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

Module 1
Education 4.0
Example of Future School

Erasmus+

European Association
EAofEC
Erasmus Coordinators

EDUCATION 3.0

- Student-Centered approach
- The teacher is transformed into a Coordinator/facilitator, advisor, learner and practice guide
- The student is researching more
- VR to support Flip classroom
- More dialogue, technology is everywhere, the student is self-learning and everywhere.
- The classical style classroom no longer exists
- Lesson Plans are converted into …

… *Learning Plans*

European Association
EAofEC
Erasmus Coordinators

EDUCATION 4.0

- Co-creation and innovation in the centre
- Whenever and Wherever
  - Hybrid Learning Environments
  - Interactive practical exercise – F2F or Distance
- Learning is done outside schools, while in school premises students develop competences and skills
- Learning Plans are now called Learning & Creativity Plans
- The technology
  - Its free or/and easily accessible,
  - Increased use of virtual reality, artificial intelligence ,etc
  - Continuous evolution and innovation and therefore a need for development of
  - Competences and Skills so people become Adaptable to Change

EDUCATION 4.0

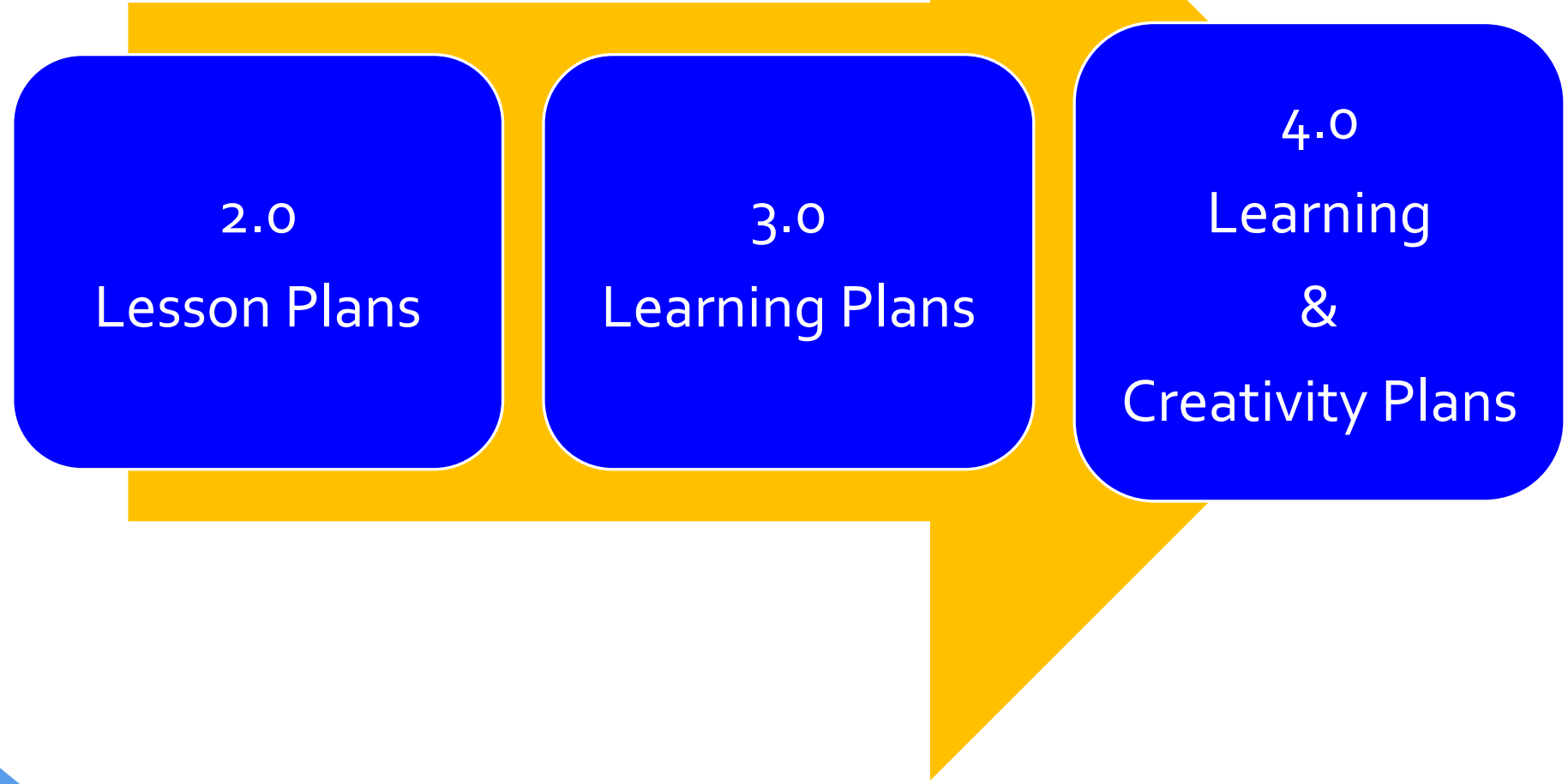
Four core components are integrated to shape the concept of Education 4.0:

