

ECKERT 16

Bulletin

Digitality



GEORG ECKERT
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Bulletin

Digitality

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DEAR READERS,



For the Georg Eckert Institute, the year 2016 revolved around our evaluation by the Leibniz Association, a process that all member institutions undergo on a regular basis. In October we presented eight years' worth of work to the evaluation commission, and we are confident that it went well. I would like to take this opportunity to sincerely thank everyone at the Institute for their commitment to preparing and seeing through this very important process. It was a challenging time for all of us, but one that also helped refine the Institute's profile and reinforce already strong connections among members of our staff and to the Institute itself.

I am also delighted to welcome our new head of the Textbooks and Society department, Professor Riem Spielhaus. Based on a joint appointment, she also holds the Chair of Arabic Studies/Islamic Studies with a Focus on Education and Cultures of Knowledge at the University of Göttingen. Concentrating on the representation of Islam in textbooks and the development of Islamic religious studies classes in Germany, she enriches the GEI with research on Islam in applied contexts.

Even beyond the evaluation, 2016 was an eventful year for the GEI. In October we presented the Georg Eckert Research Award for the fourth time and the Award for Young Academics for the second time. The jury, led by Beatrice Ziegler, awarded the research prize to Anja Kirsch, whose PhD dissertation *Weltanschauung als Erzählkultur* (Ideology as Narrative Culture) examines the relationship between religion and socialism in social studies textbooks of the GDR. The Award for Young Academics went to Anna Heym for her Master thesis about the influence of the media transformation

on educational publishing strategies. In a festive ceremony at the Old Town Hall 'Dornse' in Braunschweig, we presented the awards in the presence of Stephan Weil, State Premier of Lower Saxony. Our warmest congratulations to the recipients again! And many thanks to the Westermann Verlagsgruppe, sponsor of the Research Award. The awards contribute greatly to the promotion of research on educational media and encourage young scholars to enter this field.

Another high point of the year was the publication of the first volume of the joint German-Polish history textbook, *Europa – Unsere Geschichte* (Europe – Our History), which was officially presented to the German and Polish foreign ministers, Dr. Frank-Walter Steinmeier and Witold Waszczykowski, in a public celebration at the Robert-Jungk-Oberschule in Berlin-Wilmersdorf. This represented a first major step for us and our Polish partners in completing our bilateral textbook project, slated to be published in four volumes.

2016 was quite momentous, but considering the plethora of planned projects and upcoming events, GEI's future will not be boring either. Above all we hope that 2017 will mark the beginning of construction on our new campus, so that the entire institute can start working together at a single location soon.

As in previous years, this issue of the GEI Bulletin concentrates on one overarching theme: digitality in the educational sector. The authors approach this topic through a range of thematic and regional lenses: from the use and production of digital educational media in Mexico and Australia, to the perspective of educational publishers, to developments in the area of open educational resources (OER). Equally important are questions related to infrastructure and research arising from the fact that educational media – like the world around them – are increasingly digital. With this issue, we hope not only to touch on current debates but also to give you, dear readers, insight into topics that will be part of our future work.

Very best wishes and happy reading!

Eckhardt Fuchs

DIGITAL CHANGE AT THE GEI



Eckhardt Fuchs | Director of the Georg Eckert Institute

Felicitas Macgilchrist | Head of the Textbooks as Media department at the GEI and Professor of Media Research at the University of Göttingen's Institute of Education

It's 1922. Thomas Edison says: 'I believe that the motion picture is destined to revolutionise our educational system and that in a few years it will supplant largely, if not entirely, the use of textbooks.' It's 1962. The magazine *Popular Science* writes that by 1965 over half the students in a class will be using 'teaching machines'. Textbooks will no longer be necessary. Now it's 2016. We Google 'textbooks' and 'obsolete', and receive over 400,000 hits.* And yet our research shows that textbooks remain the most important medium in history and social studies classrooms. The textbook is certainly a resilient medium, but it has undeniably changed a great deal since 1922. The pressing question today is less about whether the textbook will disappear and far more about how it will react to the challenges of the digital world.

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 com-

bat 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.

THE DIGITAL REVOLUTION IN THE CLASSROOM?

Interview with **Christina Kakridi**

Experts believe that the future of school is digital. The digital revolution in the classroom, education experts say, enables more efficient and more individual learning. But in the implementation of new media, Germany lags far behind developments in other European countries or in the United States. People in Germany still debate whether it is appropriate to use computers in the classroom at all. Critics argue that students already spend too much time sitting in front of the computer; school, at least, should remain analogue.

So far, the tablet's introduction to the classroom has been a selective development whose success or failure depends entirely on the teacher's commitment. According to researchers, more than just a lack of money stands in the way of outfitting schools with technology.

In cooperation with the Bürgerstiftung Braunschweig (Braunschweig Civic Foundation), the Georg Eckert Institute (GEI) conducted a study on the use of laptop computers in schools. In the final report, *Elektronische Medien im Unterricht* (Electronic Media in the Classroom, 2014), the GEI presented solid findings on the introduction of laptops to entire school classes, with respect to technical, organisational, didactic, and individual challenges. The study shows that in the first year of the project 'Mobiles Lernen' (Mobile Learning), technical problems and a lack of digital textbooks at the time meant that – contrary to expectations – the laptops were hardly used in the classroom at all. Printed textbooks and other teaching materials remained the central media for most teachers.

Also lacking were intensive training sessions for teachers in how to use the new technology to support subject-specific learning in the classroom. However, the results of this initial study also showed that students grew significantly more motivated to learn when digital devices were introduced. Whether or not the implementation of digital media led to an improvement in subject-specific learning could not be studied systematically in the first year of the project. Other studies also offer limited findings in this regard.

Education experts argue that the use of digital media in the classroom enables more efficient and more individual learning. What do you think?

I can't help noticing, with some amusement, that the education experts hold diametrically opposed views and advocate them fervently: for some, digitality is the beginning, for others the end of all learning. Personally I find this kind of 'sweeping argument' unconstructive. There is no way around

DR. CHRISTINA KAKRIDI

teaches history, Latin, and German as a foreign language at the Otto-Hahn-Gymnasium Göttingen. She is also a lecturer at the University of Göttingen in the Department of History Didactics. In both contexts, she explores the influence of digital educational media on teaching and learning, and she experiments with these media in her own classroom.



the use of digital technologies in our classrooms. But learning follows certain anthropological principles, and these are not overruled by digitality. It is crucial to think precisely and objectively about how each age level, each subject and each application can benefit from using the internet, the tablet or the whiteboard, and what dangers lurk in doing so. So far I have personally observed, for example, that students' spatial understanding can increase enormously through digital map work and satellite images, but working with texts (extracting meaning, careful reading) does not function very well on the computer.

I do not agree with social reformist utopian visions of a digital transformation of teaching. Students who fall behind in our school system do not get better when we hand them a tablet. The reasons for their failure are of a social and psychological nature. I am worried about a supposed increase in the school system's 'efficiency', which would leave weaker students even more to their own devices. Learning with a tablet also

requires a concentrated willingness to absorb information, which these students tend to lack. Sometimes I wonder if when people talk about a change in learning, they are really talking about a change in the structure of our education system.

You just mentioned 'working with texts' on the computer. Let's take a look at a digital textbook. What can an electronic textbook do better than a printed one?

We do not have very much experience in this area. Whether learning with this textbook is more efficient or more individual depends, of course, on the quality and technical capabilities of the actual textbook. The range of variation is enormous. The hope is naturally that a textbook like this can be more comprehensive than the print version and can offer many different materials and exercises, allowing for precise differentiation within the textbook (even in terms of the language used). Also, this kind of book probably reflects the

media formats our students are accustomed to consuming, piquing their interest because it contains not only images and text but also sound documents, animations and films. Thinking about my history class, the additional value of a digital textbook is, for example, that it includes non-written narratives (especially films) and can reflect very current discussions and texts on the internet, which comprise a large part of our 'history culture' today. One of the central goals of my history class is to provide orientation within our history culture. In the *mbook* from the Institute for Digital Learning, I love the idea of integrating short films into the textbook in which the authors of individual chapters explain their motivations and perspectives in writing each text. This gives students an idea of who the author behind the book is, enabling them to recognise history writing as a product of a particular perspective (as history didactics would say, 'as a position-bound construct'). Paradoxically, in a certain way the medium serves to 'humanise' the material.

In light of increasingly digital textbooks, the teachers' associations are warning against a loss in textbook quality. How do you see this issue, and how can quality be ensured?

As long as digital textbooks are subject to the same control mechanisms as printed textbooks, I see no danger of them getting worse. Digital textbooks are written by especially well-known authors, edited for content and approved by the state, so they serve as a reliable intersection of conventional textbooks and digital resources.

The real danger for digital textbooks is rather that – because of their theoretically unlimited length – they do not provide enough didactic reduction. Teachers and students are then overwhelmed by the excess of material and links; in general the discussion on digital textbooks and their many possibilities tends to overestimate the will and capacity of students to make sensible decisions. Moreover, individualisation, always mentioned in a positive light, can also lead to worse communication in the classroom. Communication in class depends on having a common foundation of knowledge.

I am also distressed by the idea that the textbook could disappear completely and be replaced by an arbitrary collection of random online sources. This is already happening, for example with teaching material that student teachers put together, and there is no way to stop it. The answer can only be to maintain teacher education at a high academic level so that the teacher can make the right decisions and tap into the advantages of what the internet has to offer, without falling into its traps. The fact is that when we think of digitality in the classroom today, it is not the electronic textbook we think of first but rather learning software and software to help create course content, which often renders the textbook unnecessary. In subjects like history, there is a potential for this to be dangerous. The textbook as a deliberated, manageable whole product is important – whether it is digital or printed.

The United States is years ahead of Germany in terms of digital learning. Why?

There are a lot of reasons, for example that people in the United States have more trust in technology than in Germany. The technical infrastructure in our schools is very bad. Economic factors probably play a role, too, especially the relationship between American schools and private companies. But schools in Anglo-Saxon countries ask students to reproduce a lot of standardised knowledge, whereas we counter the multiple-choice mentality with a more holistic educational ideal, and this is difficult to convey in programmed steps on the computer. During a professional training session in the United States, I noticed that cooperation is valued more than in Germany, and the American teachers use digital technologies not only for receptive learning, like we do, but also in new capacities for communication and cooperation. There I learned how to write texts on the internet together with my students, allowing them to correct and rewrite my contributions as well. It was a very democratic, transparent and learning-intensive process. Students learn not only how to be internet consumers but also how to participate appropriately in the discussions going on there. In the United States there is a lot of openness to this kind of thing.

If everyone uses his or her own learning programmes, and these are constantly adapted to each person's knowledge, won't this eventually lead to the mass surveillance of students?

One of the paradoxes of this development is that we talk about individualisation, but in fact we only mean a greater number and variety of algorithms that put students into ever more cus-

tom-fit pigeonholes. This can be very helpful in certain cases, but it has nothing to do with individuality in a humanistic sense. And digital spying on the students is a real danger. But the law needs to ensure legal security for us teachers. It is crucial to achieve the right amount of both reasonable documentation and respect for the student's individuality. And of course as the teacher, I still need to acknowledge the work of my students and speak with them about it, especially in order to build personal relationships.

When will digital learning pick up speed in Germany?

This development has accelerated enormously over the last five years. There is a variety of online learning software, several teachers' platforms, learning videos, even digital textbooks. Numerous schools have introduced tablet classes. So the revolution has already begun, and we will see how spectacular it turns out to be. I would like to see stronger support for teachers in this area from non-commercial organisations and the state; there is a great need for professional training. I don't mean that we need courses in the application of certain programmes. Rather, we need to develop a practice- and subject-based 'didactics or methodology of digitality'. Especially for refugee children, digital technology can provide a great equalisation of opportunities. But in general, pedagogy will always be more important, and true education can only occur through relationships with other people.

DIGITAL EDUCATIONAL MATERIAL

CONSIDERATIONS FROM AN EDUCATIONAL PUBLISHER'S PERSPECTIVE

Christoph Bornhorn | Managing Director of the German Association of Educational Publishers, Verband Bildungsmedien e.V.

There is no clear definition of the term 'educational material'. From a pedagogical point of view, it can mean all material used in education. From an economic point of view, we define it as products that are primarily – and most of the time even exclusively – designed for the targeted support of specific learning processes. These learning processes are often institutionalised: They take place in kindergartens, general education or vocational schools, universities, or adult education centres, or else they are part of in-company vocational training, be it apprenticeships or further professional training. This definition also describes the characteristics of the educational publishers' market, which determines the development of all products including digital educational material. There is a wide variety of professional educational material because of the huge number of educational institutions, courses of study and final certificates. Educational publishers in Germany offer some 60,000 products. The same quality standards apply to all of them, whether they are printed or digital.

