



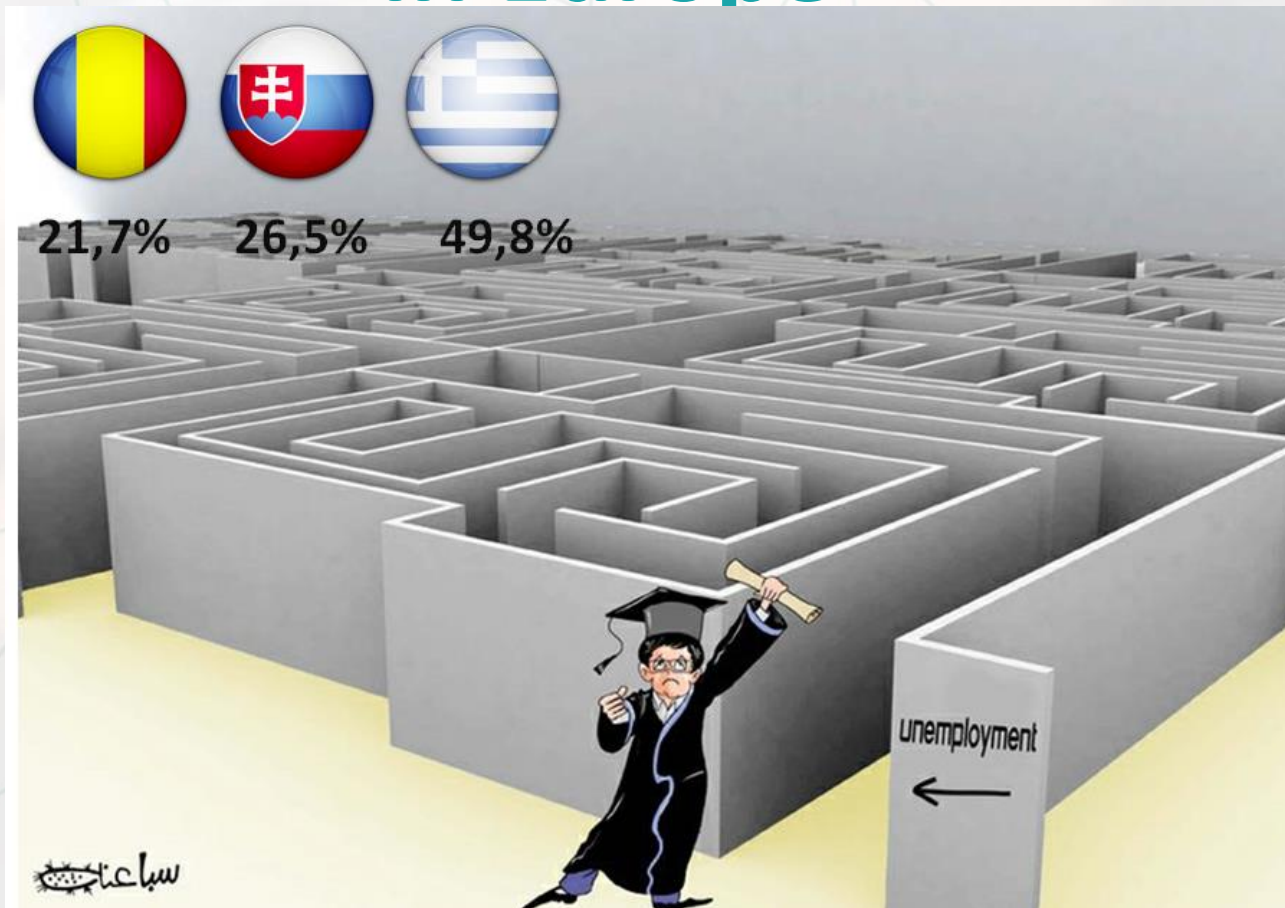
STEM Entrepreneurship training in Europe & VR4STEM courses