(i) Competencies development through IBL, PBL, CBL…internships, blended learning. Micro-credentials the competence and skill factor.

(ii) Learning Methods (Digital Learning via BYOD)

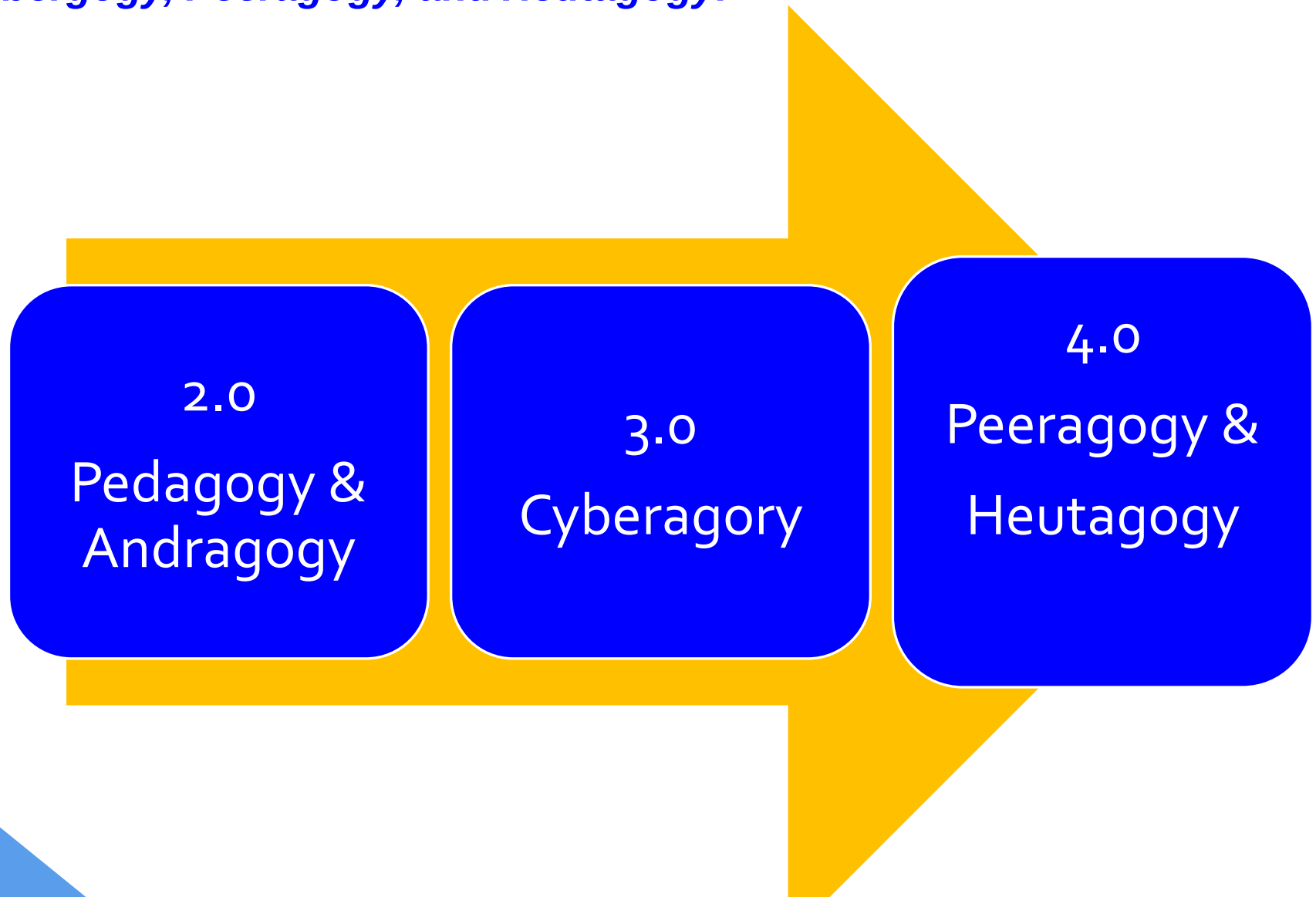
(iii) Information and Communication Technologies (VR, AI, etc)