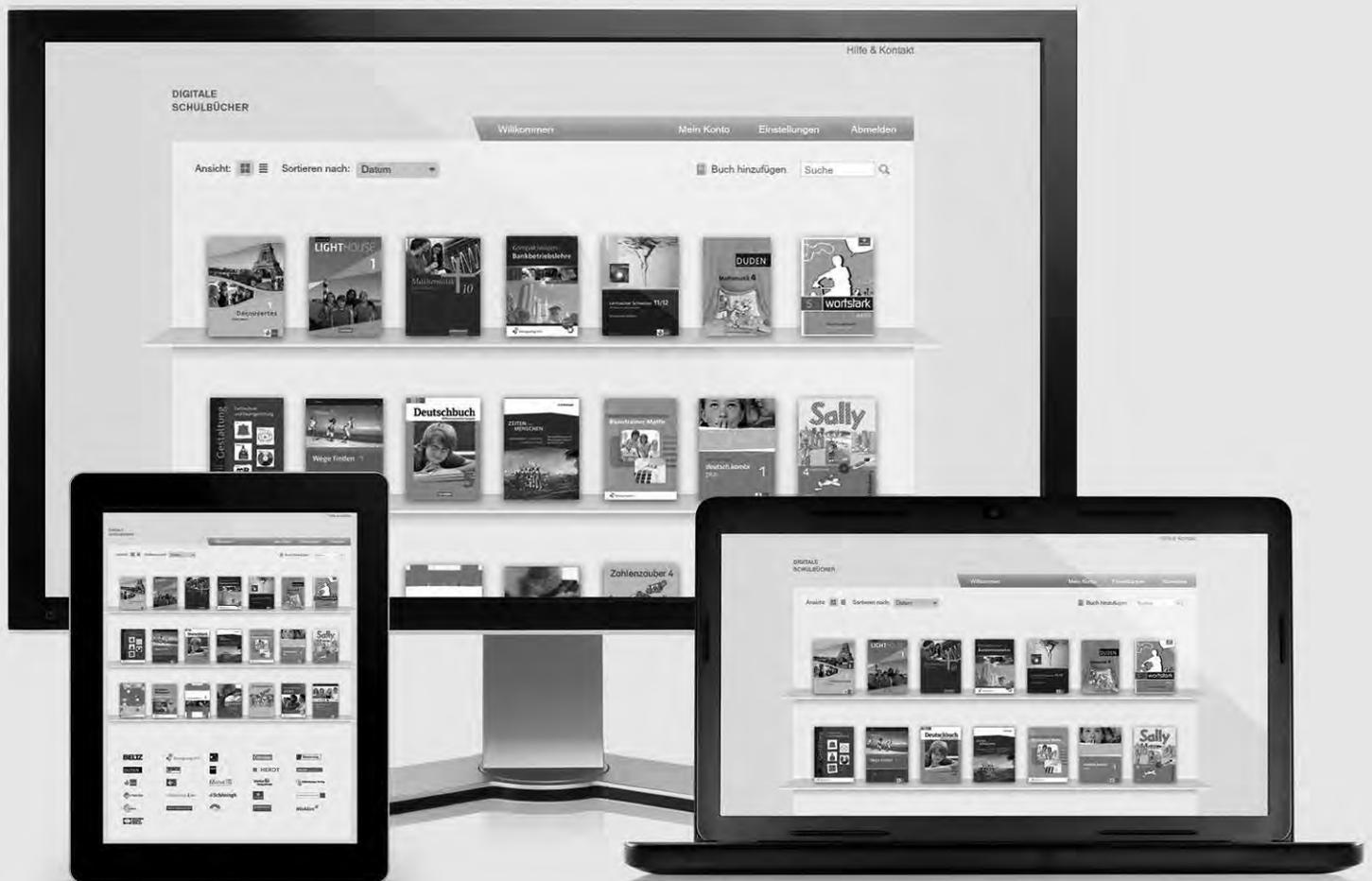
Professional educational materials implement a concrete syllabus or set curriculum. They are explicitly tailored to the different German federal states and different courses of study. This way they prepare learners for their targeted final certificates, often over many years. Educational material is curricular and provides a coherent progression of learning subjects. This applies, for example, to the structured build-up of vocabulary in foreign languages, but also to any other systematic development of competences. Educational material only contains third-party content (texts

or images) for which the copyright is secure. It is required to reflect diversity, use gender-inclusive language and respect the prohibition of indoctrination. Producers of the material are also committed to following the national and state laws on data privacy protection and effectively preventing any misuse of the data collected.

Furthermore, individual professional educational materials are connected to one another. They create so-called 'textbook families' or 'textbook palettes'. This means that different products for different learning scenarios use the same content, same language and same graphics and complement each other didactically. Digital and printed educational material also interacts in this way.

FROM THE DIGITAL TEXTBOOK . . .

Colloquially, the terms 'textbook' and 'educational material' are often used synonymously. But legal regulations for the approval of textbooks in the different German federal states define 'textbook' as a specific form of product for the purpose of teaching. Therefore, textbooks have to undergo a very detailed approval process. This procedure is in force for both printed and digital textbooks. Following the approval of a digital textbook, it usually may not be changed. Digital textbooks work primarily as supplements to the printed textbooks and serve to better visualise the lesson topics (for example, when a teacher starts a new subject) or simply contribute to reducing the weight of school bags. A minimum standard for digital textbooks has already been established to a large extent and will gain acceptance in the coming years. One of the most important tasks now facing



federal education politicians is to draw up a legal and financial framework for the massive and systematic use of digital textbooks.

The Verband Bildungsmedien e. V. (Association of German Educational Publishers) has supported this process since 2012 with its software solution 'Digitale Schulbücher' (Digital Textbooks). With this software, textbooks from several publishing companies can be administered and used in one virtual bookshelf. Individual annotations can be made to the pages of the books, and applications for their use with whiteboards are included. This way, more than 100,000 active users – that is, teachers and learners from schools for general education, vocational education and training, or institutions of adult learning – currently have access to about 4,000 digital textbooks.

... TO A MULTIMEDIA LEARNING PLATFORM

The other products in the textbook family, for example the teacher's edition of the textbook, additional software for exam training or vocabulary learning, suggestions for class tests and many others are often available digitally, too, at least in the form of video and audio material. Learning platforms assign this material to specific pages of

the digital textbooks and also allow teachers to add their own material or to access third-party material in a copyright-secure way. This significantly simplifies teachers' work when preparing their lessons.

These platforms can include other kinds of digital services as well, such as databases with learning videos or software for exam training. The educational publishers are continuously designing their products to address the needs of teachers and learners.

Learning platforms can be used in general education schools, as well as in blended learning for adults or in the German 'dual system' of vocational education, where the lessons in the vocational school could be better linked to the teaching in the apprentice's company. Acknowledging this high didactic potential – not least in terms of individualised teaching and inclusion – 'Digitale Schulbücher' will become BILDUNGSLOGIN, a media shelf where users can administer and access teaching material from several publishers: not only digital textbooks but also online portals and enhanced teaching and learning materials.

FROM TEXTBOOKS TO TABLETS

THE PRODUCTION OF EDUCATIONAL MEDIA IN LATIN AMERICA

In the past 15 years, schools in all Latin American countries have introduced digital technologies at a very fast pace. How has the production of educational media changed in the transition from textbooks to digital media? Who are the main agents in this new market? And how is this production affecting access to that media?



Screenshot: telesecundaria.sep.gob.mx
Formerly a TV-based educational programme, now an array of educational materials online

Eugenia Roldán Vera | Research Fellow at the Center for Advanced Studies and Research (Cinvestav) Mexico

Since the year 2000, government programmes introducing digital media in public schools have expanded exponentially. First there were programmes that built computer rooms in schools, where children would go for additional activities in support of classes or homework. Then came the programmes that intended to equip each classroom with one PC, one projector and one electronic board, for example 'Enciclomedia' in Mexico, which also included the digitisation of existing printed textbooks for projection on the board. 2007 marked the start of regional and national programmes to distribute laptops, netbooks, or tablets free of charge to students in public (primary or secondary) schools according to the so-called 'One-to-One Laptop' scheme. These are cheap, non-commercial devices pre-loaded with basic software (word processors, internet browsers, presentation software, multimedia design environments, calculators, games). Private schools are excluded from these programmes on the assumption that the families of better-off students can afford their own equipment, but they have also introduced digital media.

'One-to-One Laptop' programmes are strikingly similar in all of the different Latin American countries (as well as in other developing countries in Asia and Africa), as shown by examples such as 'Conectar la igualdad' (Connecting Equality) in Argentina, 'Plan Ceibal' (Ceibal Plan) in Uruguay, 'One Laptop per Child' in Peru, Jamaica and Brazil, 'Proyecto Canaima Educativo' (Educational Canaima Project) in Venezuela, 'MiCompu.Mx' in Mexico, and many more in Bolivia, Chile, Colombia, Ecuador, El Salvador, Haiti, Honduras, Nicaragua, Paraguay and Trinidad and Tobago. Less visible (and less successful) programmes for teacher training in digital skills have accompanied

these large-scale, highly publicised endeavours. The distribution of laptops or tablets has not reached the whole population they are intended for, but the programmes are ongoing and they still enjoy public credit. Governments along the entire political spectrum have implemented them, since there is generalised consensus on the importance of advancing children towards the so-called 'knowledge and information society'. All of the programmes have been carried out in collaboration with mostly transnational members of the private sector.

Have digital technologies replaced textbooks altogether? Certainly not. The history of education shows that the coexistence of different technologies is typical for classrooms in Latin America (and probably around the world): the success of the Mexican 'Telesecundaria' since the late 1960s, whereby rural secondary schools with only one teacher have supported their work with TV broadcasts, is a prime example. This coexistence continues, but digital technologies have transformed the role of textbooks in the classroom. Teachers today have access to an array of materials, games, exercises, maps, videos, images and charts, which, in addition and/or connection to physical textbooks, students can access through their school PCs or on their own personal equipment. The printed textbooks, which in most countries also exist in digital format, are thus no longer the prime containers of school content but have become the articulators of different kinds of material: hypertexts, references to other sources, images, movies, timelines, interactive maps, and so on. However, the traditional textbook persists as an object that provides condensed, comprehensive and facilitated information on the basic content required by a given curriculum.

Who is producing these new technologies? Traditionally in Latin America, the national state has played a central role in the production and distribution of textbooks since the mid-twentieth century, either as producer of the 'official' textbooks, free of charge and compulsory for all schools (at least, for all public schools), or as approver of the textbooks that private publishers can put onto the market. Historically, the argument for that intervention was less about controlling what the population should know and more about guaranteeing a minimum equality in access by children of all economic backgrounds to high-quality textbooks. This role of the state has been called into question recently by textbook publishers that, merged into a handful of powerful corporations to supply textbooks for the entire Spanish-speaking market, are pushing for fewer restrictions.

By contrast, there is much less state control in the production of digital media. 'One-to-One Laptop' programmes are mostly carried out in the framework of so-called public-private partnerships in education (PPPE), that is, joint investments of state and private money. Laptops are either XO laptops, as part of the OLPC programme launched by Nicholas Negroponte in 2005, or Intel Classmate PCs, launched in 2006. There are also alternative modes of production such as Argentina's locally assembled brandless netbooks, for which the hardware was designed by a pool of ten international corporations and the parts made in China. Microsoft is also present in countries such as Mexico, Chile, Peru, El Salvador, Panama and Argentina through its global 'Partners in Learning' (PiL) programme, initiated in 2003. According

to Microsoft, this massive programme has reached around 12 million teachers and 250 million students (20 per cent of the world's student population!), most of them in developing countries. 'PiL' has three core schemes: the 'Fresh Start for Donated PCs' programme, by which Microsoft provides free licences to schools for Microsoft software on donated PCs; the 'School Agreement' programme, consisting of price discounts on Microsoft core educational tools for schools; and the grant programme, for projects introducing technology and training teachers in individual schools.

The software for the cheap computers is dependent on the hardware. 'Connecting Equality' in Argentina was designed to work with both Linux and Windows (rumours claim that Microsoft sold the Windows licence for \$3 per laptop), whereas 'Micompu.mx' and all of the other XO OLPC programmes in Latin America use open-source software. At the same time, the state is still crucial in providing the infrastructure for connectivity, without which the equipment's most important functions would be impossible.

Although large corporations such as Microsoft and Intel lower their costs to a minimum to sell their equipment to the governments, it is almost inevitable that their economic interests will be advanced in the region by the normalisation of their technology, hardware and software among millions of schoolchildren. This also happens through their alliances with private publishers. For example, Microsoft reached an agreement with the powerful transnational publishing house SM for the production of its textbook series, 'Digital Abilities'. SM textbooks for this subject, which



Screenshot: Educ.ar

is optional in secondary schools in several countries, display the Microsoft logo on many of their pages and show students how to use Microsoft software.

Regarding the design of digital educational material, state agencies are still in charge of a large part – carried out by either dependencies of the ministries of education or by outsourced, not-for-profit organisations. National governments have online repositories of digital materials connected to the websites of their ministries of education, such as the Argentinian educ.ar or the Mexican micompu.mx. There, teachers and students can search for complementary educational materials grouped under the categories ‘text’, ‘audio’, ‘interactive’, ‘diagram’, ‘e-book’ or ‘video’. These materials tend to accumulate over time and vary greatly in quality and didactic methods.

Teachers and students have access to other online repositories of educational material developed by for-profit organisations or by textbook publishers. Companies producing digital educational material are expanding fast; it is an attractive business given that they do not need much physical infrastructure to produce and sell directly to schools, whether public or private. Textbook publishers, too, have developed repositories of digital material free of charge, some in connection with their textbooks, others free but conceived of as a hook for other packages they sell. They also provide e-books for rent and apps for download onto mobile devices. None of these materials have to be approved by government agencies. And, although private schools have a greater degree of freedom to select their digital media packages, public

schools in some Latin American countries also have the freedom to use some of the money they receive from the state to purchase didactic material of their own choice.

In short, in the production of digital media we are witnessing a reconfiguration of the agents involved in producing traditional educational media. New agents have emerged – large IT corporations, small for-profit and not-for-profit developers of educational material – along with novel partnerships between governments, publishers and multinational corporations. This rearrangement means that the state has less power in controlling what is produced, whether it fits to the curriculum, or whether it meets certain standards of quality and adequacy for the students. It also means that multinational corporations, both IT companies and publishing houses, have a greater say in this respect. At the same time, the diverse market gives teachers a greater degree of freedom in the choice of materials they use and breaks their dependency on one single textbook.

However, if the historic purpose of the state’s control of textbooks was to guarantee a minimum of social equality in students’ access to high-quality media, can this equality be maintained under the present conditions? As a compensatory programme for public school students, can the continuity of the ‘One-to-One Laptop’ scheme be secured? What will happen when the laptops or tablets become obsolete? And how can countries guarantee that the quality of the teaching material making its way into the different classrooms does not depend on the amount of money a school pays for it? These questions remain open.