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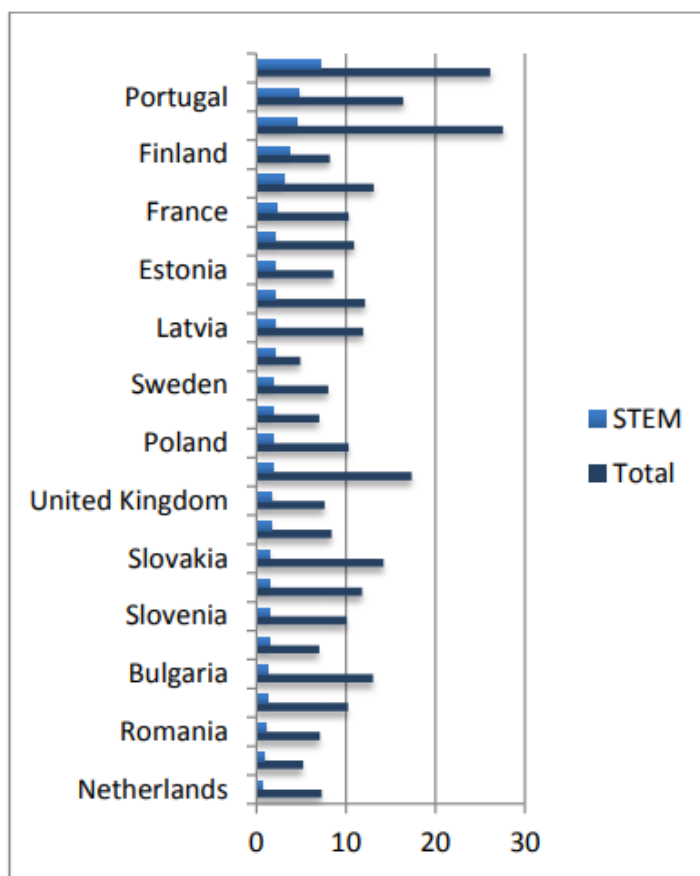
Starting points

- Report on practices and competences in STEM Entrepreneurship Training and 3D Virtual Worlds:
 1. Report on STEM Entrepreneurship Training in Europe
 2. State of the art in Virtual 3D World Training
 3. Report on Learning in Virtual Worlds