(iv) Infrastructures, Learning Spaces, Learning Communities


2.0
Lesson Plans
3.0
Learning Plans
4.0
Learning
&
Creativity Plans

European Association
Erasmus Coordinators

The evolution of Pedagogy and Andragogy into *Cybergogy*, *Peeragogy*, and *Heutagogy!*



Architectural Designs and Animations

Infrastructures of the future

A learning space of the future

A learning space of the future

Specs Basement

BASEMENT

- STEAME THEATRE

MAIN LABS

- B1.1 Main Biology Lab
- B1.2 Main Chemistry Lab
- B2.1 Main Physics Lab
- B2.2 Main Mathematics Lab
- B3.1 Main Construction and 3D printers Lab
- B3.2 Main Environmental Lab
- B4.1 Main Robotics Lab
- B4.2 Main Computing and Software Lab
- B5.1 Main Prototype Develpment Lab
- B5.2 Main VR Centre Lab
- B6.1 Main Skills and Talent Development Lab
- B6.2 Main STEAME Communication Lab

- Additional VR rooms
- Learning stations
- Entry into amphitheatres

Specs
Ground Floor

Satellite Labs

- G3.1 Biology-Chemistry S-Lab
- G4.1 Physics-Mathematics S-Lab
- G5.1 Industry Liaison Office
- G5.2 Virtual Business Centre
- G1.1 Robotics – Computing –Multimedia S-Lab
- G1.2 Sound-proof student meeting room
- G2.2 Construction- Environmental S-Lab
- G2.1 Sound-proof student meeting room
- G3.2 Sound-proof student meeting room
- G4.2 STEAME Museum for learning

- Individual Learning Stations as private u-shape booths
- Open space movable furniture for small group work by students
- Courtyard
- Reception area
- Entry into amphitheatres

Specs
First floor

THE VERY QUIET FLOOR – THE IDEAS FLOOR

- Open space flexible movable furniture for student groups
- Co-creation Train moving …with group siting stations
- Learning Centres/Rooms
- Additional Learning Stations
- Entry into amphitheatres
- Slow Moving STEAME train
- Administration offices

Specs Roof

- Recreation spaces
- Cafeteria
- Garden and Lake
- Photovoltaics
- Football court
- Athletic field
- Open Amphitheatre