MAKING AND PLAYING TO LEARN IN AUSTRALIA

Joanne O'Mara | Associate Professor in Education at Deakin University, Australia

This article reports on some of the major findings from research on how digital games might be used as part of the curriculum in Australian schools. This research, 'Serious Play: Using Digital Games in School to Promote Literacy and Learning in the Twenty-First Century' ('Serious Play Project') was funded by the Australian Research Council.

The Scratch project



DIGITAL GAMING IN AUSTRALIA

In Australia, as in many other countries, digital games are an important part of young people's lives. In Australia there are very high rates of ownership of digital game devices – such as mobile phones, laptops, game consoles and tablets – and most young people play games in at least some of their recreation time. While games are often played outside of schools, they are generally excluded from the school curriculum. More recently there has been growing interest in digital games in education, and many games have been designed and developed for educational uses.

In our research for the 'Serious Play Project', we took the stance that play is serious, that it is about learning. We researched the possibilities for digital games in schools, working with teachers as they developed digital games-based curricula with their students. We worked with young people aged five to sixteen from 2012 to 2015. In this short article, I will report on two aspects of the 'Serious Play Project' that may be of interest to the readership: the making of games in school and the use of *Minecraft* for teaching about other areas of the curriculum.

MAKING GAMES IN SCHOOL

Across the project there were a number of schools that worked with their students on various aspects of the production of digital games. These ranged from games that used software such as GameMaker from Yoyogames, which requires some coding skills; to Scratch and Sploder, which use a block programming approach; to games produced by repurposing non-game software, such as PowerPoint, to make simple games. Some teachers worked with their students to design games, game narratives or game boxes, but the games themselves did not reach production stage. The example I discuss in more detail is from a primary

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school where young children from eight to nine years of age made their own digital games. This was a very complete project, and all aspects of game-making were covered. It shows what is possible when even quite young children are given the guidance and opportunity to make their own games.

THE SCRATCH PROJECT

Scratch is free 'visual' programming software developed by the Lifelong Kindergarten Group at the MIT Media Lab (<http://scratch.mit.edu>). In this software, and also in the accompanying online community, you can create your own interactive stories, games, and animations and share them with others. Scratch is ideal for younger students, as they can create reasonably sophisticated games using block coding, built on the logic of programming, without actually having to learn to programme before they begin. The teacher used Scratch to develop a language and literacy focus through the game-making unit.

The Scratch project followed four distinct stages: reviewing commercial games, narrative development, designing and coding the game, and game production. The project had a very strong emphasis on composition, with students focussing on the development of the narrative storyline of their game and then thinking through how they would represent that story on screen.

In stage 1 the students analysed how storylines worked in digital games. They played games together in class and classified the features of the games. Their focus was to consider how all of the game elements came together to create the experience of the gameplay. They also considered the ways in which these games were marketed: the packaging and arguments made for buying the game.

In stage 2 the students worked in groups to plan, design and storyboard the narratives of their games. They drew pictures and designed the game characters. Eventually these stories became story booklets that accompanied the final game.

Stage 3 was devoted to the design and coding of the game. The students developed the narrative through the game play. They had to represent their characters and stories as well as they could through the coding, and animated their drawings and sketches. The final stage of the project was the production of the game. The students wrote instructions for their game. Students tested each other's instructions and really enjoyed playing each other's games and providing constructive feedback. All groups designed a box cover, logo and advertising text for their game.

The teacher made copies of the games on CDs. All of the students received a copy of their game and the game booklet at the end of the unit. This project was extremely successful, and the students showed that they understood how narrative worked across different platforms: in the storybook, in the game itself, and continued out of the game to the advertising material and reviews. One of the features of this project was the extensive support given by the principal of the school. Her support showed respect for the teacher and his work, and enabled him to spend the necessary time on this project. For the students, the project was extremely gratifying. They were very proud of their games and had developed considerable coding and compositional skills through this work.

BUILDING CURRICULAR KNOWLEDGE THROUGH MINECRAFT

Minecraft is an extremely popular digital game that is now owned by Microsoft. It is a 'sandbox' or 'open world' game, so there is no set way of playing and no levels or achievements that need to be gained. Because of this openness it is ideal for repurposing in school, as it provides a sophisticated virtual world that is an ideal educational platform. Educators are beginning to recognise the potential of *Minecraft* for usage in schools, and this is an area of growth in the use of digital games in schools.

In our project there were a variety of ways in which schools used *Minecraft*, but two approaches were most common: for designing and building models (building models for history; creating a model of an idealised local community; building a replica of the school) and as an environment for working on the school curriculum (science curriculum on sustainability; the development of a trading game in *Minecraft* to foster collaboration and problem-solving skills). In this article I will describe the project to map the school and the sustainable curriculum project.

RECREATING THE SCHOOL

One group of students very successfully recreated their school campus to scale in *Minecraft*. Their teacher had little experience with *Minecraft* herself but was confident enough to lead the students through the process. After the project she said, 'I think too often teachers think they have to know it all in order to get students working with something, but believe me, you don't.'

The project had several phases. Initially the teacher planned to use the experience of the class playing *Minecraft* together as a subject for writing, but it became a design and technology unit when the students suggested they create a model of the school for the upcoming Design and Technology Showcase. The initial task was planning how the model would be built and how the students might cooperate together to build it.

Students running a 'school tour'



The students decided to begin by building their own classroom, and one noticed that the carpet squares resembled the *Minecraft* squares, so they began by counting out the carpet and then transferring this to *Minecraft* blocks. There was a lot of mathematical work involved in transferring this basic initial counting into a scale model, but building their own classroom worked as a proof of concept.

In recreating their school, the students developed many other skills. There was a short ten-day timeline, and the students were motivated to complete it on time. They also wrote a 'Code of Conduct' about how to behave within the world and during construction. The teacher was delighted with their enthusiasm and the ways in which the students measured and cross-checked each building for accuracy. When the work was showcased, it was extremely popular and generated a great deal of positive feedback for the teacher and the class.

CLIMATE CHANGE

In this larger project, a full school-year group of more than 100 ten- to eleven-year-old students designed a new planet in *Minecraft*. The students were briefed that planet Earth was in chaos: 'Climate change has ravaged the land, with food and drinking water now in short supply. Civil unrest, extreme poverty and disease are rampant, as global warming has caused sickness, famine and a 5000% increase in the occurrence of natural disasters. Fossil fuels are all but gone, crisis talks are held by the New World Order.' They were then instructed to 'terraform' the new planet (in *Minecraft*), with the closing line: 'Good luck. The future of the human race is in your hands ... No pressure.'

This unit of work was located across both the Australian Science Curriculum (sustainability and biospheres) and the Social Education Curriculum (issues such as sustainable living and the social effects of climate change). Over the three years of the project, the teachers were very enthusiastic about the skills the students developed as they created the new world. They described students developing skills such as composition, imagination, creativity and thinking, through role-play.



Piles of solar panels ready for installation
(note the giant wind turbines in the background)

Each year the project was run slightly differently. A set of activities from one year of the project, for instance, included the following: Students designed their own spacecraft using Google Sketch-up, they then made an argument for their design to be the one selected to be built, and they participated in a drama activity, taking off from earth and landing in the *Minecraft* server. They also researched various aspects of science, needing to argue for what they wanted to build in the new world. Topics researched by the students included nuclear power, solar energy, wind power and sustainability.

Each time the unit was run, the teachers and students were incredibly engaged and excited by it. The teachers saw that valuable learning took place in this project and that the students developed initiative and cooperation skills through working with *Minecraft* in this way.

CONCLUSION

This short article gives just a few examples of the ways in which the teachers in our project used computer games in their classrooms.

FOR FURTHER INFORMATION ABOUT THE PROJECT, PLEASE VISIT:

<http://www.seriousplayproject.org>

<https://www.youtube.com/watch?v=i6lc8eeTx1E>

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SCHOOLS DOING TECH

CURRENT RESEARCH ON DIGITAL EDUCATIONAL MEDIA

Felicitas Macgilchrist | Head of the Textbooks as Media department at the GEI and Professor of Media Research at the University of Göttingen's Institute of Education

Contemporary education is, according to many observers, experiencing a 'digital revolution': New digital tools and practices are – in this view – leading to radical shifts in how education unfolds. Today's schools have access to a wide range of multimedia educational technologies, including interactive whiteboards, tablets, apps, laptops, and assessment software. Educational policy is keen to support digital innovation in schools. Recent initiatives include the German Federal Government's 'Digital Agenda', the European Union's 'Opening Up Education', and the 'Educational Offensive for the Digital Knowledge Society' launched by Germany's Federal Ministry of Education and Research in late 2016. 'Digital literacy' is a key issue, with fiery arguments unfolding over precisely which competences young people need in the twenty-first century. Indeed, schools that are beginning to introduce digital tools often see heated exchanges at teachers' meetings or parents' evenings. Some teachers and parents enthusiastically embrace the possibilities they see in networked, collaborative digital educational media; others show more resistance, demanding to know whether the school seriously understands how to improve teaching and learning with digital tools or whether it is simply seduced by shiny new toys.

Alongside these debates, technological changes in the early years of debates on digital education, there was little empirical evidence to support either side of this argument. More recently, an emerging body of research has begun to investigate the impact of digital technology:

1. Survey and interview methods are used in international information and computer literacy studies comparing national achievement levels (e.g. ICILS) or to investigate how satisfied students are with e-textbooks.
2. Experimental or quasi-experimental studies examine whether student motivation and achievement increase when using digital technology compared to printed textbooks. While motivation clearly increases with digital tools, the results on achievement are more mixed. Depending on the task, students sometimes achieve higher grades with digital media, and other times with print media.
3. Looking inside the black box of digital technology, the log data generated when learners use web-based e-textbook infrastructures has identified media usage patterns. The log files show how students engage with the interactive activities offered by the e-textbooks, such as note-taking, highlighting or starting/pausing videos.
4. Ethnography and other participant observation methods are beginning to explore how digital technologies are used in schools. Initial findings suggest that teachers' and students' preparation and digital literacy can be very varied within a single school, that young people demonstrate sophisticated identity work when they engage with media, and that these tools enable cooperative, collaborative and creative practices.

CULTURAL THEORY IN EDUCATIONAL MEDIA STUDIES

Against this background, our research at the Georg Eckert Institute approaches digital educational media primarily from the perspective of cultural studies, social sciences and historical

research. We explore how technologies are entangled with memory practices, space and knowledge construction, socio-materiality, political discourse, media practices and epistemic configurations. We investigate the mediality of digital educational media. In this way, the GEI taps into the fourth strand of research mentioned above, bringing ethnography, cultural studies and media theory to bear in a field mainly informed by psychology, information science and teacher training thus far. Our focus lies on digital textbooks, but also on the other digital media used in schools and on the socio-political contexts and debates in which these media are embedded.

THEORETICAL AND METHODOLOGICAL CHALLENGES

One important set of questions revolves around the theoretical and methodological approaches currently being utilised in the field of educational media studies. Which concepts can best capture ongoing changes or are particularly appropriate to observing current practices? The ongoing project 'Theoretical and Methodological Challenges Facing Future Research on Educational Media' reflects on these questions at the GEI. One goal is to adopt and adapt theories and methods from media and communication studies for the emerging field of educational media studies. A recent special issue of *bildungsforschung*, for instance, edited by Annetkatrin Bock and Lucia Halder, explores the potential of visual studies for research on textbooks and other educational media.

DISCOURSE AND DIS/CONTINUITIES

A second set of questions concerns the discourse surrounding new educational media. What does the preponderance of the verbs 'can' and 'could' in talk about digital educational media mean for current policy and practice? Take, for instance, statements such as: 'Fundamentally, new digital tools can offer a range of possibilities for the educational field.' Are we being seduced by shiny new toys? Is an ideology of 'innovation' being enacted with no perceptible change for pupils,



learning, teachers and teaching? Or are different goals and priorities entering educational practice that will radically change how young people learn for the future? How are curricula across Europe embedding digital learning into their subject-specific curricular designs? Where do parallels arise between debates about the introduction of digital tools today and the debates about the introduction of other 'new' media such as educational film in the 1920s? GEI projects such as 'The Discourse of EdTech', 'Innovative History Education for All' and 'Educational Films in the Interwar Period' are currently exploring these issues.

MEDIA PRACTICES

But perhaps the main question that current empirical research should address is: What is actually happening with digital media in schools today, and how are these digital practices entangled with the reproduction or transformation of social orderings? Shelves of books describe the 'state-of-the-art' of digital education, but there is still very little empirically grounded research on what the edtech researcher Neil Selwyn has called the 'state-of-the-actual'. Here, GEI projects such as 'digDAS: Digital Media and German Schools Abroad', 'Memory Practices' and 'Digital Teaching and Learning' (DTL) are conducting ethnographically oriented research, observing how media are used in contemporary classrooms. The next section describes central findings from the DTL project.

EVERYTHING STAYS DIFFERENT

LEARNING WITH DIGITAL MEDIA

Maren Tribukait | Research Fellow at the GEI, Textbooks as Media department

What happens when students work with digital media? Do they learn more efficiently – and if so, what does that mean? Do they look for answers to questions more independently, taking into consideration different perspectives and aspects of the topic? Or do they just Google information and paste it together or copy everything from Wikipedia? What opportunities digital media provide for schools is the subject of heated debate. The Georg Eckert Institute is currently studying the digital transformation in Braunschweig's schools – a process that is not at all a given in Germany.

