DIGITAL CHANGE AT THE GEI
Schools are increasingly embedding multimedia technologies such as interactive whiteboards, tablets, apps and e-textbooks into their teaching and learning routines. Educational policies, at national and supra-national levels, are actively supporting innovative digital practices. Integrating new technologies into the classroom and improving digital literacy are, for instance, core goals of the European Commission’s ‘Digital Agenda’, one of the seven pillars of the Europe 2020 Strategy (European Commission 2010; European Commission 2013). National governments are seeking evidence-based concepts and strategies to help them develop approaches to ‘digital education’ in twenty-first century schools (e.g., Germany’s ‘DigitalPakt#D’, Austria’s ‘efit21’, and the UK’s ‘Digital Future’).

But what does this shift towards digital education mean for today’s society? For one set of observers and researchers, it is generally positive: digital media lead to increased student motivation, they enable innovative, connected, flexible, interactive learning opportunities, and they combat entrenched educational practices that are seen to perpetuate social inequality. For another set of observers, the risks outweigh the benefits: young people are losing the ability to concentrate; any motivational benefit is short-lived; and public education is being thoroughly commodified.

For the GEI, the most intriguing aspects of the current digital shift are related to cultural and social change, or to shifting epistemic configurations: Do changes in the materiality of textbooks and other educational media lead to transformations in the kinds of knowledge that are produced, circulated and taken up? Which forms of subjectivation or identification are enabled when pupils use individualised, participatory educational media? How does classroom culture change with digital tools? What role do (explicit or implicit) imagined futures play as design teams develop

* Full disclosure: Many of these 400,000 Google hits include a question mark and are meant as a provocation: ‘Will textbooks soon be obsolete?’ We gladly take up that provocation here.
digital educational media? Which economic factors are involved? What happens to pedagogical relationships in the ‘age of sharing’? These are only some of the questions that the Georg Eckert Institute is now asking. To explore these issues, we are developing and extending our research and research infrastructures to engage more thoroughly with digital educational media in the coming years. Our current priorities lie in three areas:

First, we are systematically integrating questions about digital educational media into our core research focus. In an academic field that has been mainly informed by psychology, information sciences, media education and teacher training, we approach digital media through cultural studies and historical research. As the questions above suggest, our research explores how digital technologies are entangled with memory practices, space and knowledge construction, political discourse, media practices and social orderings. By looking at the representations in digital educational media, the production and use of these media, and the discussions about them, we aim to shed light on the norms, expectations and rules governing social life, and to reflect on how these media shape social relations and young people’s understandings of the world.

Within this overarching frame, current research engages with several aspects of digital educational media: Some projects focus on the theories and methods informing the emerging field of educational media studies. The goal is to develop new theoretical models for understanding media in twenty-first century education. Other ongoing projects are oriented towards practices, exploring how media are used in contemporary schools. A third research interest is the analysis of academic, political and popular discourse about educational technology. Finally, we investigate the historical dimension of ‘new’ media for schools, asking about similarities and differences in the ways new media have been introduced in the past and today. Future projects will develop these four strands, also examining the representations in digital textbooks and exploring the economic dimensions of producing digital textbooks and other educational media.

Second, given the technological changes afoot, the GEI’s research infrastructures are engaging with entirely new formats. Textbooks have long been accompanied by CD-ROMs and online activities, but they are now also being developed as digital textbooks (e-textbooks). Some of these are quite straightforward PDF versions of printed books; others are ‘born digital’ and embed interactive videos, photo banks and 3D images into their multimedia design. Some digital textbooks are designed as e-books to be read in e-readers, such as the Kindle device or the iBooks app; others stretch the definition of ‘textbook’ by being made available as non-linear websites. Some open educational resources (OER), made freely available to use, remix and share, have a textbook character and are thus highly relevant for textbook studies. How can the research library archive these diverse resources? This is not only a matter of licences, copyright and storage capacity. If one core advantage of digital textbooks is that they are constantly updated, but we want to archive ‘outdated’ versions for future historical research, then we need to
find ways of archiving older versions of multimedia. Tricky, since the publishers see no need to keep these available.

To this end, we are expanding the collection profile of our research library to include digital educational media and OER, while also focussing on making textbooks available digitally. As part of the ‘Specialised Information Service (FID) on Educational Science and Educational Research’ funded by the German Research Foundation (DFG), the research library has been documenting global developments in digital educational media since 2015. The project team systematically looks through online platforms of the ministries of education worldwide, researches what publishers are producing, and scans relevant websites that offer digital educational media. Following this documentation phase, the research library will expand its acquisition profile, establishing specific criteria to govern how digital educational media should be collected. Above all, the library aims to secure the rights to archive the material – that is, it needs to be able to store copies of the digital educational media to make them available to researchers. In the next step, the library will actively collect digital educational media, catalogue the material, and work with the DIRI department to develop a technical infrastructure for its archival storage.

In addition to systematically collecting, cataloguing and archiving digital textbooks and OER, we will continue to digitise historical textbooks and expand ‘GEI-Digital’ with copyright-free materials. The ‘Curricula Workstation’, which provides free access to curricula in digital form, will also continue to grow. Our goal is to integrate the different types of digital educational media and curricula into the GEI’s collection profile, to add them to our library in a systematic way, and to make them available to research in the long term.

Third, we plan to create further digital educational material ourselves. Central to this area is the project ‘Zwischentöne (Nuances): Teaching Materials for Classroom Diversity’, which publishes teaching and learning modules on societal diversity and religious plurality. In addition, selected research projects will continue to produce specific teaching and learning modules, in the hope that this material will prompt educational publishers to include alternative perspectives on important topics facing society, such as diversity and inclusion, in their digital publications.

For each of these three areas, we are pleased to be developing and integrating new models, approaches and technical solutions, which also influence our knowledge exchange activities with educational policy-makers and practitioners. These are exciting times in educational media studies, and the GEI is delighted to be highlighting a specific set of issues that have largely been neglected in the rush to design (or critique) innovative digital educational media and programmes. The GEI’s own research, together with the unique library resources and further digital infrastructures, the development of teaching and learning modules and consultations with policy and practice, not only draw on the GEI’s traditional expertise in textbook studies but also place the Institute at the heart of emerging cultural approaches to digital educational media.