



KULTUSMINISTER KONFERENZ

The Standing Conference's "Education in the Digital World" strategy Summary

Taking up the challenges of digital changes in education and the ensuing transformation process, the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) presented a strategic concept for the future development of education in Germany in December 2016 with its "Education in the Digital World" strategy.

Integrating the digital changes in society into the teaching and learning process is an extremely complex undertaking. Measures have to be planned, coordinated and implemented simultaneously in several fields of action. The fields of action described in the strategy are:

1. Education plans and the development of teaching, curricular developments;
2. Initial, further and continuing education of educators and teachers;
3. Infrastructure and equipment;
4. Educational media;
5. E-government and school administration programmes, education and campus management systems;
6. Legal and functional framework.

Since the developments in schools and institutions of higher education differ greatly in terms of actors, educational mandates and legal frameworks, the strategy is split into two main chapters: schools and vocational education, and institutions of higher education.

Schools and vocational education

Two key topics were identified for the field of general schools:

1. Integration of "Competences for the digital world" in the curriculum. These competences are described in a binding competence framework that is to be implemented in all subjects, not by introducing a specific separate subject;
2. Teaching and learning processes whose organisation is supported digitally. This will address the pedagogically sound incorporation of the potentials of digital media and processing possibilities.

The goal of vocational education and training is the acquisition of a comprehensive set of competences for action, whereby the acquisition of these competences should be designed as an interdisciplinary cross-sectional task within the context of digital working and business processes. These competences are addressed in the context of the craft sector, industry and economy 4.0; they relate amongst other things to self-management as well as to thinking and acting internationally, along with project-oriented cooperation.

One basic requirement for the realisation of the strategy's goals is the competence of teachers who have to be able to use digital learning environments in a professional and didactically sensible way in their respective subject teaching. This is why support for developing the competence of teachers for pedagogical work in a digital world is regarded as an integral task of training in all academic subjects as well as education sciences throughout all phases of teacher training. The necessary competences are described in the strategy.

The field of action relating to educational media is described by the process of change that has followed digitisation. Apart from professionally designed educational media, a fast-growing number of web-based educational offers is now available. The open license of these Open Educational Resources (OER) allows users to edit and disseminate these media. Particular attention will have to be paid to the quality of educational media, as these will have to remain correct in terms of their content as well as in line with the curriculum.

With a view to the large number of education institutions in Germany, one challenge lies in the field of action of technical infrastructure. The goal is to provide all schools with a broadband internet connection and a network within the school buildings. This should enable users to access the digital learning environment in all rooms also with mobile devices. Working and communication platforms are supposed to assume the role of a central basis for information and communication that can be accessed by all teachers and pupils anywhere and anytime, while taking into account data security and data protection aspects.

The KMK strategy sets out the goal that every pupil should be able to use a digital learning environment and have access to the internet, wherever deemed useful in lessons from a pedagogical point of view, by the year 2021.

The potentials of digitisation should also be exploited in administration through new government offers as well as the expansion of education management systems, leading to electronic pupil records.

Institutions of higher education

The second chapter of the KMK strategy sets the objective for the higher education sector to describe the need for action in the performance of academic tasks in consideration of digitisation, and to point out corresponding further developments. In addition to offering new access paths to education, digitisation also plays an important part in the strategic alignment of the institutions of higher education, as well as for the regional and national hubs of science and technology in Germany.

The strategy suggests measures for institutions of higher education such as:

1. Expansion of supporting structures;
2. Working with digital media as a natural part of an academic career leading to a professorship;
3. Creating campus-connect solutions through the development of standards and encouraging scientific implementation;
4. Creating incentive systems.

For the implementation of the strategy the Länder adopted the Recommendations for the digitalization of higher education teaching (Empfehlungen zur Digitalisierung in der Hochschullehre). They address the Länder, the Bund, the higher education management, the faculties, the departments and the higher education teachers themselves and include inter alia objectives for the consideration of digitalization in the strategic development of the higher education institutions, for the linkage between them, for quality assurance and the digital exchange of student data.

The Länder will promote the further implementation of the recommendations in cooperation with the relevant stakeholders in the higher education sector.