STEM Entrepreneurship training in Europe

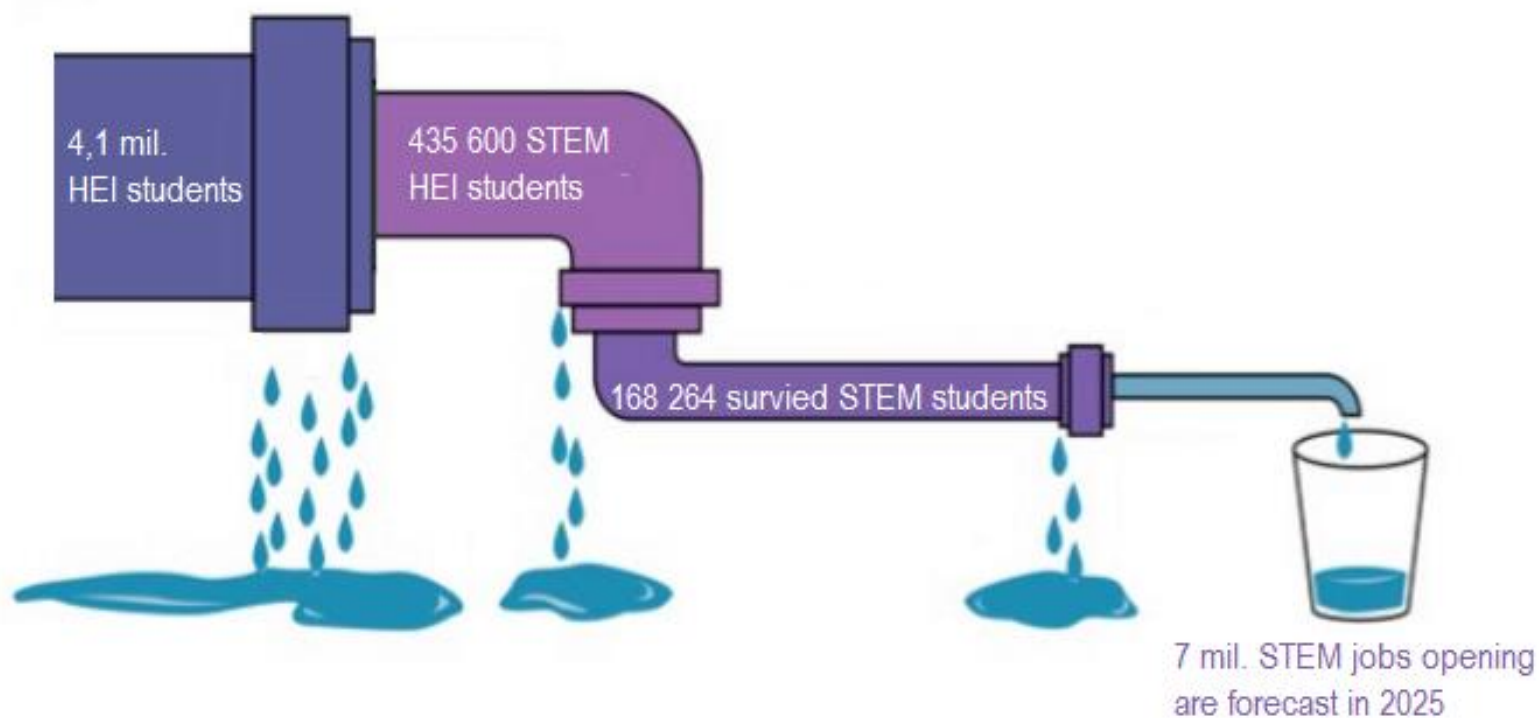


STEM unemployment rate and total unemployment rate



The graphic features a central white background with several key elements. On the left, a black silhouette of a human head is shown in profile, facing right. Inside the head, there is a yellow circular area containing various STEM-related icons: a microscope, a gear, a globe with an orbital path, and mathematical symbols including $a^2 + b^2 = c^2$ and $E = mc^2$. Below the head, the text "STEM Career Fair" is written in white on a black background. To the right of the head, a blue map of Europe is displayed, overlaid with twelve yellow stars, similar to the European Union flag. Above the map, the text "2%" is written in a large, blue, 3D-style font. Below the map, the text "20%" is written in a large, red, 3D-style font.

Demand for STEM graduates



VR4STEM mission

1. to respond to the need of attracting young people in STEM education, mainly by offering modern and attractive learning technologies, such as the virtual reality
2. to assist them gain entrepreneurship skills, build strong entrepreneurship background and spirit and meet the growing needs of STEM sector

VR4STEM Curriculum

- Innovation and start-ups
- ICT and Entrepreneurship
- Modern Technologies and Entrepreneurship
- Unmanned aerial vehicles
- World of Lasers
- Robots world
- Teamwork

VR4STEM Curriculum

- Innovation and start-ups
 - Start-up team
 - Funding possibilities
 - Business Model/Business Plan
 - Marketing Strategy
- ICT and Entrepreneurship
 - Gamification
 - Machine Learning and Data Mining
 - Mobile Programming
 - Von Neumann Architecture

VR4STEM Curriculum

- Modern Technologies and Entrepreneurship
 - 3D Printing
 - Lasers
- Unmanned aerial vehicles
- World of Lasers
- Robots world
- Teamwork

VR4STEM Learning Materials & Learning Scenarios

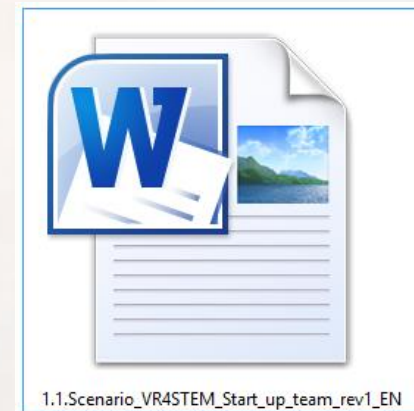
- **Learning scenario** = important part of the process of learning materials preparation
- The scenario covers:
 - general learning functionality of the 3D world,
 - specific interactive 3D activities associated with each learning concept

VR4STEM Learning Materials & Learning Scenarios

- Scenario:
 - describes all multimedia resources and 3D objects
 - covers different types of learning materials organized as a repository web page and exist apart from the 3D Virtual World

VR4STEM Learning Materials & Learning Scenarios

- Prepared learning resources:
 - presentations
 - notecards
 - non-player character (NPC)
 - 3D objects
 - multimedia and animations



VR4STEM Learning Materials & Learning Scenarios





**Any
questions
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