# **SIEMENS** | Stiftung

# Media Portal

Over 4,000 free digital educational resources for STEM lessons

Whether for mathematics, biology, chemistry, technology, or physics, the Siemens Stiftung Media Portal helps teachers of all grade levels present diverse, real-world-oriented lessons. Over 4,000 free digital educational media provide inspiration and ideas on energy, health, and the environment, and can be flexibly adapted to different learning levels. The Media Portal offers students the opportunity to independently deepen their knowledge through experiments, puzzles, tests, and games, and also provides materials for conducting research for presentations in the STEM subjects.

medienportal.siemens-stiftung.org

#### Our goal: free, high-quality STEM education worldwide

The Siemens Stiftung would like to enable more people around the world to access education in STEM subjects. That is why we exclusively use open educational resources (OER) on the Media Portal. This means that all media are openly licensed so that they can be used, edited, and shared free of charge, allowing them to be individually adapted for different learning purposes and target groups. Of course, we carefully check all media used to ensure legal compliance for teachers and students.

We place great value on high-quality technical and pedagogical/didactic content. To this end, we have established a network of experienced authors from schools and universities. In cooperation projects with partners and experts, we also routinely develop new content to expand the media offering and address evolving challenges for students and educators with our materials.

# Helpful: multifaceted educational media for all grade levels

In addition to the three main topics of energy, health, and the environment, the media offered for STEM lessons cover other socially relevant topics such as issues of sustainable development, Big Data, and artificial intelligence. In order to accommodate as many teaching and learning methods as possible, we offer a wide range of digital content, formats, and methods. Simulations, educational games, puzzles, explanatory videos, and interactive whiteboard content are suitable for practicing, monitoring learning objectives, and presenting. Extensive teacher handouts round out the media packages and provide helpful suggestions for integration into lessons.

# Innovative: inquiry-based learning with Experimento

The Media Portal also includes the materials from our international education program Experimento. These materials have been developed especially for inquiry-based learning. With this teaching method, students can work entirely on their own to discover scientific interrelationships while also learning important technical expertise and key skills. The experiments are prepared for different age groups and use value-shaping issues to encourage the development of conscientious behavior.

## Modern: from service-learning to online training

In addition to the diverse offering of teaching materials, we offer an overview of current methods applied in STEM lessons. For example, we concisely and clearly explain servicelearning, design thinking, inquiry-based learning, and inclusive learning, and augment them with application-oriented examples.



Many of the digital media are whiteboard-compatible

for use in the classroom.

The Media Portal provides

media both for use at

elementary schools and

for subject teaching at secondary schools.



**Contact** Corinna Hartung Media Portal Project Manager Tel. +49 89 54 04 87-325 corinna.hartung@siemens-stiftung.org siemens-stiftung.org