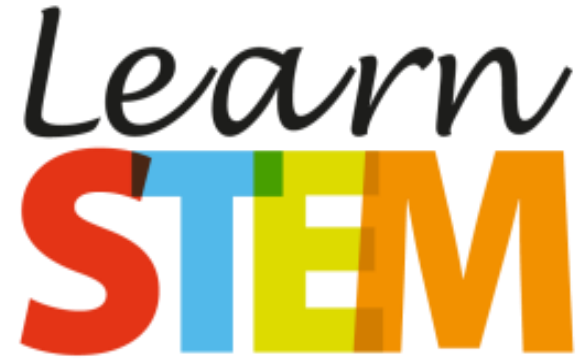


Innovative STEM learning in schools

# Online Conference

29th April 2020



# Augmented Reality for STE(A)M



*finance & banking*

Associazione  
per lo sviluppo organizzativo  
e delle risorse umane

# AUGMENTED REALITY (AR) AND GAMIFICATION

- AR is a technology to add different information to the real world: sounds, images and text
- Gamification is the application of game-design elements and game principles in education

# AR for STE(A)M teaching

Potential impacts on Education and Training:

- To make education more productive, engaging and interactive
- To adapt content to different kind of users
- To allow for a collaborative and social learning

# AR for STE(A)M teaching

## Benefits for STE(A)M:

- help learners to observe events which cannot easily be observed
- increase learners' motivation and enhance their investigative skills
- enhances the interest in STE(A)M subject and the learners' engagement

# EU Project AR4STE(A)M

Use gamification strategies  
and augmented reality for  
innovative STE(A)M learning

(Dec. 2019 - May. 2022)



# Project AR4STE(A)M

## Partnership:

### Coordinator:

- DE - DIPF - German Institute on Educational Research and Information

### Partners:

- IT - EFFEBI Association
- IT - ITT Marco Polo

- NL - “Niekée / Agora” Secondary school
- TK - Samandira Vocational and Technical High School
- CY - Hearthands Solutions
- BE - AEDE - Association Européenne des Enseignants

# Aims to:

- a) Integrate immersive technologies and game-based learning in upper secondary schools' educational programs
- b) Foster school teachers skills to teach STE(A)M effectively
- c) Help teachers to provide game-based learning activities in science education
- d) facilitate an inquiry-oriented teaching

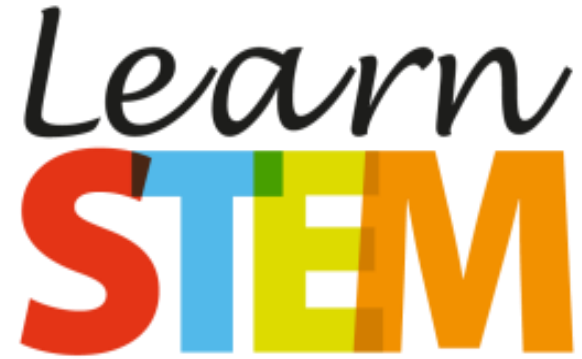


# Aims to:

- d) Use innovative digital technologies in order to:
  - Facilitate the conceptual understanding
  - Improve observation of real life
  - Enhance autonomous thinking
  - Students as actors of the learning process

# Expected Results

- ✓ Compendium of gamification strategies based on Augmented Reality for STE(A)M learning
- ✓ Online training programme for school teachers on the use of AR and gamification to teach STE(A)M
- ✓ Innovative STE(A)M laboratories, in which teachers and students will develop an educational AR game on a STE(A)M topic



Thank you for your attention!



*finance & banking*

Associazione  
per lo sviluppo organizzativo  
e delle risorse umane