This is not how I imagined a hi-tech learning environment. On my first visit to a Braunschweig grammar school, I let my gaze wander through the classroom. Tables, chairs, the teacher's pedestal, at the front an interactive Smart Board, some of the students playing with their cell phones – but where are the laptops? After all, I am here to study digital learning in a so-called 'laptop class'. Finally one girl pulls out a black device the size of an atlas from her backpack. As I learn later, everyone else has left their laptops at home – too heavy, too bulky, and the software updates take too long anyway.

After deciding to study the opportunities presented by digital media in the classroom, it does not take long to notice that the process is not really working in German schools. The school where I

conducted my classroom observations is relatively well-positioned: all A-level classrooms have a Smart Board; Intel and the Braunschweig Bürgerstiftung (Braunschweig Civic Foundation) sponsored laptops for all students in one year level and provided the necessary infrastructure; and across the hallway from the classroom is a computer lab. In 2014, only 12 per cent of youth across Germany were provided a laptop or tablet by their schools, as the JIM Study revealed.¹ And according to a PISA study, the extent to which German classrooms were technologically equipped in 2012 was lower than that in most EU countries, with 4.2 students per computer. Only in Bulgaria, Croatia, and Greece did more students have to share a computer.²

These numbers alone indicate that this country has placed little value on digital education so far. Against this backdrop, it was hard to imagine that the laptop classes in Braunschweig could achieve a new dimension of learning. The more fundamental question of whether digital technologies enable

¹ Medienpädagogischer Forschungsverbund Südwest, ed., *JIM-Studie 2014. Jugend, Information, (Multi-)Media. Basisstudie zum Medienumgang 12- bis 19-Jähriger in Deutschland* (report, 2014), 33, <http://www.mpfs.de/?id=631>.

² OECD, *Students, Computers and Learning. Making the Connection* (report, PISA, OECD Publishing, 2015), 21, doi: 10.1787/9789264239555-en.

this new dimension at all had to be shelved momentarily. The study asked how teachers and students in history classes dealt with digital media and whether there were noticeable changes compared with conventional teaching, for example through basic approaches to didactic innovation. Classroom observations were complemented by group discussions with students. The study's exploratory character provided initial insight into historical learning with digital media, as summarised in the following points:

1. Whether digital media are available in a classroom or not: the digital transformation shapes learning at school and influences all learning media. A textbook may still be called a textbook, but it is embedded in digital network structures that the students are aware of. In a group discussion, one student commented that the 'book consists entirely of a bunch of sources, but I don't believe it is a source in itself. It contains a lot of excerpts and a lot of internet sites, which I don't think is very good. And it never used to be like that, I don't think, in the textbooks we had before. There were always just the texts, and they weren't available anywhere else. But these texts (from the current textbook) can also be found on the internet.' She can deconstruct the textbook, refers to its links to the internet, and is simultaneously disappointed that the textbook has lost its authority. The digital availability of knowledge has thus relativised the value of the textbook.
2. A common argument for digital learning is efficiency, as emphasised, for example, by the European Commission's initiative 'Opening Up Education'. To what extent do laptops lead to more efficiency? We observed that rapid access to a variety of materials on the internet did increase the efficiency of lesson organisation – but only when the teacher or students knew

what they were looking for. When students were asked to do research on their own, the plethora of material on the internet became a challenge, as one student described: 'Yeah, I also found that on LeMO [a site from the Deutsches Historisches Museum] there was just so, so much. Also a lot that you couldn't possibly absorb or didn't need to know, at least not for this class. It was also interesting, but it took way too long. Personally I was completely overwhelmed by the page.' Thus, the excess of material led to confusion and – in terms of acquiring declarative knowledge – turned out to be a bad use of time. This example shows that efficiency may not be the best argument for using digital media in the classroom.

3. Students in our study used the internet above all for informational research, in order to answer questions that were posed to them. The greater potential of digital media – to find multi-perspective approaches to history – remained largely untapped. In particular, moments of irritation while doing research could serve as opportunities to ask new questions and better combine historical and digital learning. The search for historical information, sources, representations, and positions, as well as their evaluation, should be addressed and reflected upon more thoroughly. My observations indicated that students do not do this on their own within the existing framework; rather, they need explicit encouragement in that direction.

Based on these observations, our future research aims to describe digital learning cultures not as 'brave new worlds' but as social practices that include irritation and friction. Only with an open view of what takes place in the classroom is it possible to record the changes to learning processes that (might) result from the digital transformation.

OPEN EDUCATIONAL RESOURCES IN GERMANY

Annekatriin Bock | Research Fellow and Deputy Head of the Textbooks as Media department at the GEI

What status open educational resources (OER) can attain in the German education system has been the subject of heated debate for quite some time. Advocates of the 'open movement', for example, hail the free licensing of material and its consequent availability for free use and modification, which, in turn, provides a measure of legal security to users. On the other side, critics are concerned with how to guarantee quality and curricular relevance, considering that there are no official quality standards for OER so far. OER generally refers to educational material that can be created, revised, shared, and used by anyone and thereby falls under a free licence.

CENTRAL STAKEHOLDERS

The OER movement in Germany has been characterised thus far by a multitude of individual projects and stakeholders. Political and commercial institutions, as well as civic initiatives and platforms, have come together as a community in the last five years with the common goal of publicising and spreading OER in the area of education. Hardliners are even demanding a revolution of the entire educational sector.

Especially in the school setting, which has always been heavily regulated (and protected) by the approval guidelines of the state cultural ministries,

The OER Festival 2016 in Berlin



the pro and contra discussion of using OER in schools is gaining momentum. Seeking orientation and recommendations for best practice, education politicians are turning to both research and educational media producers for help.

CURRENT RESEARCH ON OER

Research on open educational resources in Germany has been mostly limited to so-called feasibility studies, in which established research institutions or civil society actors evaluate who produces OER, in what framework it is distributed and used, and what opportunities and challenges arise. The goal of these studies is above all to analyse the current use and prevalence of OER in Germany.

In addition to feasibility studies, several other investigations have followed and evaluated specific OER projects. Research questions in such projects generally ask what ‘works’ well and which best practice examples should set a precedent for the future. The literature on OER also includes dossiers, articles on metadata and technological challenges, texts that elucidate the legal aspects or compare OER measures in different federal states, and white papers that provide a summary of current knowledge on OER.

Although this article does not allow for a comprehensive review of the research, even a brief glance at the corpus of literature clearly reveals one thing: the debate thus far lacks in-depth research – not only on the ‘what works best’ questions that education politicians and practitioners are itching to answer, but also on aspects relevant to the humanities, social sciences, and cultural studies. In what

ways does the increasing use of free educational material change the culture of learning in the classroom? Does a culture of sharing emerge that might later make its way into other areas of society, such as the education and job markets or the health or social sectors? Which new media practices and digital competences do students and teachers develop in dealing with OER?

TEXTBOOK RESEARCH AT THE GEORG ECKERT INSTITUTE AND OER

Society-wide digitalisation trends are already tangible in the area of school education. The GEI, which long focussed almost exclusively on textbooks, has joined the societal debate on digitalisation in schools and expanded its scope to include digital educational media. OER are a part of this larger development. And even though the term OER includes more than just digital educational media, it is the multimedia, interactive and multiperspective OER that best embody the advantages of open digital educational media. Considering the potential of these resources as discussed here, it is easy to ask what role textbooks should play in relation to other digital educational media.

To answer at least some of these questions, the GEI is drawing on its many years of expertise in studying school-based educational media in the German and international context. Since 2014, the institute has increasingly dealt with OER in the area of school education. Taking a historical and cultural studies perspective, the GEI is studying changes to educational material that result from the media transformation, providing answers to the questions that will shape our future.

THE MULTIMEDIA TEXTBOOK (*MBOOK*)

AS A POSSIBLE ANSWER TO THE EDUCATIONAL
CHALLENGES OF THE DIGITAL REVOLUTION



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Marcus Ventzke | Research Fellow at the Catholic University of Eichstätt-Ingolstadt

Waltraud Schreiber | Professor for Theory and Didactics of History at the Catholic University of Eichstätt-Ingolstadt

TRANSFORMATIONS AND CHALLENGES

The printed textbook as a static, unchangeable, uniform learning tool, absorbed in a mostly linear manner, reflects the educational ideal of the nineteenth century. It has increasingly come to symbolise the lockstep school of the industrial era: a school with strictly disciplined, homogenous groups, a school that aimed to inculcate all of its students with the same information at the same time.

But with digitalisation, the world finds itself in the middle of a fundamental change, one that will have disruptive consequences for all areas of society. Demands on educational actors are also undergoing dramatic transformations. Digital thinking diversifies learning needs and learning requirements, counters previous notions of when and where learning takes place, and reshapes the forms of social organisation and understanding of roles involved in learning processes. Behind all of these changes lies the legitimate expectation that the digital revolution is releasing major individual creative potential.

Amid this upheaval, the printed textbook can only go so far in contributing to the development of competences needed to shape our living, working, and thinking environments in the twenty-first century. Arguments supporting the textbook – interwoven with the mass society of the industrial age and based on educational theory – referred to mostly constant life and career paths reproduced across many generations, for which the knowledge of previous generations remained largely relevant in terms of both quantity and quality. Such arguments were based on the claim that homogenous social groups in homogenous social classes should be shaped in a certain way, and to that end they

demanded the establishment of a set and defined educational canon. This would serve to maintain existing socio-economic structures, from which a majority of people could expect to benefit. However, this intergenerational educational contract has started to crumble: secure jobs with a structural resemblance to those in the past are becoming ever more elusive. Knowledge in modern societies is not only growing but also shifting its practical applications at an increasingly rapid pace. Change has become the norm because the challenges are constantly evolving.

DIGITAL MULTIMEDIA TEXTBOOKS SEIZE ON THE CHALLENGES OF CHANGE

The *mBook*, a digital multimedia learning tool, is paving the way in connecting the traditional textbook with the demands of the twenty-first century. The goal of the ‘mBook Project’ is not to replace material-based, core classroom work with a diffuse and arbitrary array of material. Instead, as a digital workbook and reflection book, the *mBook* aims to free teaching and learning from the static, analogue patterns of thinking and distributing knowledge. With this in mind, the *mBook’s* approach includes the following:

- It eliminates material limitations arising from the formats and quantities of the printed page and promotes critical thinking through the inclusion of multiple perspectives.
- It can be individualised by the user through notes, marks, and material.
- It covers the full curricular content of multiple school years at the secondary level, right from the beginning (i.e., students do not only have access to volumes for their own year). This enables a long-term development of competences through repetition and exam preparation.

- The content and methods of each subject are specifically related to the present reality, current issues, and the goal of providing orientation, in order to guide the acquisition of applicable knowledge rather than the rote memorisation of meaningless masses of facts.
- Its use of multimedia leads to greater methodological and didactic value.
- It exposes the backgrounds of narratives: the authors explain their individual perspectives and relation to the subjects through dialogue and transparency texts, as well as in videos.
- It functions not as an automated 'lesson machine' but as a navigation system for competence-oriented learning processes.
- It does not simply demand nuance but actually creates it through the material.
- It is dynamic rather than static – a book that is constantly developing and never grows outdated.
- It taps into the potential of using multimedia

in its material for teachers as well (*Lehrerbände* or teachers' volumes).

- It reflects the fundamental curricular and didactic structures that exist across the federal states.

DIDACTIC FOUNDATION OF THE MBOOK

The goal of the multimedia history textbook (*mBook*) is easy to describe: it aims to support students in developing their historical competences and empower teachers to orient their teaching towards these competences. At the root of the mBook concept is an understanding of 'competence' (*Kompetenz*) from the group 'FUER Geschichtsbewusstsein' (FUER Historical Consciousness). It is thus conceived as a teaching and learning tool supporting a competence-oriented history class.

Drawing on Franz Weinert, 'competence' is understood as the responsible application of skills, abilities and preparedness to deal with questions and problems arising in new situations. The historical competences needed for historical thinking can be derived from the (ideal-type) cycle of historical thinking, as modelled by the FUER Group. The Group presents four areas of historical competence: the competence to deal with historical questions (*historische Fragekompetenz*), the competence to deal with historical methodology (*historische Methodenkompetenz*), the competence to use history's potential as a source of orientation (*historische Orientierungskompetenz*), and the competence to acquire and use relevant historical terminology, categories, and scripts (*historische Sachkompetenz*). With these four areas, all didactic requirements of historical work can be understood



DIGITAL EDUCATIONAL MEDIA AT THE GEI

The inexorable march of digital and interactive teaching media into classrooms is well underway. It is thus all the more important that such material is credible, intelligible and appropriate and that it piques pupils' interest. The GEI currently provides teaching resources on three web portals. The material covers social diversity and multi-ethnic border regions ('Pruzenland' and Upper Silesia) and is available to download free of charge. These multimedia teaching materials are all based directly on findings from research carried out by the GEI.



ZWISCHENTÖNE (NUANCES)

TEACHING MATERIALS FOR CLASSROOM DIVERSITY (ZWISCHENTOENE.INFO)

Inga Niehaus | Research Director at the GEI

Classrooms naturally reflect the diversity of pupils' individual biographies and the increasing pluralisation of living environments, particularly in post-migration societies. Social diversity must be addressed in schools in order to conquer resentment and animosity towards minorities and migrants. Training social and communication skills and ensuring that teaching content includes multiple perspectives can teach pupils a constructive approach to diversity.

The 'Zwischentöne' project develops teaching modules that provide new methods of addressing social diversity within the teaching environment. The multimedia materials, which are designed for secondary schools, present social diversity as normality and address questions commonly arising in heterogeneous societies.

The project provides digital teaching resources for educational practice in schools, which address current socio-political topics and are designed to complement existing textbooks. Material covering 53 individual topics is currently available online. These topics cover a range of social diversity aspects such as migration and refugees, diverse living

environments in societies shaped by migration and facets of religious affiliation. The didactic composition of the platform and the themes it covers make it unique in Germany.

