

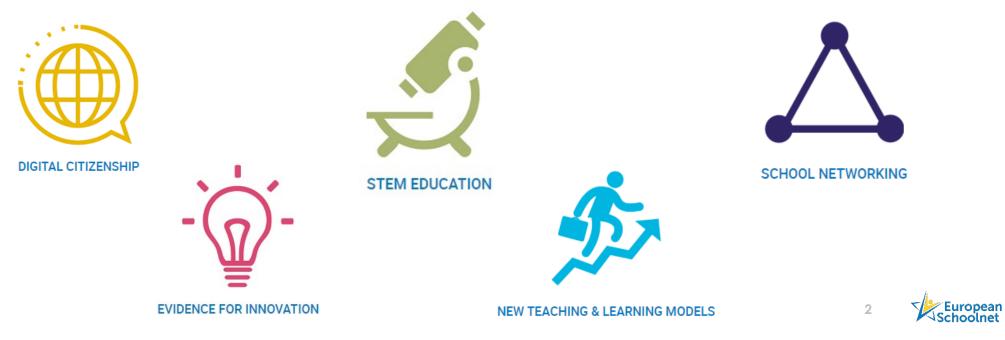
## **European Schoolnet**

Future Classroom Lab



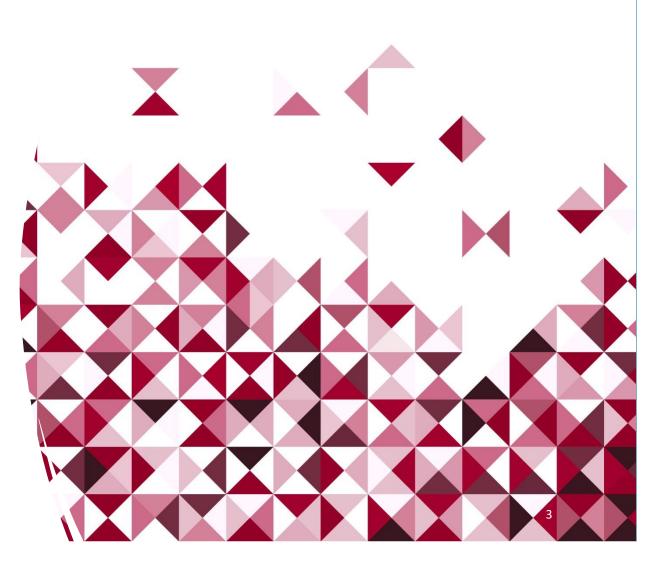
#### Who we are

- Network of 34 European Ministries of Education
- Non-profit international organisation
- Aim: bring innovation in teaching and learning to our key stakeholders: Ministries of Education, schools, teachers, researchers and industry partners.
- Focus Areas:



# What have we planned?

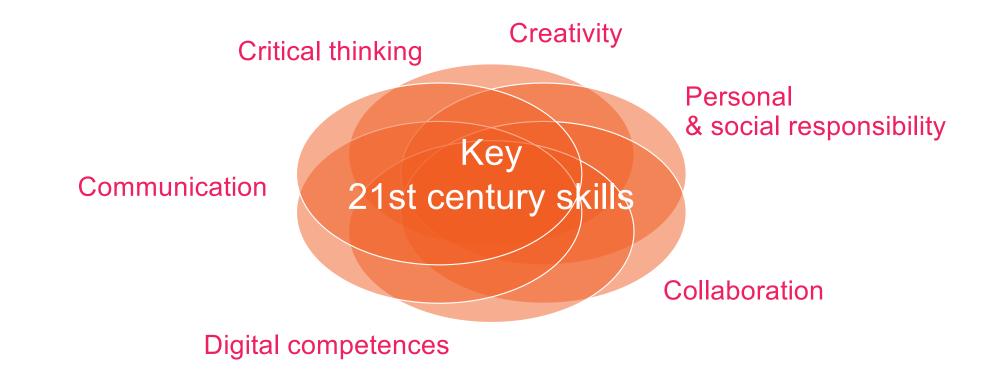
- Introduction to the FCL
- Explore the different learning zones
- Design a learning activity that promotes the use of the learning zones
- Wrap-up, reflection







# 21<sup>st</sup> Century Learning







# The FCL Learning Zones



Future

Lab

Classroom





#### Create

- Students **plan**, **design**, **and produce** their own work.
- Learning by creating: students exercise their imagination, innovate, develop their soft skills, and take ownership over their learning.
- Useful equipment: high definition video camera, video editing software, microphones, podcast, animation streaming software, 3D printers, robots, LEGO, etc.



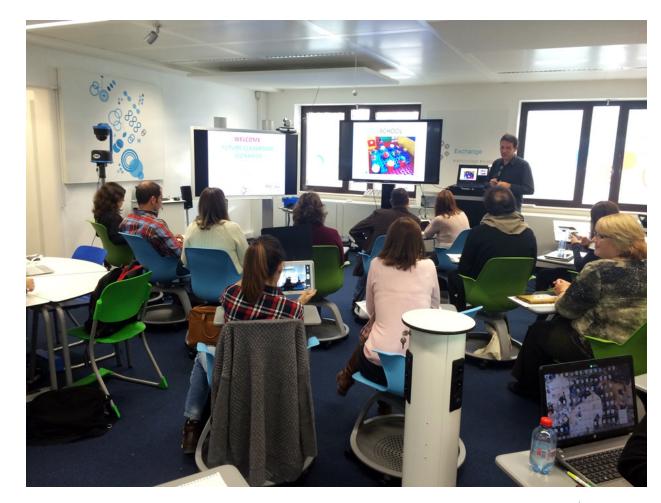




### Interact

- Learning involves both teachers' and students' active engagement.
- Rearrange physical space and break the traditional classroom paradigm of rows.
- Interact with the learning content (interactive whiteboards).
- Useful equipment: laptop, netbook, tablet, smartphones, classroom management system, learner response system and devices.