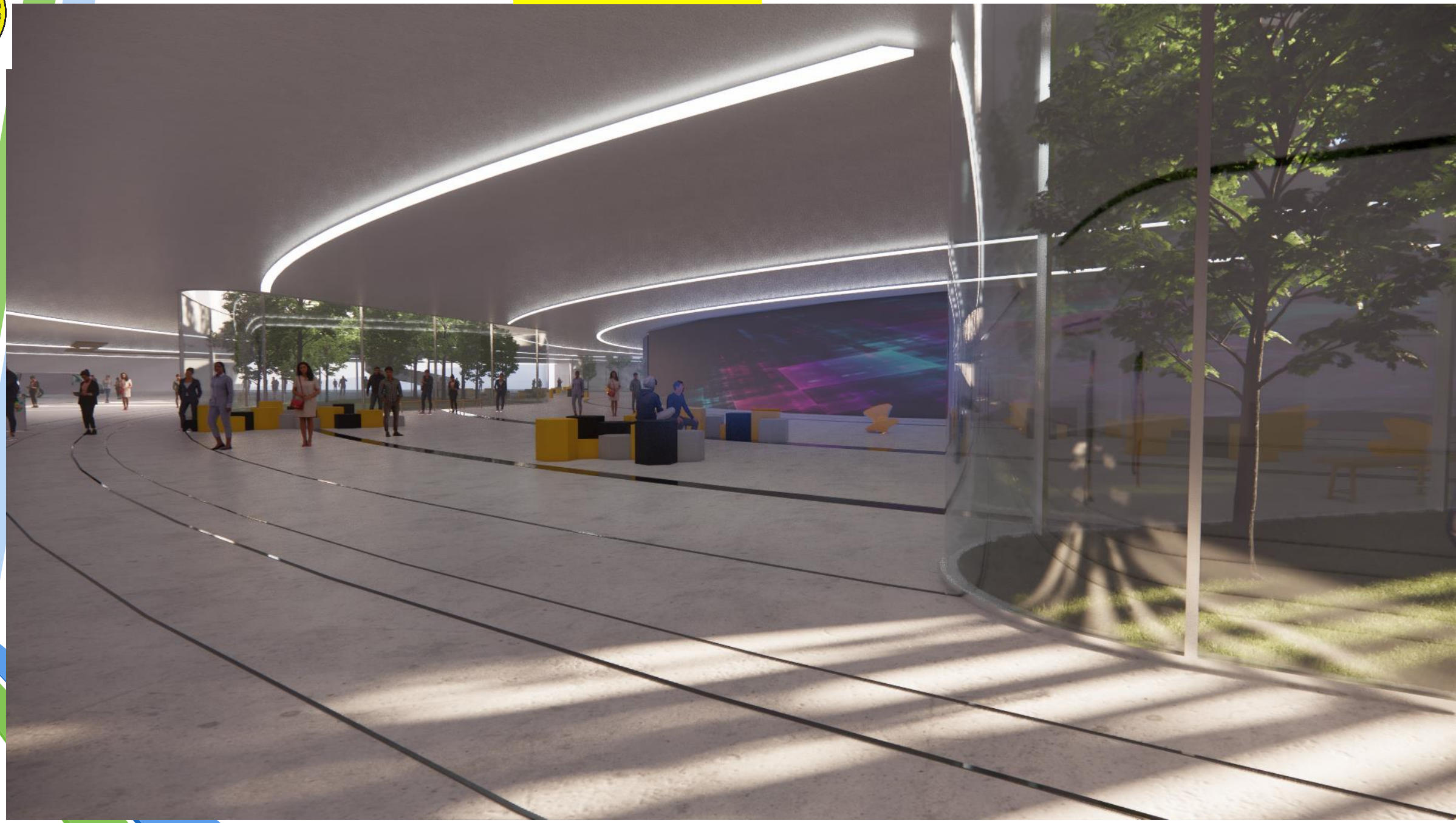
BASEMENT

MULTI-SPORTS FIELDS OF THE FUTURE

VIDEO

BASEMENT LABS

BASEMENT VR



GROUND FLOOR LEARNING STATIONS - HEUTAGOGY

