Awarded top grades for effort in chemistry class:

The Evonik Cyber Classroom.
3D / Virtual Reality Learning

- Available online worldwide via standard browsers
- Users can develop and improve content via the Internet/online platform
The idea:

It is time for new teaching and learning methods.

Evonik is bringing virtual reality (VR) to the classroom:

Digital and the ideal addition to lessons.

- Chemistry subjects in **multiple languages** (incl. German and English)
- Content **available worldwide** via Internet browsers (Firefox, Chrome, …)
- Can be controlled using **standard interactive devices** (e.g. “Wii”, “Xbox”, …)
- Chemistry topics developed and improved by Evonik in conjunction with teachers especially for schools
- **VR multimedia teaching materials** (compatible with standard devices such as TVs and 3D glasses)
The journey so far …

- 4-year pilot phase

- Development of topics in a variety of middle schools in the German education system

- Usage in the classroom so far only possible with the help of technically demanding software in stand-alone technology

- Extensive project phases to develop new content/topics = cost intensive and lengthy
The achievements so far ...

The virtual reality technology steps in to support school students’ power of imagination at the point where they lose interest in complex teaching subjects.

- **Risk-free** chemistry lessons
- Combines **fun, education, and creativity**
- Open system structure allows for networked and cross-curricular learning and teaching
- Can be used via an Internet browser by **groups, individuals**, or for student-centered learning – also on home laptops/PCs
- **VR glasses and whiteboard bring content to life**
- **NEW in 2017**
  previous content now available with **no need for additional technology**
  = now accessible via Internet browsers in interactive 2D/3D format
The next step

- **Internet development platform**
  Virtual idea generation, improvements to subjects, and online execution of projects for new 3D content

- **Collaborative virtual working on the Web**
  positive side effect: development of media skills for future use in further training and the workplace
The vision:

School students have fun discovering new worlds of learning and simultaneously develop media skills, making them better equipped in the world of digital transformation.
Financing going forward

a. through topic sponsors  
   (such as the sponsorship of chemistry topics by Evonik Industries)

b. Sponsored user licenses for schools

c. Pay-by-use model  
   through license fees for ready-to-use topic packages via the Internet  
   (Provider: Imsimity GmbH / Germany)