8

#### Present

- Students **present**, **deliver** and **obtain feedback** on their work.
- Sharing the results of work is supported by a dedicated area for interactive presentations that, through its design and layout, encourages interaction and feedback.
- Keywords: share, communicate inclusively, interact.
- Useful equipment: HD projector/screen, online publication tools, flexible furniture







9

## Investigate

- Students are encouraged to **discover learning themselves** through projects.
- Flexible furniture supports this concept and the physical zone can be reconfigured quickly to enable work in groups, pairs or individually.
- Students learn how to find quality resources, manage information, solve a challenge, research, explore, analyse understand things from multiple perspectives.
- Useful equipment: robots, microscopes, online laboratories, 3D printers.



Future Classroom Lab





### Exchange

- Students collaborate with their peers.
- ICT can help to create a richer way of communication and collaboration.
- Collaboration can be extended to after-school tasks with the aid of an online learning environment.
- Learning by playing: digital games and simulations for more engaging learning.
- Useful equipment: collaborative table with projector, mind-mapping software, brainstorming board/wall.









### Develop

- Informal learning and self-reflection.
- Students can work independently on homework, concentrate on their own interests.
- More relaxed-non-monitored space, use of personal devices.
- Support of motivation and self-expression.
- Useful equipment: informal furniture, study corners, portable devices, books, e-books, games (analogue and digital).







## Network of Innovative Learning Labs and Spaces

Around 210 labs around Europe and beyond

We have identified roughly three types of learning labs:

- Professional' learning labs
- School-based learning labs
- Industry-based learning labs

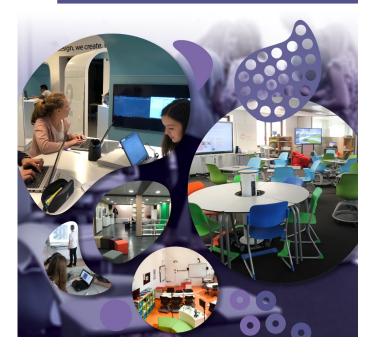






#### BUILDING LEARNING LABS AND INNOVATIVE LEARNING SPACES

Practical guidelines for school leaders and teachers





# Network of Innovative Learning Labs and Spaces







# FCL Industry Partners 2023





# Future Classroom Lab, Denmark

- □ The lab is part of the University College Copenhagen.
- □ Used by **10000 students** and a wide range of local **K12 schools**.
- Focus on experimenting with new forms of teaching, learning spaces and approaches to technology.







# FCL Tampere, Finland



Future



- Used by **high school students**.
- Focus on combining F2F and online teaching methods into hybrid teaching practices.
- Design of new interdisciplinary modules combined with phenomenon-based learning to increase pupils' transversal competence.
- Entirely new ecosystem that supports the pedagogical use of learning zones: media classroom, school library and a study hall, arts and crafts classrooms, a study lobby and a drama classroom.



#### Escola Secundária Campos Melo, Portugal

#### □ Focus on **project-based learning**.

- Development of autonomy and self-confidence by multidisciplinary learning, programming, robotics learning and the use of multiple technologies.
- Development of projects with other schools (Erasmus+, eTwinning) within the field of STEAM.
- Student trainings: Introduction to Programming, MBOT Robots Programming, Programming of Mobile Applications, 3D design and printing.







## Future Classroom Lab BESST, Slovakia

#### Used by year 5 pupils (10-11 year old).

- □ Aim: lead pupils to discover, experiment and be motivated to construct their own knowledge.
- Focus on individual learning zones but also active learning.
- ❑ All pupils of the FCL have an iPad for educational purposes at school (and at home) on which they have many applications that they can use to learn, revise, or create their own content.







#### Future Classroom Laboratory (Texas, USA)





Two DHH students work together to program the Matatalab robot to draw pictures

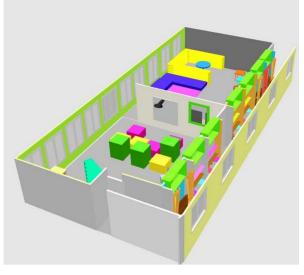
- □ The Texas Woman's University Future Classroom Laboratory (TWUFCL) is in the university's College of Professional Education,
- Open to all individuals in **teacher training**,
- Develop activities for pre-K-12 general education and special education classrooms,
- □ Funded by Texas Woman's University.
- Latest activities: Camp Code for Girls, 3D printing workshops in K-12 classroom, Camp Minecraft.



#### Forticl@sse, France

- Pedagogical laboratory for the elementary classroom of the future.
- Focus on acquiring the 21<sup>st</sup> skills (collaboration, communication, creativity, critical thinking)
- **8 zones** instead of six (relax, isolate).
- Offers several types of seating so that students could choose the one that allows them to be best for a given job.





21



# Introduction to the tool

# Novigado Scenario Tool

NOVIGADO

fcl.eun.org/scenario-tool/support

Building a Scenario

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# Sharing and Managing Scenarios

# Novigado Scenario Tool

# 3. SHARING & MANAGING SCENARIOS

NOVIGADO

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