

Digital Learning in Elementary School



OBJECTIVE

To prepare tomorrow's elementary school teachers to teach classes with digital media.



DURATION

2015 – 2018

Young people will only succeed in our digital world if they learn how to use digital technology effectively at an early age – starting in elementary school. Unfortunately, few elementary school teachers know how to incorporate digital media into their lessons, leading to discouraging progress on this front. It's not their fault, however: there are currently no viable programs for training or enabling teachers to instruct students about digital technology. Deutsche Telekom Stiftung has decided to fill this gap with its project, "Digital Learning in Elementary School".

An Allensbach survey commissioned by Deutsche Telekom Stiftung showed that elementary school teachers rarely know how to effectively integrate digital media in their classes. Indeed, the Trends in International Mathematics and Science Study (TIMSS) found in 2011 that many German elementary schools fare badly compared to their international counterparts when it comes to digital media access and use.

That is about to change significantly. Deutsche Telekom Stiftung is supporting the Universities of Education of Ludwigsburg and Schwäbisch Gmünd as well as the Universities of Bremen, Hamburg, Munich and Potsdam. Each of these institutions was selected in a competitive bidding process. They will be developing and testing methods for productively using digital technologies in elementary school classes until 2018.

All the universities are working closely with local elementary schools, which are being outfitted with "university classes". These are technologically advanced classrooms in which classes are recorded by a video camera. The classrooms are used to train college students majoring in



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Well-trained teachers will productively incorporate digital technologies into lessons starting at the elementary school level.

"UNIVERSITY CLASSES" WILL TURN TEACHERS INTO EXPERTS IN DIGITAL TECHNOLOGY INSTRUCTION.

education and, in the future, licensed teachers. The "university class" approach was developed by Ludwig-Maximilians-Universität in Munich.

Once the methods and materials have been successfully tested, they will be incorporated

into teacher training programs. Lesson plans will also be made freely available for interested elementary school teachers.

The project is supported by an expert committee headed by Professor Stefan Aufenanger of University of Mainz and will be evaluated together with the universities and Deutsche Telekom Stiftung.

More information:
<https://www.telekom-stiftung.de/en/dles>



Deutsche Telekom Stiftung

Projects at universities

University of Bremen

Bremen has a culturally diverse student body. A large proportion of the children come from disadvantaged families. The university is thus developing programs that use digital media to encourage learning in an inclusive classroom setting.

Contact

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University of Education of Ludwigsburg

Child-friendly activities figure prominently in UE Ludwigsburg's digital literacy programs: from cartoon workshops to media camps at all-day schools to geogames for science class.

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University of Education of Schwäbisch Gmünd

UE Schwäbisch Gmünd is developing several programs for effectively integrating digital media into the classroom such as using mobile devices for science "voyages of discovery", computer-based English class or lessons on robotics.

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University of Hamburg

The team in Hamburg is developing several digital learning projects for a wide range of the elementary school curriculum: from mathematics, German, science and physical education to media literacy and computer science. Some of the projects cover multiple subjects.

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University of Potsdam

Three basic themes run through the University of Potsdam's program ideas: linking real and virtual action spaces, basic approaches for continued learning, and building on specialized education skills in the development of digital learning programs.

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Ludwig-Maximilians-Universität (LMU) in Munich

LMU Munich developed the "university classes" being used to test the other five universities' ideas: specially equipped classrooms featuring a remote-controlled camera system and state-of-the-art recording equipment.

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Expert committee

- Prof. Dr. Stefan Aufenanger (chairman; Johannes Gutenberg University Mainz)
- Prof. Dr. Carlos Delgado Kloos (Carlos III University of Madrid, ESP)
- Prof. Dr. Andreas Breiter (University of Bremen)
- Prof. Dr. Beat Döbeli Honegger (Schwyz University of Teacher Education, CHE)
- Prof. Dr. Volker Frederking (Friedrich-Alexander-Universität Erlangen-Nürnberg)
- Jun.-Prof. Dr. Andreas Lachner (Leibniz-Institut für Wissensmedien, Tübingen)
- Prof. Dr. Silke Ladel (Saarland University)
- Prof. Dr. Jörg Ramseger (Freie Universität Berlin)
- Prof. Dr. Marcus Specht (Open University, NED)

! CONTACT

Project manager

Digital Learning in Elementary School

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DEUTSCHE TELEKOM STIFTUNG

Deutsche Telekom Stiftung was established in 2003 to strengthen Germany's position as an education, research and technology leader. It is one of the country's main corporate foundations with an endowment of EUR 150 million. Deutsche Telekom Stiftung's mission is to improve education in the digital world concentrating on the so called STEM subjects science, technology, engineering and mathematics. It focuses on four core areas: Education Drivers, Education Opportunities, Education Innovations and Education Dialog.

In Education Drivers, the foundation supports people who inspire others to study STEM subjects. Education Opportunities involves projects to prepare children and teenagers to succeed in STEM fields and participate fully in our connected world. In Education Innovations, the foundation invests in researchers and teachers who specialize in STEM subjects. Finally, Education Dialog comprises all the projects in which the foundation works with policymakers and civil society to improve education in a digitized world.