The teaching resources are produced through close collaborations between GEI staff and external authors. The contributors each bring their specific didactic and academic expertise to the project, in turn providing schools with access to the most recent research in the social sciences. A central part of the project is publicising the internet site at events for teachers as well as via the German Education Server and the social media channels Facebook and Twitter. In the last three years 27 seminars have been held for teachers, and the website now has 2300 users and records up to 800 downloads each month.

From 2017 onwards, 'Zwischentöne' project aims to start providing multilingual materials on a European platform, alongside resources from other partners. This will occur within the framework of an EU-sponsored project and will make the materials available to an international circle of users, raising the project's profile and application.



Screenshot:
pruzzenland.eu

DIGITAL TEACHING MATERIALS

'PRUZZENLAND'

Stephanie Zloch | Research Fellow at the GEI, department Europe, Head of the working group 'Migration and Education in Germany since 1945'

Is it possible to recount a pluralistic and interwoven history of Europe from a regional perspective rather than that of a nation state? And if so, would this also function for a region such as 'Pruzzenland' (East Prussia / Warmia and Mazury / Oblast Kalinigrad / Lithuania Minor), which is shaped not only by diverse cultural and multi-ethnic traditions but also by competing national claims?

These questions are the subject of a project supported by the DFG and the Polish Ministry of Science and Higher Education: 'The "Pruzzenland" as a Region of Broken Memories: Reconstruction and Representation of European Historical Space in Germany, Poland, Lithuania and Russia since 1900'. In 2014 the findings from an international comparative analysis of memory cultures and identity constructs in textbooks were published by the GEI in its series 'Eckert. Die Schriftenreihe'.

Following the publication, the project team addressed the challenge of transferring the academic findings to the wider field of education. The result was a multilingual, instructional, digital collection of source materials for 14- to 18-year-old pupils in Germany, Poland, Lithuania and Russia with a particular interest in history and geography, who could use the website as a reference tool for presentations, project work, competition entries or study trips.

The website pruzzenland.eu presents ten topics that include the German, Polish, Russian and Lithuanian perspectives as equitably as possible. The topics are: Pruzzen, 1410, Migration, Beliefs, Personalities, Living Environments, City/Country/River, Men and Women, Freedom, and Jews. The topics address 'gaps' in current textbooks and in

historical research. The aim behind the selected source material, which comes from libraries, archives, museums and the internet, is to highlight the interwoven historical perspectives of the region but moreover the ways in which they contrast and oppose the established national narratives. A range of different sources are employed for this purpose: texts, pictures, maps, audio files and videos. One distinctive aspect of the project that makes it exceptional among existing Europe-

an educational media is the multilingualism of its source material. It is hoped that the digital sources will make an impact in educational practice and that they will stimulate comment and discussion and prompt further international projects. The promotion of the 'Pruzenland' website remains important, and the team uses presentations, publications and notifications in journals and on education servers in this task.

LESSONS ON UPPER SILESIA

Marcin Wiatr | Research Fellow at the GEI, department Europe

An examination of textbooks in many European countries quickly reveals that European border regions are paid scant or only fleeting attention in respective educational policies. Why? Primarily because addressing border regions necessarily invalidates the traditional national perspective. Any examination of the transnational history and culture of particular regions must be founded on principles regarded in the field of international textbook research as central parameters for textbook narrative and teaching materials: multi-perspectivity and an open-minded approach towards history and controversy. These principles not only allow for shifts in perspectives, they also widen viewpoints and augment the number of perspectives from which one can recognise and reflect upon existing borders of historiography. Such moments of innovation can be stimulated by an examination of Upper Silesia and used to develop educational materials further.

Teachers wishing to exploit the potential of European regional history in the classroom frequently

encounter barriers in teaching practice: the applicable curricula rarely allow much leeway and there is a lack of suitable textbook narrative and teaching resources.

A German-Polish website (oberschlesien-im-unterricht.net), which was set up in 2014 as part of the project 'Upper Silesia and its Cultural Heritage – Memory Politics, Education Policy and Didactic Innovations', introduces new perspectives on selected aspects of the culture and history of Upper Silesia and encourages closer examination of a region considered to be on the very fringe of Europe. The project proposes ways to address the complex history of Upper Silesia in history lessons for pupils at upper secondary level (year 9 onwards in German grammar schools and year 2 onwards in Polish Lyzeum). The website will be continually improved, updated and augmented by new teaching modules. It focusses on intersecting or complementary perspectives on relationships or social and cultural history, which should obviate monocausal descriptions. It thereby aims to help



Screenshot:
oberschlesien-im-unterricht.net

pupils develop their judgement and decision-making skills as required in the curricula of both countries, and also enable pupils to actively participate in political discourse.

The materials also make the culture and daily life of the region tangible – information on the footballers Miroslav Klose or Lukas Podolski is just as popular as the experiences of the cross-border commuter Janosch, the well-known children’s author from German Upper Silesia, or details on the multi-linguistic nature of the region. How did life change for Upper Silesians after 1922 when the region was divided by an artificial and entirely new border? Why do people in the region still support the German national football team? Why do some German national players speak Polish to one another? Why is it still possible in Upper Silesia – 70 years after the last border movement, following attempts to rid the region successively of both Germans and Poles, and after expulsions and resettlement – to hear both German and Polish spoken alongside the Upper Silesian dialect?

Answers to such questions can be found in these modules that open up the region of Upper Silesia to teachers and pupils. The modules – currently available are ‘The German-Polish Border’, ‘Languages’, ‘Football’, ‘Industry’ and ‘Migration’ – do not provide a fixed lesson plan, rather they

provide material that can be implemented flexibly by the teacher. They are therefore easy to adapt to the respective didactic cultures and can be used in both Germany and Poland. One of the fundamental criteria during the development of the modules was the potential for them to address topics beyond Upper Silesian regional history and to provide an introduction to the wider phenomenon of historical border regions in Europe. The materials are supported by references to sources as well as historical and modern video and sound recordings, and they also provide work sheets and assignments to help teachers plan their individual lessons.



CHILDREN AND THEIR WORLD

Andreas Weiß | Research Fellow at the GEI, department Europe; Joint Junior Research Fellow at the Institute of Advanced Studies and the German Historical Institute London for 2016-17

With the digitisation of archives and library collections in the last years and decades, often involving enormous financial and personnel resources, the question of how the results will be used in the future has grown ever more pressing. The digitised files need to be processed and stored in a way that enables other projects and scholars to use them for their own research.

This applies not only to the technical side (formats) but also to the treatment of the content. Especially for historical research, it is crucial that the presentation of data and digitised media be as 'open' as possible, since historians often formulate their research questions only after examining the material. A further problem arises in the application of existing digital tools to historical research. Aside from visualisation and digital edition projects, the most important tools used in the field of history so far have not come from the discipline itself, from history or a supporting field, but from neighbouring fields such as literary sciences and (computer) linguistics.

The project 'Children and Their World' aims to address this contradiction. We understand the digital humanities as a process that brings together new methods and technologies with new research questions in order to generate new knowledge in the respective discipline – in this case, history.

Funded by the Leibniz Competition, our project combines historical competence with the expertise of computer linguists and IT specialists (TU Darmstadt), as well as information scientists (University of Hildesheim Foundation). Thanks to the support of several partners in Germany and abroad, it can also expand the resource base to include digitised media from other institutions (TU Braunschweig, Bayerische Staatsbibliothek). Furthermore, through cooperation with literary scholars (University of Zurich, Swiss Institute for Children's and Youth Media/SIKJM), we are able to bring a new and interesting source to the GEI: namely, children's and youth literature. The project will thus expand the narrow, textbook-focussed notion of 'educational media' to reflect the project's subtitle, 'Knowledge of the World and Its Interpretation in Textbooks and Children's Literature, 1850–1918'. The innovative nature of the project also shows in its structure at the Georg Eckert Institute, located across several different departments. As part of the Europe and DIRI departments, working closely with the research library, 'Children and Their World' draws on the diverse personnel and infrastructure resources available at the Institute. The high quality of data processing at the research library enables us to provide full-text searches and sorting according to classification, with the help of a Solr web platform. To this end, we have added specific

metadata (for example, type of school and school level, or whether the material was aimed at only girls or boys). When the project ends, this fine-tuned metadata analysis will be available to the research library for further use.

Our original digital source material consists of the core media from GEI-Digital (approximately 3,000 German-language school textbooks published from 1850 to 1918 in the subjects of geography and history), as well as 300 works of children's and youth literature from the same period. The latter are drawn mostly from the Collection Hobrecker in Braunschweig and selected for the project according to specific criteria. Our research asks how knowledge about the world, communicated to young people through textbooks and children's and youth literature in the late nineteenth century, was prepared for different religions and states, denominations and genders, school types and school forms. For example, did children learn something different about Africa from a Bavarian *Volksschule* (elementary school) textbook than from a *Hauptschule* (general secondary school) textbook in Berlin? And was war portrayed differently in books for upper-level girls' schools than in *Gymnasium* (grammar school) textbooks for boys?

Since these are very broad questions, and our previous experience with digital tools is too limited to prepare such a huge quantity of data for analysis right away, 'Children and Their World' has developed specific questions that can be evaluated concretely to test the process for the historical discipline.

Take, for example, the question of how differentiated the nineteenth-century German educational

landscape was, or how much influence school conferences had in determining the topics of textbooks.

In 1890 and 1900, two conferences took place in Prussia to discuss, among other things, university admissions: first, the question of whether only *Gymnasium* graduates with A-level exams (*Abitur*) should be admitted or whether to expand the pool to graduates of other types of upper secondary school (*Oberrealschulen, Realgymnasien*); second, the question of curricula. Kaiser Wilhelm II argued for a de-prioritisation of ancient languages and material in favour of a comprehensive engagement with German history since the Wars of Liberation against Napoleon. This emphasis would increase patriotism among adolescents.

So far, we have pursued two approaches to making the enormous quantities of data useful for historical research. Using Mallet, a software toolbox for working with vast amounts of text, we have generated different topics through a procedure called 'topic modelling'. This means roughly that a certain number of word lists are created based on statistical relationships between the individual words (frequency of occurring together). At the same time, we are attempting to integrate online ontologies to facilitate semantic searches. Like a Google query, a semantic search looks for individual terms, but it also has databases available to formulate a more precise search, meaning that the terms in the query receive more or less weight depending on the content of the search and texts contained in the database.

Both approaches can also be used to recognise structural OCR errors and correct them in GEI-Digital. In addition, we have started to test

different annotation tools, but the amount of work required seems too great to process such a large quantity of text (more than 600,000 pages) within this project. Optical character recognition (OCR) errors most clearly demonstrate the limitations of digital tools for historical research. Fundamental to the success of any project like this is the quality of the prepared texts. Even today, the OCR error rate is too high – particularly with the older German Gothic type (*Fraktur*) – for fully automated text analysis. Adding to the problem, there are no freely available lexica that would enable an automatic standardisation of spelling across the different texts. Thus, nineteenth-century orthography and printed type still represent a major challenge to digital historical scholarship.

To report on some of our preliminary results: Using a source analysis based in the digital humanities, we have found that the educational landscape of the German Empire must be viewed with great nuance. While a number of Prussian themes related to establishing ‘Lesser Germany’ (Kleindeutschland) found their way into textbooks of the southern states, the wide variation in textbooks shows that a top-down indoctrination and standardisation of the educational landscape did not succeed.

This is also reflected in findings from our parallel study of educational journals from the same period, which, depending on the author’s perspective, critiqued the various pedagogical or historical approaches of the textbooks. For example, numerous popular works of cultural history are criticised by proponents of Wilhelmine education, which concentrated on the heroisation of individual figures.

At the same time, elements of cultural history made their way into textbooks focussed on a history of events; this applies to textbooks for both *Volksschulen* and *Gymnasien*.

In addition, the results of our ontological experiments (with special thanks to Christian Scheel) show that ‘world histories’ at the end of the nineteenth century increasingly corresponded to our notions of world history today; history textbooks, at least world histories, became increasingly ‘objective’.

Our data also draws a clear picture of the temporal lags in top-down educational reforms. As other scholars have suspected, the resolutions from the two school conferences in 1890 and 1900 were largely unsuccessful: the humanist educational ideal with its strong emphasis on antiquity remained dominant in textbooks for many years to come.

At the same time, girls’ *Gymnasium* textbooks proved to be surprisingly modern in their choice of topics: many of the books moved away from classic notions of women as housewives and mothers. Some textbooks introduced heroic female figures active in the war as sources of identification. Examples of these include Queen Louise of Prussia or Joanna Stegen, the so-called ‘Heroine of Lüneburg’. These women, who actively influenced the fate of the nation, did indeed serve as role models; for young women of the German Empire’s upper class, being bound to the ‘home and hearth’ no longer represented the only possible future.

INTELLECT UNDER PRESSURE

Urs Hafner | Journalist, Zurich

Some call it a revolution, others call it hysteria, others are just sick of talking about it. The latest buzzword in the liberal arts and social sciences is 'digital humanities', in other words, digital human sciences or the digital science of people. But this virulent concept most often refers to the liberal arts, and that is what makes it so irritating. It brings together two things that seem irreconcilable: the humanities on the one hand, with their well-tryed hermeneutics, with their focus on understanding texts and content, interpreting hidden structures of meaning in the world, and on the other hand the future, the new, the digital, with its unlimited possibilities of storing, managing, calculating, and evaluating all kinds of data.

A NEW REGIME

Regardless of his or her position on digitality, every humanities scholar knows that this polar opposition does not really exist. Even the classical philologist sends email, uses databases, manages information on his computer, and gratefully views digitised manuscripts and editions online that he would otherwise have to seek out in remote archives; in particular, the digitisation of text editions by classical authors has found broad acceptance among humanities scholars, since this allows users to easily comb through them for keywords. And on the other side, even the most euphoric digital advocate cannot sidestep interpreting the images or texts she is working with if she wants to call herself a scholar of the humanities. The uproar triggered by digital humanities rather derives from the feeling that its proponents are attacking the humanities at their most basic core – and that the discipline itself is facing a crisis. Otherwise people's reactions would be more relaxed.