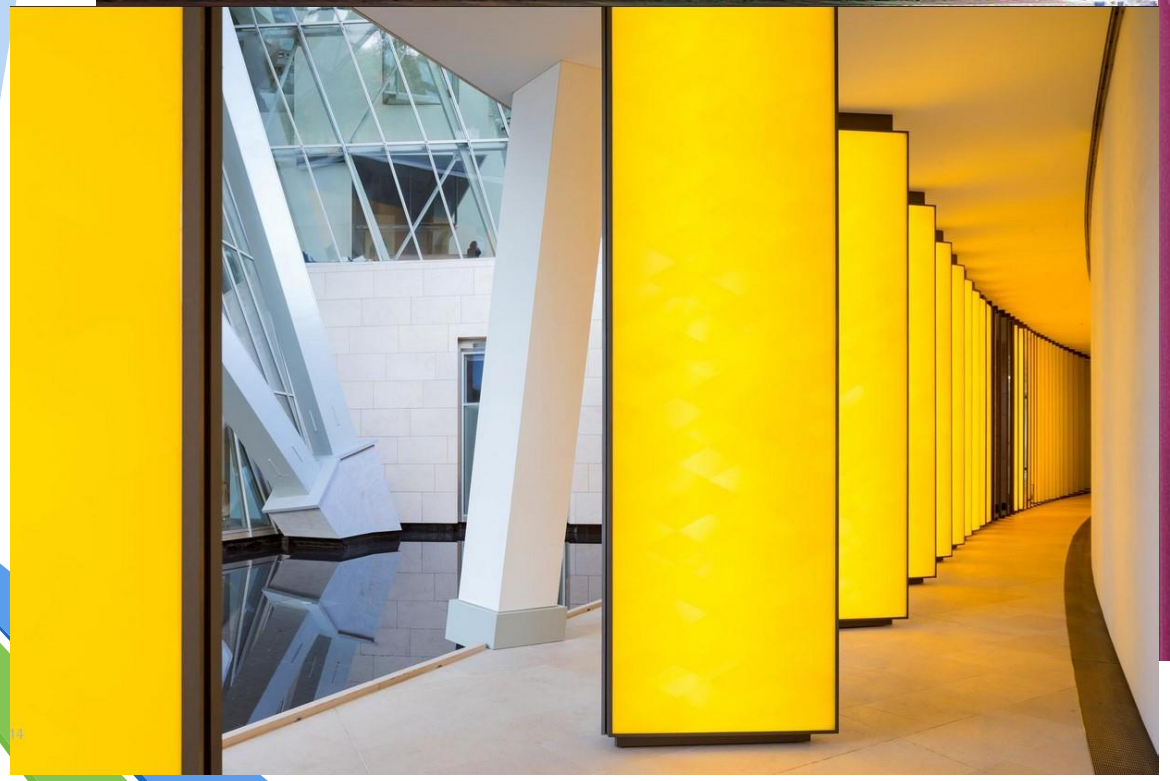
FIRST FLOOR LEARNING ROOMS - PEERAGOGY

FIRST FLOOR TRAIN

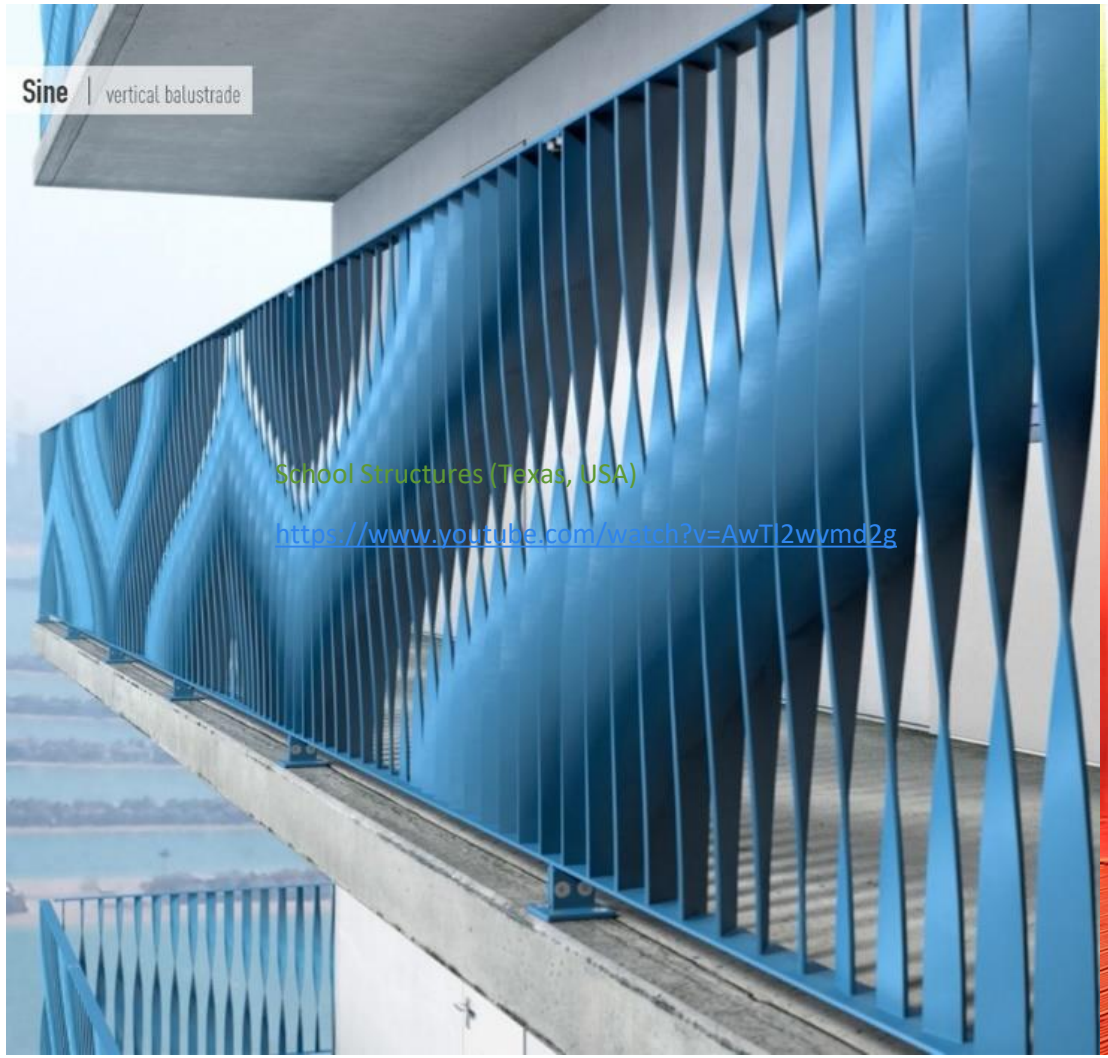
FITST FLOOR LEARNING ROOMS

