# Digitization in education

## Advisory service

#### The challenge

Universal access to education, poor educational quality and insufficiently qualified teachers constitute major challenges for our partner countries. Digitization is particularly important for the education sector. On the one hand, digital skills are indispensable for social, economic and political participation in our increasingly interconnected world. In many of our partner countries, however, education systems are not equipped to teach these skills to children and young people. This is particularly true for girls and women. They often have no opportunity to acquire digital skills. This creates a gap between the digital knowledge of women and men ("digital gender divide"). This gap contributes to the fact that girls and women have much worse educational and income opportunities than men. Educational planners often face the difficulty to keep up with the speed of technological change. On the other hand, digitization and the implementation of digital technologies offer enormous opportunities for improving education and developing new solutions. However, this potential is currently not being fully tapped. The international donor community has already tried out a variety of approaches to digitization. Nevertheless, there is still a lack of knowledge about how digitization can be used sustainably in our partner countries for reforms and development goals.

#### Our approach

With our measures, we support all players in the education sector in integrating digital approaches into educational systems and making use of the opportunities offered by digital technologies. For GIZ, digitization in education is not an end in itself, but pursues two overarching goals. We use digital technologies where they can increase access to education for children and young people and improve the quality of teaching. Above all, we want to contribute to improving the learning of all pupils and to closing the digital gender divide. This approach covers all levels of the education system: At the central level, we advise education ministries on how they can use digitization to improve data collection, evaluation and planning. This enables ministries to increase the effectiveness and efficiency of their education systems. Education networks also benefit from digitization, for example through better exchange and easier access to knowledge. At school level, digital resources can be used for learning. Training content can be converted into digital approaches. In most cases, it makes sense to combine different digital approaches, such as blended learning methods that combine classroom and e-learning, apps or online platforms. We always involve teachers in the partner countries in our approaches.

#### Our services

We adapt our services in the field of "digitization in education" to the requirements of our partners. In terms of content, we focus on the following key areas: Digital planning and management of education

- » Support in the development and implementation of integrated management information systems;
- » Development of digital monitoring tools, for example to improve school supervision at the community level;
- » Use of social media so that parents and pupils are more involved in processes and decisions.

#### Digital skills

- » Strengthening digital literacy of pupils through formal and non-formal education;
- » Teaching media skills and media security to pupils.



Digital learning formats to improve classes

- » Support of e-learning and blended learning approaches in the training and further education of teachers;
- » Use of digital learning formats in teaching and integration into existing curricula;
- » Development of digital learning formats that improve access to education for disadvantaged groups, for example through literacy apps or game-based learning.

### The benefits

As an integrated part of development strategies, digital literacy can improve planning and governance in education. For example, digital technologies can be used to promote participation, transparency and accountability in the education system. Digital approaches also have the potential to massively expand educational opportunities and reach groups of people who have had little or no access to education. Where girls and women have limited mobility due to traditional role models, digital approaches can offer new opportunities. However, digital applications not only promote gender equality. They also give previously disadvantaged groups - such as marginalized population groups, people in rural areas, migrants and refugees, and people with special learning needs - the chance to receive education.

#### An example from the field

The Malawian government is currently preparing a strategy for the implementation of inclusive education. GIZ is supporting Malawi in this endeavor through the "Enhancement of basic education program". One of the beneficiaries is the state-accredited teacher training institute "Montfort Special Needs Education College". This college receives support in the development and implementation of an IT-supported "MOODLE" certificate course for primary school teachers in inclusive education. "MOO-DLE" is a free online learning system that supports cooperative teaching and learning methods and allows flexible and independent learning. The one-year course was developed and implemented together with the Ministry of Education. It is particularly suitable for teachers, as further training is often difficult to reconcile with their professional obligations. The course combines face-to-face training with digital formats. Teachers can use it anywhere and at any time via tablet. The course helps teachers to recognize early on whether pupils in their primary school classes have learning difficulties and to support these children in the best possible way.

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