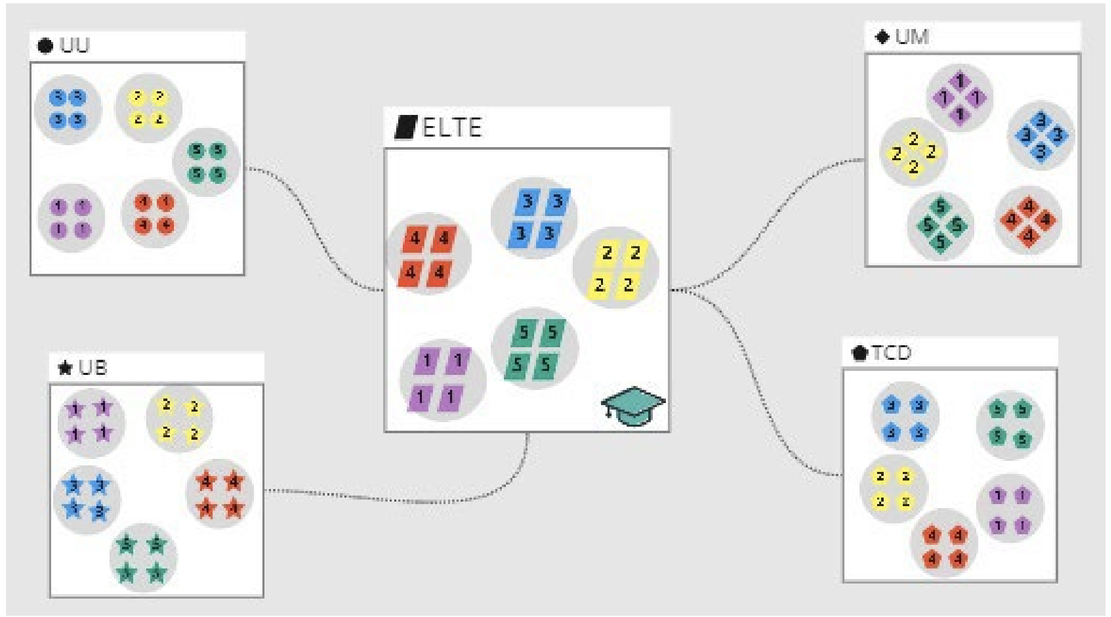


TECH EQUIPMENT

- For plenary, groupwork and specific activities.
- Equal offer on the 5 campuses

PODS, why pods?

- Facilitate participation during plenary session (large screens)
- Students group work
- Castors: flexibility of classroom setting



Emerging technology selection

Technology enhanced learning
- Virtual reality
- Augmented reality
- Mixed reality

Showcases as:
- *Sustainability game,*
- *(gamified) fieldtrips,*
- *virtual lab for sustainable watermanagement,*
- *presentation skills training.*

Technology and assessment
- Assessment and mixed reality
- Skilltrack to reflect upon transversal skills

Technology and inclusion
- Image recognition
- Speech recognition

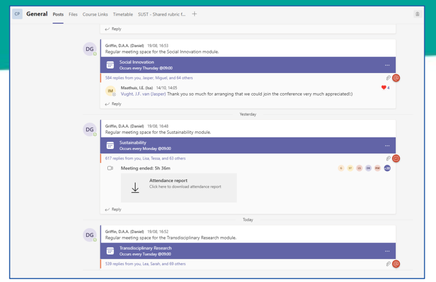
Future vision
- Remote labs
- Virtual teaching assistant
- Automatic and incremental grading
- Student centered course planner
- Etc.

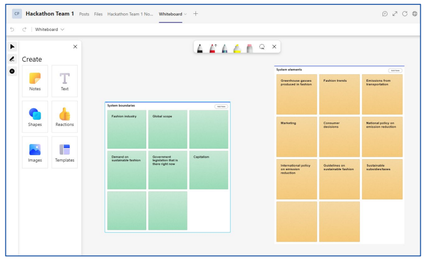
USE CASES OF THE ENVIRONMENT
In class activities

PHASE 1

The first semester of the pilot master (sept 2021 – feb 2022)

- 3 modules
- Running in parallel
- In class activities: 3 days per week (one per each module)
- Online/selfstudy: 2 days per week





CORE VLE

MS Teams

General Brainstorming Plenary

Chat/Channels/workgroups

Moodle

Repository / home study

Scorion

Evaluation, assessment, peer feedbacks

FLEXIBLE APPS

OneNote

Workgroups

Wooclap

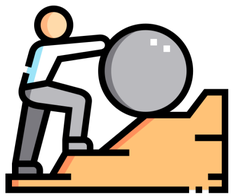
In-class activities

EMERGING TECHNOLOGIES

Utrecht 2040 game

Out of the building

Lesson learned so far



Huge effort for the teaching staff

Teachers have very little room to think about technology enhanced learning. Probably due to:

- Building new modules from scratch with a new assessment model and pedagogical guidelines (probably not an issue next edition)
- Pandemic

To check our actual process: should we afford more time/roles on tech?

You need to get use to it

The teaching and learning environment (VLE + Hybrid classroom + Emerging tech) is a **new concept**.
We do need to insist on showing the potentiality of the environment and tease the teaching staff on trying new tech.

To plan more teaching induction: should we focus more on professional development?

Lesson learned so far

To build from scratch is time consuming!

Underestimation of time/costs needed.

We re-used UU platforms to save time (and money) but a brand new VLE will be optimal. To be aware in the future, Rome wasn't built in a day ☺

To check resources we want to dedicate to the VLE.

Support and …support again!

The role of teaching assistants in supporting with VLE is crucial during everyday activity

To define the current support as a task

Different identities: too many logins

Teachers have multiple accounts, it is difficult to manage (and not user friendly…).

To work asap on a unique identity / access

How might the future VLE of CHARM-EU develop?

1. **Go for open-source**
   Moodle as learning management system / BigBlueButton for virtual classrooms / Next Cloud for collaboration / etc.

   Use public money to contribute to openly available software
   No complicated license deals
   Full control of data and no dependencies on suppliers

2. **More connections/integration**
   within and with the 2 layers of the VLE

   Core-VLE with best of breed apps (Inter-operability)

3. **Identity and Access Management** (IAM)
   tool used for controlling and unify user accesses

   Student-id / EDU-ID / EDU-Badges / Microcredentials

4. **More Emergent Technology**
   VR experiences, gaming, AI, more

   EDU-Bot / Learning analytics

5. **Central/Connected Student Information System** (SIS)

   EduXchange

Main challenges and questions for the future

- Who and how will we host, administrate and develop the VLE?
- Do we have the right expertise to do this? We're all universities, not software providers.
- When we'll be able to offer a unique CHARM student identity?
- How to involve more the teaching staff on the geek side of the moon?

CHARM-EU / Toolkit

All the tools and results are accesible in CHARM-EU toolkit. We publish everything as soon as we test them.

https://www.charm-eu.eu/toolkit

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Accessible
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Mobile
European
University

MOLTES GRÀCIES
MUCHAS GRACIAS
FÒRÇA GRÀCIAS
MANY THANKS
GO RAIBH MAITH AGAT
HEEL ERG BEDANKT
MERCI BEAUCOUP
NAGYON KÖSZÖNÖM
DANKE SCHÖN!

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