FITST FLOOR VIEW

Colour of Learning SPACE could change every day

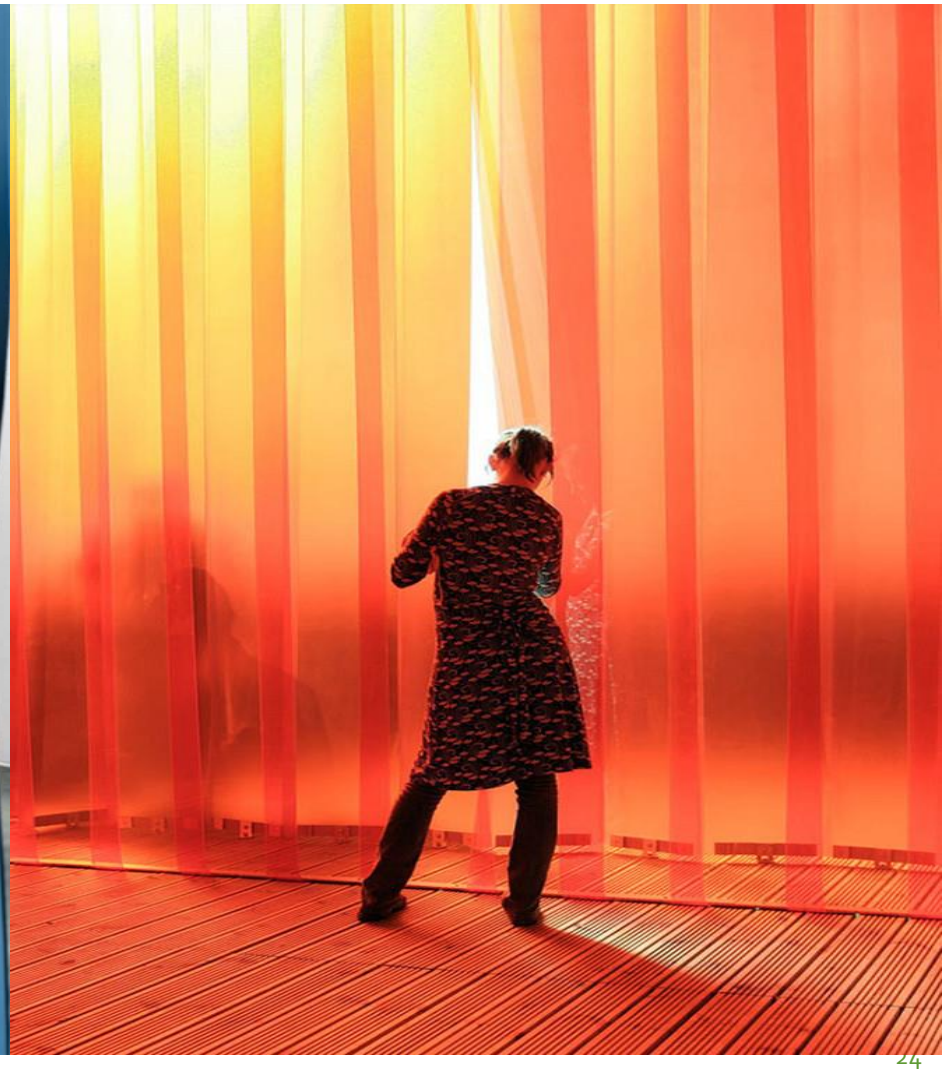


Colour of SPACE changes every day



School Structures (Texas, USA)