Since the rise of 'new public management' and the innovation paradigm at the end of the last century,

all academic disciplines have found themselves under increasing pressure, which, in view of shrinking state funding, they will likely continue to feel in the near future. In this 'economised' research landscape, they are forced to procure third-party funding, show evidence of their progress, prove their usefulness, and contribute to the economic prosperity of society. Ideally they should produce a marketable product, or at least an impressive result. The humanities in particular are not cutting a very good figure under this new regime, with the exception of a few historians who have achieved high sales with books on nationally relevant historical topics or biographies of prominent persons, not seldom eliciting the contempt of their colleagues in academia. Put on the defensive, the humanities now find themselves fighting a general suspicion of *l'art pour l'art*, art for the sake of art.

Interestingly, the natural sciences do not have to answer to the same standards, even though research in this area rarely produces 'positive' or 'quantifiable' results. However, the natural sciences – for example, biology – enjoy the advantage of depicting themselves and their research as part of a chain that could potentially lead to a promising new medication or a groundbreaking therapy. Along the rocky path to this destination, and this seems to find broad acceptance, detours and setbacks are inevitable. At the same time, the findings of, say, particle physics, even though very few people truly understand them, generate such extreme fascination that the enormous sums of money devoted to labs like Cern are rarely called into question. That most humanities disciplines (like some of the natural sciences) are not really market-compatible is understandable; less clear is why they have such a hard time communicating their cultural services, their 'benefit' to society. They actually need to go on the offensive. In Anglo-Saxon countries their situation has grown

precarious. According to the philologist Gerhard Lauer at the University of Göttingen, the humanities there receive hardly any public funding at this point and have to finance themselves through tuition fees. If things continue in this vein, he says, they will not have much of a future. Lauer is a fan of the digital humanities. Indeed, digital tools seem to have arrived right on cue. They lend the humanities a modern touch and promise a connection to the statistically based natural sciences, which are always one step ahead in the research grants. But what exactly should we understand 'digital humanities' to mean?

For Claire Clivaz, theologian and an open advocate of the 'digital turn', the digital humanities have ushered in a 'new era': the humanities are finally moving beyond the study of only texts to look at countless other documents, to study sounds and images – although admittedly the humanities have included these materials for quite a while. Clivaz works at the Laboratoire de cultures et humanités digitale at the University of Lausanne, Switzerland, a centre for digital humanities founded in 2013. The 'laboratory' (not coincidentally a term that usually refers to a research centre in the natural sciences) is affiliated with the faculties of social sciences, humanities, and theology and aims to bring together all researchers at the University of Lausanne whose work has to do with digital humanities. It is not by chance that Clivaz cites bioinformatics, a natural science rather than liberal arts discipline, as the centre's model, with its interactive, three-dimensional data visualisation. Traditional 'close reading' is still important, she says, but the future also lies in 'big data' whether one likes it or not. Ultimately this area is also where the money is.

TEXT AND AUTHORSHIP

Enrico Natale, historian and director of infoclio.ch, takes a similar approach. Infoclio.ch is a digital platform for the humanities, funded by the Swiss Academy of Humanities and Social Sciences. It contains job listings, event tips, and reviews, but also organises events and serves as a point of contact among international projects. For Enrico

Natale, the digital humanities represent the side of the liberal arts that tackles the not-so-minor task of 'meta-reflection', which considers the crisis of academic policy brought on by digitalisation, the problem of copyright issues, and new communication possibilities.

For many of its proponents, the digital humanities are nothing short of a new discipline that is revolutionising the liberal arts. So far, however, evidence of its success has been modest. Two years ago, researchers presented a series of digital humanities projects at a conference in Bern. In line with the current zeitgeist, they spoke of more practical applications, more reach, more feedback, more data and better interconnectedness, but new findings remained few and far between. There was an undeniable fascination for the positivist regrouping of large amounts of data, but the costs were often completely disproportionate to the results. To what extent digital technologies in the humanities and social sciences exceeded the usefulness of their traditional counterparts remained unclear.

What was clear, however, was that the argumentative text, still at the heart of the humanities, is losing its status. As a completed work, a text – whether an essay or a monograph – still testifies to the reasoning and conclusions of its author, who has channelled his experiences, contemplations and literary influences onto the page; it still constitutes a 'narrative' that, especially in the field of history, tells its readers a story based on and legitimised by primary sources. In contrast, the text of the future, according to some digital humanities advocates, is an 'openly' accessible online publication – as if everything free of cost and code online were automatically available to the entire global public, which happens to have a burning interest in the latest specialised knowledge. The word 'open' is becoming increasingly pervasive in the world of academia, whether as 'open data', 'open access' or 'open source', and it takes a strong ideological lens: a simple equation states that the greater the 'openness', the greater the progress and wellbeing.

The 'open' publication calls traditional authorship into question: many people can contribute to its creation; it remains forever unfinished; and in place of references are masses of aggregated data and objects. The text dissolves, becomes fluid. With this kind of publication, the reader no longer assumes it contains a specific meaning that he is supposed to decipher. He rather identifies single, not necessarily text-based elements in the publication that he can reuse in the future. This task can also be fulfilled by a programme that compiles and sorts data according to algorithms. Such a programme, however, can only set the data in relation to each other based on probability; it cannot draw conclusions about causalities. And it cannot interpret texts. Many proponents of the digital humanities like to support their vision, somewhat provocatively, with the work of post-structuralist thinkers such as Roland Barthes, Jacques Derrida, Michel Foucault and others, who already anticipated the 'death of the author' and the dissolution of the text in the 1960s and 1970s. These anarchic interpreters of signs and discourse analysts, these creators of artistic, original monographs: digitalists *avant la lettre*? This view rests on a clumsy misunderstanding. With their attacks on the objectivist and orthodox tendencies in the humanities, these thinkers actually hoped to sharpen their readers' consciousness to the power and self-will of language.

So what does the liquidation of text mean for the humanities? If the digital humanities establish themselves as a separate discipline and strive to be more than simply an auxiliary science – like heraldry or numismatics in historiography – then scholars must consider the methodological consequences of taking the digital approach, according to Markus Krajewski, media theorist at the University of Basel. This, he says, has hardly taken place. He argues for a reversal of perspective: not to ask what the liberal arts can do for the digital humanities, but rather what the digital humanities should learn from the liberal arts. Because for Krajewski, who does not shy away from provocation either, the digital humanities are nothing new. His examples are a tour de force: he dates digital

calculation on the basis of 0 and 1 back to the philosopher Gottfried Wilhelm Leibniz, who died in 1716; he traces mass email communication to intensive letter exchange during the early modern Republic of Letters; Google's goals, he argues, are no different from those put forth by the organisation theorists Paul Otlet and Wilhelm Ostwald in the late nineteenth century; Facebook's brave new world is rooted in data structures of the eighteenth century (such as the timeline) that tried to visualise knowledge more efficiently; and the internet server, of course, reflects both the ancient Roman postal system and the baroque valet...

AND NOW?

Social media in ancient times and the Middle Ages? The media historical perspective certainly encourages us to relativise the hype surrounding the digital humanities. Digital tools – like the printing press in its time – are new technologies that ease the work of scholarship but also generate new questions: What happens to a text under the rule of the algorithm? What happens to the reader if digital or digitally compiled texts are only ever skimmed or no longer intended to be read at all? At the same time, the rise of the digital humanities should encourage the liberal arts to confidently remind society of their strengths: reading (not only texts but the world in general), reflecting and questioning.

It would not hurt to know more about the technologies we use as a matter of course: about the fibre-optic cable or the functioning of databases and repositories. For example, Google's 'Ngram Viewer', which allows researchers to search nearly five million books in different languages, is based on an opaque selection of works – which significantly reduces the validity of the results. At least in this regard, both sceptics and digital humanities adepts completely agree.

'Digital Humanities' und die Geisteswissenschaften: Geist unter Strom, Neue Zürcher Zeitung Arts Section (Feuilleton), 4 July 2016, <http://www.nzz.ch/feuilleton/geist-unter-strom-1.18582482>. Translated and printed with permission from the author.

DIGITAL TEXTBOOKS AS A CHALLENGE TO THE LIBRARY COLLECTION

Anke Hertling | Head of the GEI research library

Digital textbooks and the new opportunities they represent for teaching and learning are gaining traction worldwide. As the research library of the Georg Eckert Institute works to expand its collection profile to reflect this development, the immateriality of digital textbooks raises fundamental questions for library and information sciences.

While the e-book gains prevalence in everyday reading, the digital textbook is becoming an increased focus of textbook production. More and more publishers, along with political actors such as education ministries, are releasing digital textbooks. As part of the 'Specialised Information Service (FID) on Educational Science and Educational Research' funded by the German Research Foundation (DFG), the research library of the GEI is documenting developments worldwide and formulating a concept to systematically integrate digital textbooks into the library collection. From a librarian's perspective, there are currently three types of digital textbook, which differ from each other in terms of production and accessibility:

Digitised textbooks are the digital versions of printed textbooks. They are made available digitally after the printed book is released. Several projects are working to digitise copyright-free textbooks in particular and make them available online.

Born-digital textbooks originate only in digital form, and their use revolves around digital contexts. They are produced by textbook publishers and generally provided at an additional cost alongside the corresponding printed works. Digital

textbooks expand on the printed editions through multimedia, interactive and individualised elements. In addition to publishers, countries with state-organised textbook systems are increasingly building online textbook platforms overseen by the respective ministries of education, which hold the rights to the textbook content. These platforms normally offer copies of the textbooks via PDF download or flip-through access in the browser, both free of cost. The printed versions often appear in parallel.

Open educational resources (OER) are usually born-digital and produced as free, accessible learning and teaching resources by many different parties involved in educational policy and practice. The majority of OER today are supplementary classroom materials. However, projects and initiatives around the world are placing greater emphasis on creating comprehensive textbooks in OER form.

In view of the increasing number of digital textbooks, the GEI research library is working to integrate the various publication formats into its collection profile and make them available to researchers on a long-term basis. The GEI's online platform GEI-Digital (<http://gei-digital.gei.de/viewer>)



From library stacks ...

already presents an extensive collection of digitised textbooks. It currently includes 4,300 copyright-free German textbooks in the subjects of history, geography and politics, as well as readers (*Lesebücher*) and studies of the natural and cultural world (*Realienbücher*), ranging from the seventeenth century to 1918. Parallel to the expansion of GEI-Digital, the research library is concentrating its efforts on the numerous born-digital textbooks conceived for the classroom and the specific challenges they present.

LICENSING VS. PURCHASING

Collecting, archiving, and providing access to born-digital textbooks are activities linked to changes in all areas of the research library. The immateriality of these new resources plays a central role. Like other digital media, digital textbooks are not purchased in the classic sense: contracts of sale generally apply to physical objects, while digital media are rather linked to licencing agreements. Unlike purchases, which allow libraries to acquire specific works as their own property, licencing agreements regulate the right to use digital content. This distinction is significant for both the acquisition and the use of the material. It is no longer sales law but copyright law that determines the conditions of use, and this provides much stronger protection for the interests of the rights holders. Each instance of copying, printing, downloading or saving the digital content has to be approved individually and often paid for separately by the library.

Whereas libraries have a range of different licencing models available for digital academic literature, commercial publishers are not currently planning to offer comparable agreements for digital textbooks. Almost exclusively, these works come with licences that limit their use to the classroom in terms of both who has access and for how long. Free digital textbooks from the online platforms of ministries of education present a difficult situation as well. Often these sources completely lack licencing information that would make it legally possible for libraries to provide scholars with sustained, long-term access. In addition to extensive research on the digital textbooks themselves, the library has also assumed the task of contacting publishers and providers to negotiate adequate licences for research. This process requires knowledge of international copyright law and a keen ability to negotiate; as our experience with e-books and e-journals has shown, digital products can end up generating much higher costs than printed works. On top of that, the number of printed textbooks is not diminishing as fast as digital textbooks are proliferating, meaning that the library must plan for higher acquisition costs and greater personnel resources in growing the collection.

HYBRID COLLECTION PROFILE

Even though certain textbooks are now published only in digital form in countries such as South Korea, Italy or Poland, we cannot expect to see the printed textbook disappear any time soon. Digital

textbooks most often appear alongside the printed version, highlighting the necessity to develop a hybrid collection profile to include both printed and digital works. In order to integrate digital textbooks into the collection of the GEI research library, we have formulated a few initial guidelines:

1. The library shall acquire a digital textbook if the printed version no longer exists, or if the content of the digital textbook differs from the parallel printed edition.
2. In the case of parallel versions with identical content, we shall weigh the costs but aim for 'e-preference'; in other words, acquiring the digital textbook should take priority.
3. As a condition for acquiring a digital textbook, we shall require the producer to provide long-term access, for example through a so-called 'campus licence', which enables access to all users registered in the GEI's IP system.
4. Finally, the research library must be allowed to store an archival copy of the textbook. Only with this step can the library fulfil its archival role and guarantee a digital textbook's long-term availability for research in the future.

To what extent our library can achieve these goals depends on financial factors and the licences different textbook producers are willing to provide. Long-term access to digital textbooks is crucial in two respects: First, digital textbooks are ephemeral media; compared to printed media, their approaches and content change much more rapidly. Second, the GEI research library is the only institution in the world that systematically collects international textbooks in the social science sub-

jects. Because of this, our collection profile must be structured in a way that treats digital textbooks as a valued aspect of cultural heritage.

Expanding the collection to include immaterial cultural heritage touches on another fundamental question. Michael Knoche of the Herzogin Anna Amalia Bibliothek has pointed out that a library's physical collection is a central criterion for its national and international recognition, especially for specialised and research libraries. Like the library of the Georg Eckert Institute, other special libraries contain unique collections developed over a long period of time. With the digital transformation, the collecting process is shifting its focus from only physical objects to include digital information. The reproducibility of digital material – along with the fact that a library can never acquire ownership of digital content – calls into question the uniqueness of a collection itself. Thus, in the digital era, a physically present collection is no longer the only factor in determining the unique value of a specialised or research library. A library's importance is rather determined by its competence in dealing with diverse types of information and expertise in providing access to them.

FROM COLLECTION LIBRARY TO INFORMATION LIBRARY

Access to digital resources occurs primarily through digital reference tools, making it the library's responsibility to design research and reference systems that are as straightforward and sustainable as possible. For example, the GEI research library provides two ways to begin researching in its extensive digital collection of international curricula. On the one hand, users



... to digital mass storage racks

can access the curricula through OPAC; on the other, the Curricula Workstation (<http://curricula-workstation.edumeres.net/en/curricula/>) provides a research and reference tool developed especially for these materials. For reference and access to digital textbooks, we are building the TextbookCat (<http://tbcats.edumeres.net/>) parallel to OPAC. Unlike curricula, textbooks are not actually a copyright-free source, so we need to create a technical infrastructure to accommodate the different licences and modes of access. In addition, the *Classbook*, acquired from Vietnam in January 2016, is one example of how digital textbooks are increasingly integrating multimedia and interactive content. As a tablet comprising textbooks of all subjects and school years, the *Classbook* also integrates numerous films and interactive exercises. We need to further develop our existing infrastructures in order to use and store these kinds of formats – an endeavour that we are discussing intensively with other institutions, among them the Competence Centre for Non-Textual Materials (KNM).

With GEI-Digital and the Curricula Workstation, the GEI has created information infrastructures that enable textbook researchers to access these sources through a specialised framework from anywhere in the world. At the same time, the high

number of researchers in our reading room shows that the library's physical space remains indispensable. Users can take advantage of our knowledge about international education systems and make use of individual consultation and information services. In order to visualise digital textbooks in the physical library, we represent these sources with QR codes on the shelves of the textbook collection. This allows us to reinforce the oft-cited advantage of 'browsing the shelves' and provide access to digital textbooks through the physical collection as well. The research library also plans to make mobile devices such as tablets available to impart on-site, user-friendly information about the digital textbooks.

Collecting, processing and presenting information are traditionally among the core tasks of any library. But with digitality advancing at a rapid pace, library work is in flux: legal and technological competences have become just as vital as the ability to provide information in an expert and comprehensive way. Specialised and research libraries must fundamentally rise to this challenge, for in the era of Big Data, we are more important than ever.

EVERYTHING IN ONE BIG BOOKCASE

THE OPEN ACCESS REPOSITORY OF RESEARCH ON EDUCATIONAL MEDIA

Tim Hartung | Research Fellow at the GEI, DIRI department

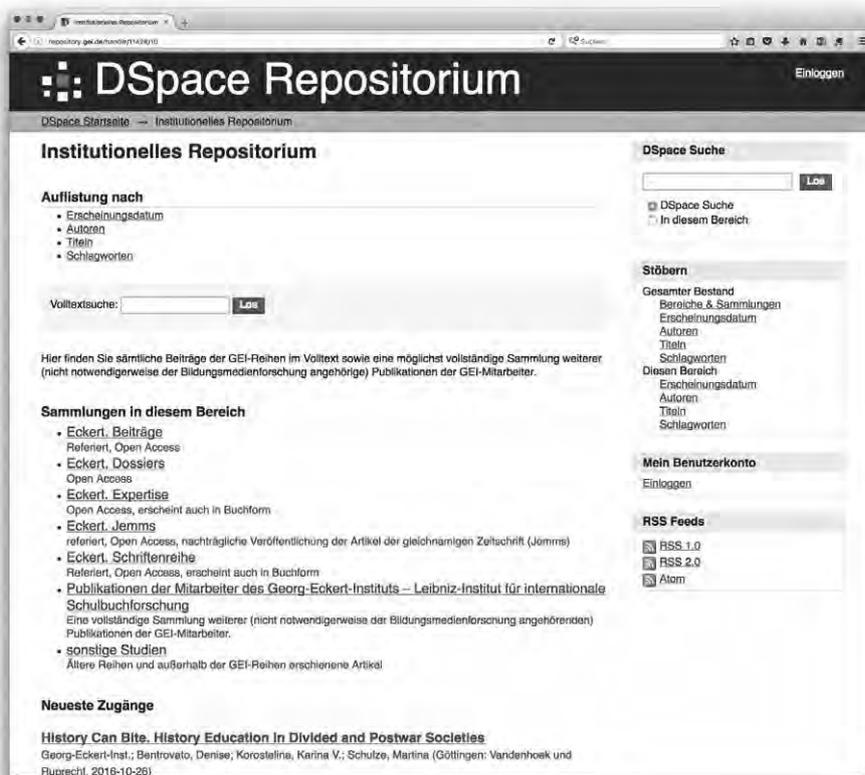
The word 'repository', from Latin, originally denoted a cabinet for storing files or books. Normally the content would be organised well and presented under careful supervision. With the digitalisation process, the term has undergone a kind of renaissance. Today a repository usually refers to storage space for data or online documents, space that is more or less accessible to the public and often linked to metadata and search functions, thanks to an editorial team. Indeed, the analogy to a filing cabinet or bookcase seems quite appropriate.

The Repository of Research on Educational Media, which went online in July 2016, is an online storage space for academic publications related to research on educational media. Freely available academic articles are compiled, organised and made publicly accessible in the form of free downloads. The included material has been published according to open access criteria – in other words, it is available without limitations and free of cost. The publications are organised into four areas, reflecting the collection profile of the Georg Eckert Institute's research library:

1. Educational research and systems
2. Curriculum research and analysis
3. Didactics, methodology
4. Textbook research and analysis

In addition to compiling articles already published by other research institutions, we are in the process of adding GEI publication series to our 'bookcase'. In cooperation with the academic publisher Vandenhoeck & Ruprecht, the GEI began providing online access to its book series 'Eckert. Die Schriftenreihe' and 'Eckert. Expertise' for free in 2016 – also through our repository. Articles appearing in the Journal of Educational Media, Memory, and Society (JEMMS) are added to the repository following an embargo period of two years. The online series 'Eckert. Beiträge' and 'Eckert. Dossiers' are now available directly via the repository.

Because of this dual approach to building the collection, we have decided to create two different paths of access. In the 'Institutional Repository' (*Institutionelles Respositorium*), we present our own series under the various series titles, along with publications by GEI staff that are not related to textbooks.



Screenshot: The landing page for the Repository of Research on Educational Media

The 'Specialist Repository' (*Fachliches Repositorium*) contains GEI and non-GEI publications from the areas of textbook and curriculum research. It also includes all articles from the institutional series, since these address the central topic as well.

Compared to collections with a larger thematic scope, the Repository for Research on Educational Media is quite small and straightforward. Since findings from the field of textbook research often interest a wider audience than textbook researchers alone, we also make GEI publications available through the portal LeibnizOpen (for open access publications from the institutions of the Leibniz Association, to which the GEI belongs), Pedocs (specialist portal for the field of education), and BASE (search engine for academic documents online). Our publications and research findings are thus easy to find and available to the broader public.

Three core staff members at the GEI worked together to build our 'archival bookcase'. Lena Stahn from the DIRI department was responsible for the technical side, setting up the system or 'building the bookcase'. Susann Leonhardt from the research

library and Tim Hartung, also from DIRI, took on the task of 'filling the bookcase' and sorting documents into the different collections (or 'shelves'). In organising the material we were guided by the well-proven collection standards of the research library, as well certification criteria of the German Initiative for Network Information (DINI).

At the moment, our new bookcase is still being filled and we are working to improve the design. Nevertheless, this project represents a major step towards modern and free access to research findings in our field. If you know of any academic articles on educational media that have been published according to open access criteria and are not yet in our repository, please contact us at the address below. Our shelves are far from full.

OPEN ACCESS REPOSITORY OF RESEARCH ON EDUCATIONAL MEDIA

Team: Susann Leonhardt (research library), Lena Stahn, Tim Hartung (both in the DIRI department)

Access: <http://edu-docs.edumeres.net/publikationen/> or <http://repository.gei.de/>

Contact: edu.docs@gei.de (Tim Hartung)

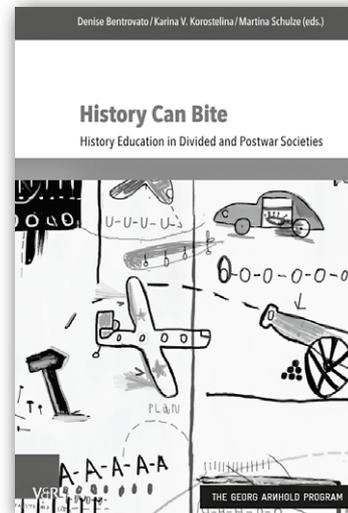
PUBLICATIONS



What do teachers and learners expect from textbooks? How are textbooks used in the classroom, and do they meet the challenges posed to schools by migration and the inclusion of students with diverse backgrounds and needs? This volume provides a systematic overview of recent and current research on textbooks, investigating the medium's development in history, subject-specific viewpoints and issues around textbook design alongside aspects of textbooks relating to cognitive psychology and textbooks' influence on processes of learning. The recommendations with which the volume concludes are intended to provide educational practitioners with a guide to using teaching materials in the classroom and to help drive the continued development of key trends within research and education policy.

ECKERT. EXPERTISE 4

Eckhardt Fuchs, Inga Niehaus, Almut Stoletzki:
Das Schulbuch in der Forschung
Göttingen: V&R unipress, 2014, 203 p.
ISBN 978-3-8471-0385-1



This volume provides critical insights into approaches adopted by curricula, textbooks and teachers around the world when teaching about the past in the wake of civil war and mass violence, discerning some of the key challenges and opportunities involved in such endeavours. The contributors discuss ways in which history teaching has acted as a political tool that has, at times, been guilty of exacerbating inter-group conflicts. They also highlight history teaching as an important component of reconciliation attempts, showcasing examples of curricular reform and textbook revision after conflict, and discussing how the contestations and difficulties surrounding such processes have been addressed in different post-conflict societies.

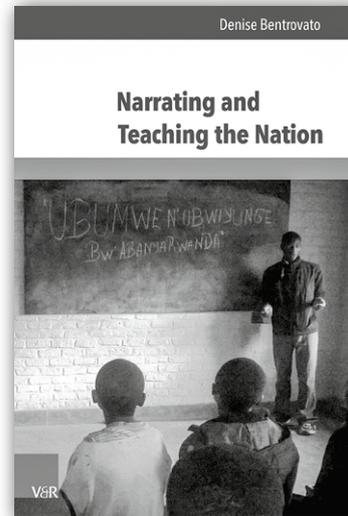
Denise Bontrovato, Karina V. Korostelina, Martina Schulze (eds): *History Can Bite. History Education in Divided and Postwar Societies*
Göttingen: V&R unipress, 2016. 314 p.
ISBN 978-3-8471-0608, € 40,00



Marcin Wiatr contributes to the reconstruction, objectification and advancement of the discourse on educational policy regarding the reconditioning and adoption of German cultural heritage, ongoing in Poland since 1989. The project pivots around 'Upper Silesia' – both as the subject of an exploration into political memory and as a venue for the virulent developments in educational policy that were incorporated symbolically into the first-ever published history book on the region of Upper Silesia. The aim of the study is to provide a reliable basis for the educational policy debates in both Poland and Germany in order to understand German heritage (among other things) as a Europeanisation moment within the history of Upper Silesia. The study further aims to illustrate how Upper Silesia can be taught successfully in the classroom as a place of remembrance shaped by multiculturalism.

Marcin Wiatr: *Oberschlesien und sein kulturelles Erbe. Erinnerungspolitische Befunde, bildungspolitische Impulse und didaktische Innovationen*

Göttingen: V&R unipress, 2016. 324 p.
ISBN 978-3-8471-0593-0, € 39,00



This book investigates the politics of education in pre- and postgenocide Rwanda, examining the actors, interests, and discourses that have historically influenced educational policy and practice and in particular the production and revision of history curricula and textbooks. The study combines a systematic historical and comparative analysis of curricula and textbooks in Rwanda, stakeholder interviews, classroom observations, and a large-scale investigation of pupils' understandings of the country's history. The author outlines emergent challenges and possibilities, urging a move away from the use of history teaching to disseminate a conveniently selective official history towards practices that promote critical thinking and reflect the heterogeneity characteristic of Rwanda's post-genocide society.

Denise Bentravato: *Narrating and Teaching the Nation*

Göttingen: V&R unipress, 2015. 254 p.
ISBN 978-3-8471-0516-9

PUBLICATIONS



Between 2011 and 2014, the German-Israeli Textbook Commission studied over 400 German and Israeli history, geography and social studies textbooks to ascertain the ways in which they depicted the other country and to examine the representation of the Holocaust in history textbooks from both countries. The textbook analyses and detailed interim reports produced by the various specialist working groups within the Commission provided the basis for the findings presented in this book and the recommendations drawn from them on the depiction of Israel in textbooks from Germany and of Germany in Israeli textbooks.