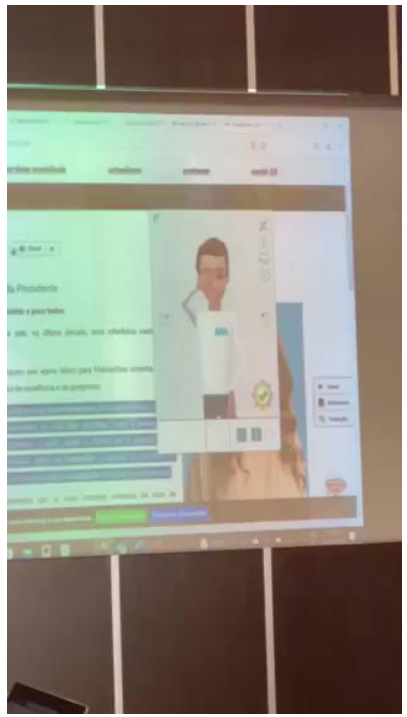
https://www.youtube.com/watch?v=AwT12wvmd2g



New Elements as a course in all Programmes of study

- International Sign Language (IS) to be learned by all

InSign- Advancing inclusive education through International Sign



LEANING SPACES of the future

- **Architectural Designs in short animation**

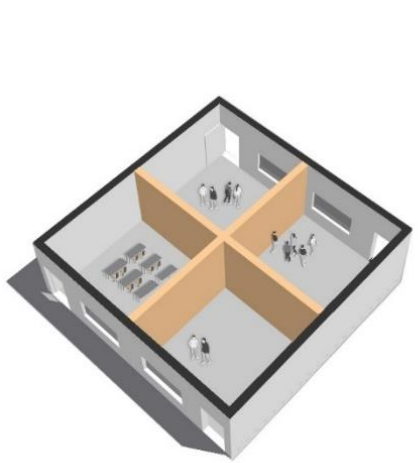
STRATEGIC ACTIONS

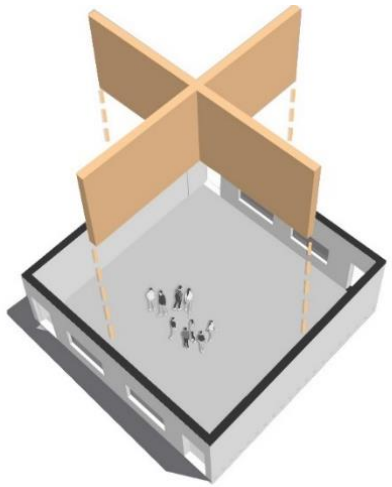
How can we change current learning structures in school into project based learning structures and spaces?

3 Steps for change from Education 2.0 to Education 4.0

- Step 1. Secure digital learning through learning videos created by teachers.
- Step 2. Train and support teachers how to cooperate between different disciplines and how to develop(co-create) PB Learning & Creativity plans. Train and support teachers how to cooperate with other academics and industry and how to do PB related activities in hybrid environments. .
- Step 3. Create open spaces in current learning Infrastructures or build the new learning premises with more open spaces for project based cooperative work between students.

RESOURCES:





SCHOOL LABEL

Co-funded by the European Union

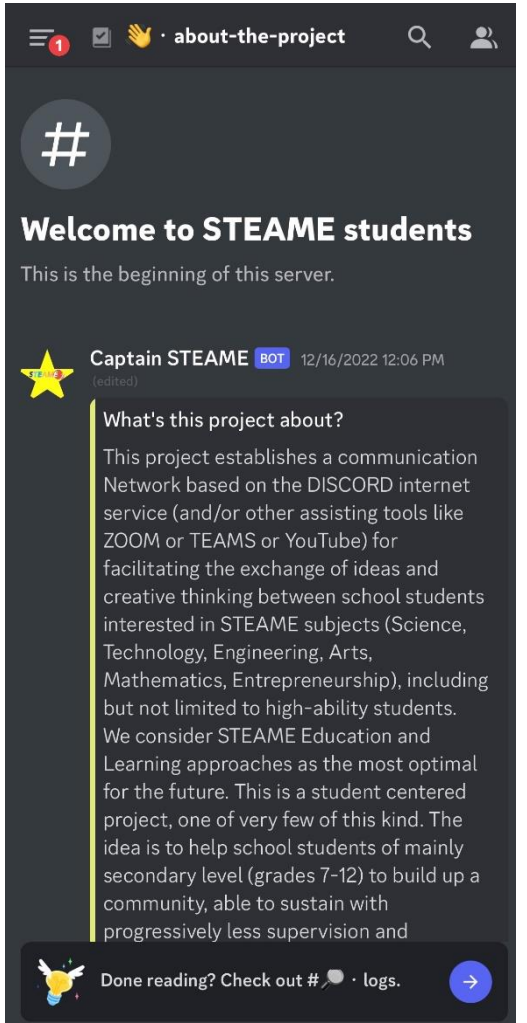
THE FIRST ever app from Students for Students!

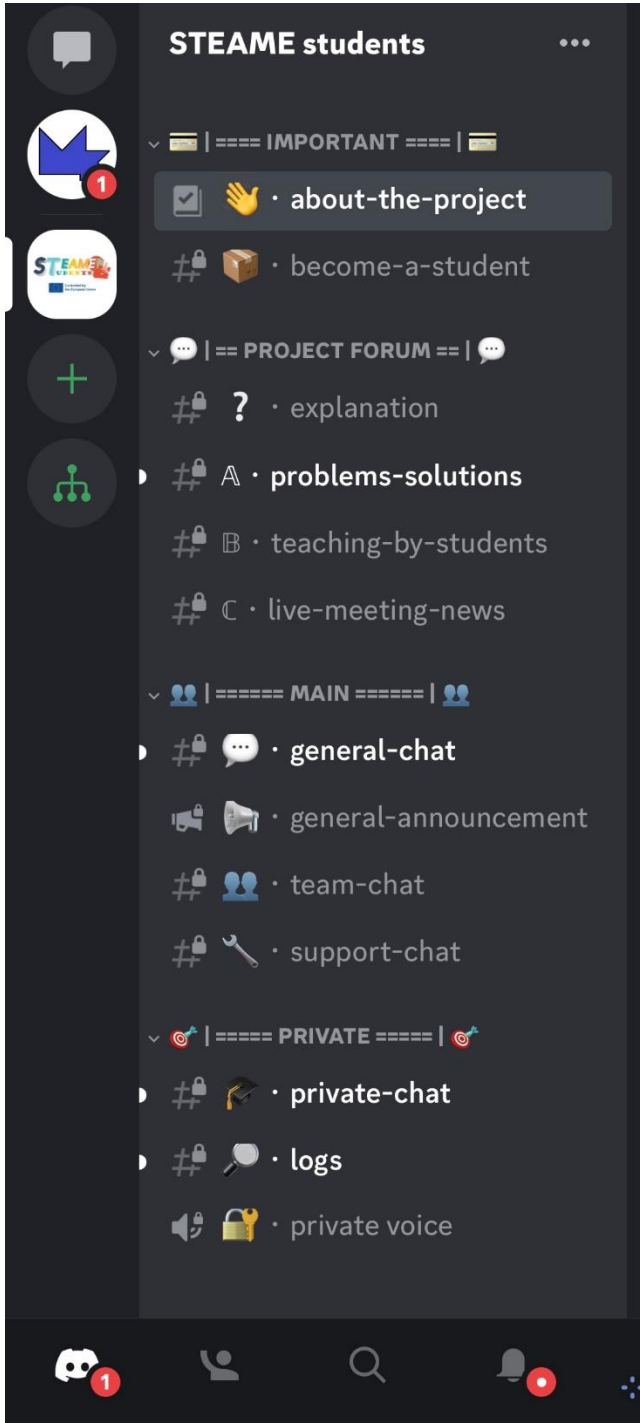
WEB-LINK

LINK to GF

https://forms.gle/WF9qb3JPdufxn8Rk9

Use the QR code for direct access to the STEAME Students platform. Crawl through an easy registration and explore a new universe in the familiar galaxy of STEAME DISCORD app.





Students are ready,

……we are not ready for them!

STEAME TEACHER FACILITATORS ACADEMY

The main innovations to be delivered by this project are:

1. STEAME Teacher Facilitators Competence Framework for student and serving teachers

2. STEAME Teacher Facilitators Learning Modules/Workshops

3. International Sharing Observatory for STEAME Learning Facilitators

4. Development of the STEAME Facilitators Community of Practice/Mentoring and Certification Programme

5. Policy Recommendations – European Federation of STEAME Teacher Facilitators Academies