Deutsch-israelische Schulbuchkommission:
Deutsch-israelische Schulbuchempfehlungen
Göttingen: V&R unipress, 2015, 200 p.
ISBN 978-3-8471-0438-4

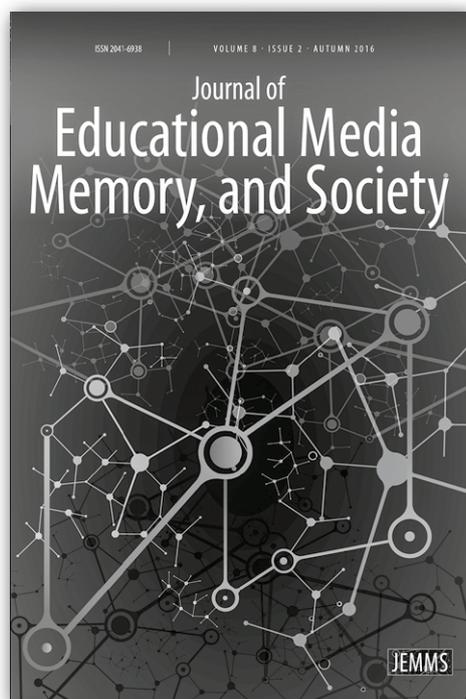


One hundred years after World War I, textbook narratives on the subject from different countries still – despite globalisation – reflect the diversity of national patterns of interpretation. The contributions to this volume reveal the national differences in traditions of memory, either from a cultural studies or from a history didactics standpoint. In the first two chapters, specific examples are deconstructed in order to present readers with the methodological instruments with which aspects of perspective are rendered visible, and which can inspire an understanding of the ‘other’. The two concluding chapters give examples of teaching materials that call for somewhat more unusual approaches to the topic ‘war’.

Barbara Christophe, Kerstin Schwedes (eds):
Schulbuch und Erster Weltkrieg,
Göttingen: V&R unipress, 2015, 226 p.
ISBN 978-3-8471-0553-4

JOURNAL OF EDUCATIONAL MEDIA, MEMORY, AND SOCIETY

VOLUME 8 (2016), ISSUE 1: EDUCATIONAL FILMS



- Eckhardt Fuchs, Anne Bruch and Michael Annegarn-Gläß, 'Introduction: Educational Films - A Historical Review of Media Innovation in Schools'
- Michael Annegarn-Gläß, 'The German Colonies in the Educational Film *Die Weltgeschichte als Kolonialgeschichte* (World History as Colonial History, 1926) as an Example of Filmic Techniques Used within Colonial Revisionism'
- Verena Niethammer, 'Indoktrination oder Innovation? Der Unterrichtsfilm als neues Lehrmedium im Nationalsozialismus'
- María Rosa Gudiño Cejudo, 'Eulalia Guzmán and Walt Disney's Educational Films. A Pedagogical Proposal for Literacy for the Americas in Mexico (1942-1944)'
- Anne Bruch, 'Meglio di ieri – Educational Films, National Identity and Citizenship in Italy from 1948 to 1968'
- Sophia E. Gerber, 'RAF-Spielfilme im Geschichtsunterricht'
- FORUM
- Anne Bruch, 'Educational Film Studies – A Burgeoning field of Research'

The Journal of Educational Media, Memory, and Society explores perceptions of society as constituted and conveyed in processes of learning and educational media. The focus is on various types of texts (such as textbooks, museums, memorials, films) and their institutional, political, social, economic and cultural contexts. The construction of collective memory and conceptions of space, the production of meaning, image formation, forms of representation, and perceptions of the 'self' and the 'other', as well as processes of identity construction (ethnic, national, regional, religious, institutional, gender) are of particular interest. Special importance is given to the significance of educational media for social cohesion and conflict. The journal is international and interdisciplinary and welcomes empirically based contributions from the humanities and the social sciences as well as theoretical and methodological studies.

VISIT OF PROF. KLEINER, PRESIDENT OF THE LEIBNIZ ASSOCIATION

Prof. Matthias Kleiner and librarian Christiane Klaes



On 5 April 2016 the president of the Leibniz Association, Prof. Matthias Kleiner, visited the GEI for the first time. The management team and several members of staff told him about the history of the Institute and gave him an overview of the Institute's many activities and functions. The head of the library, Dr. Anke Hertling, and librarian Christiane Klaes gave the president a tour of the research library, and showed him the comprehensive collection of international textbooks, focusing particularly on new developments in the area of digital educational media. The GEI started digitising historic textbook collections in 2009 with the support of the German Research Association (DFG). Over one million pages have so far been digitised. The internet platform GEI-Digital currently provides free access to over 4,300 German historic primers and textbooks pertaining to the subjects of history, geography, politics and natural sciences.

Prof. Kleiner was impressed by the breadth of the research undertaken by the Institute and listened with interest to the presentation by research fellow Nadin Tettschlag on the project 'Zwischentöne (Nuances) – Teaching Materials for Classroom Diversity'. The project prepares and supplies specially designed teaching modules that address and investigate themes and perspectives relevant to an increasingly pluralistic society, shaped by migration.

Research fellows Dr. Dirk Sadowski and Dr. Thomas Strobel explained the role of the textbook commissions and discussed with Prof. Kleiner the results of the German-Israeli Textbook Commission, which last year presented its recommendations to



Dr. Caroline Lodemann, Prof. Dr. Kleiner and Prof. Dr. Fuchs

the Federal Foreign Office. Prof. Kleiner enquired after the current state of German-Polish cooperation in light of recent political changes in Poland.

Dr. Stephanie Zloch presented the themes and methodology behind the project 'Migration and Education in Germany since 1945', which is supported by the Leibniz Association as part of the Leibniz Competition. The Institute's digital information and research infrastructures were also of great interest to the president of the Leibniz Association. Bianca Pramann was able, in the short time available, to provide absorbing insight into the portals and platforms developed by the Institute, such as edu.data. Following the presentations was a lively discussion with PhD students and post-doc researchers on the situation for early career scholars and career paths within research.

TEXTBOOK OF THE YEAR 2016

On March 18, winners of the 'Textbook of the Year 2016' were announced at the Leipzig Book Fair. The expert jury of representatives from academia, teaching and publishing presented awards to textbooks for the upper secondary level: 'philo' is the textbook of the year 2016 in the category 'History and Society'. 'Green Line Oberstufe' took the prize in the 'Languages' category. The jury elected not to present an award in the 'STEM' category, but decided to create a special prize for digital educational media, which went to 'mBook'.

This is the fifth year that the Georg Eckert Institute for International Textbook Research has presented an award for best textbooks. A new partner in the endeavour is the Federal Agency for Civic Education (bpb). In the words of Thomas Krüger, president of the bpb, 'Through this cooperation on the textbook award, the bpb hopes to highlight the importance of good textbooks and good lessons in empowering young people to think critically, form well-grounded opinions, and engage themselves politically and socially'.

'We have outstanding textbooks this year in the categories "History and Society" and "Languages". Through their innovative concepts, all award-winners exemplify the enormous value educational media can offer for teaching and learning in all areas of life. However, the jury could not award a prize in the "STEM" category this year. In our view, the few works submitted did not present new enough approaches', according to Eckhardt Fuchs, director of the Georg Eckert Institute and chairman of the jury.



Patron of the 'Textbook of the Year' award is the Standing Conference of the Ministers of Education and Cultural Affairs. Brunhild Kurth, vice president of the Standing Conference and State Minister of Culture in Saxony added, 'The nominated titles are an impressive demonstration of how ambitious textbooks in the areas of foreign languages and humanities can look at the secondary level. But the special strength of the winning books is that they do even more: they encourage creative, problem-oriented, cross-disciplinary thinking'.

Impulses for independent thought, a differentiated approach to developing competencies, and diverse, exciting material – the winners have it all. The jury's selection criteria included the didactic concept, relationship to the subject, orientation towards the students, nature of the assignments, clarity, and design.



WRITING HISTORY TOGETHER: A TEXTBOOK FOR GERMANY AND POLAND



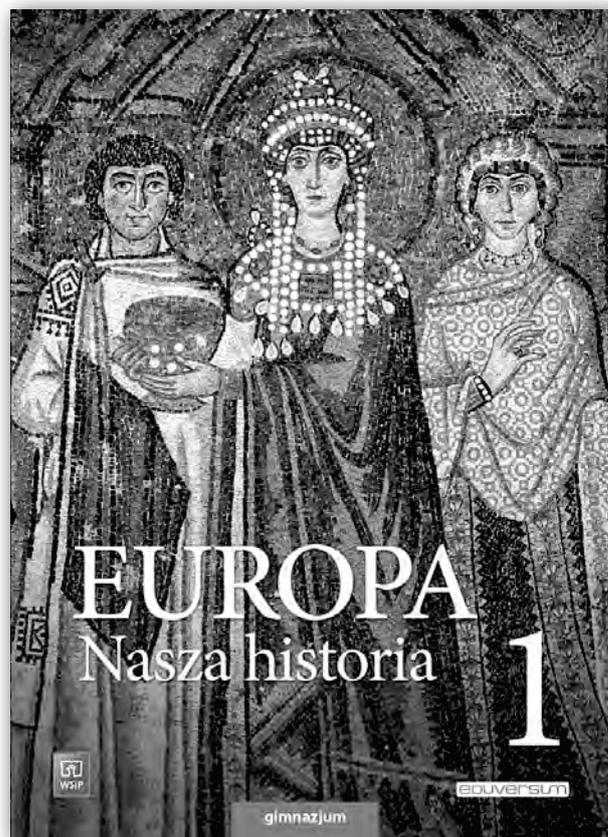
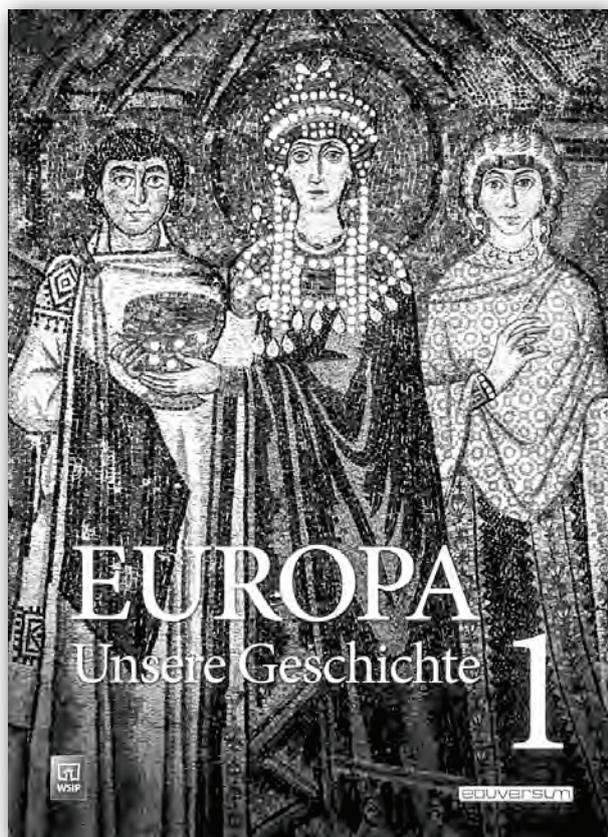
From left to right: Witold Waszczykowski (Minister of Foreign Affairs of the Republic of Poland), Dr. Frank-Walter Steinmeier (Federal Foreign Minister), Michael Jäger (Managing Director, Eduversum GmbH), Prof. Eckhardt Fuchs (German Coordinator), Prof. Michael G. Müller (German Chairman of the Expert Panel), Prof. Igor Kakolewski (Polish Coordinator)

On 22 June German Foreign Minister Frank-Walter Steinmeier was in Berlin, with his Polish counterpart, Witold Waszczykowski, to launch the first volume of a joint history book titled *Europa – Unsere Geschichte* (Europe – Our History).

The Georg Eckert Institute for International Textbook research (GEI) in Braunschweig has coordinated the academic side of the project, working alongside the Centre for Historical Research at the Polish Academy of Sciences in Berlin. 'Confronting the subject of national remembrance is and has always been an unrelenting process, which has led to conflict in many parts of the world in the past and continues to do so now. However, mutual discussions across international boundaries, and this volume lays down a marker extending

far beyond Poland and Germany, can lead to reconciliation and to differences being conquered within and between societies. In this context the first volume of this book and the successful completion of the entire series of textbooks will have a significant international impact', said Prof. Eckhardt Fuchs, director of the Georg Eckert Institute.

The series of textbooks, published by Eduversum and WSiP, are to be adopted in history lessons in the lower years of German and Polish secondary schools from the 2016/17 academic year onwards. The content of the books is identical, albeit in different languages. This project is particularly significant in that it comprises a complete textbook on European history, compliant with the curricula, rather than supplementary material. In the initial



project phases, Foreign Minister Steinmeier stated that with this project Germany would clearly demonstrate its receptiveness to Polish perspectives on history. On a visit to Warsaw in April he added: 'For this reason I am delighted that an important joint project has now reached its first milestone: volume 1 of the German Polish Textbook is complete!'

In 2008 the governments of both countries came to an agreement regarding the required organisational foundation. The political coordination and financial support for the project came on the German side from the Federal Foreign Office and the education and culture ministries of the individual states and was managed by the Brandenburg Ministry of Education, Youth and Sports. The corresponding role on the Polish side was assumed by the Ministry for National Education, the Ministry for Foreign Affairs and the Ministry for Culture and National Heritage. The project also received significant financial support from the Foundation for Polish-German Cooperation. The two chairs of the Joint German-Polish Textbook Commission were tasked with securing the relevant academic expertise for the project. The institutional framework of the project group comprises two panels: a 'control panel' and an 'expert

panel'. The latter produced recommendations in 2010 that formed the conceptual foundation for the German-Polish textbook series.

Volume 1, released after nine years of intensive work, is the first in a four-book series. It is the result of close collaboration between publishers, authors, academic coordinators and history experts from both countries. The book's chapters reflect the findings of a long discussion process exploring how a textbook can present one perspective that is sensitive in its portrayal of history to differing points of view, interpretations and didactic approaches. The book is supported by a range of measures, such as teacher training seminars, and is expected to be widely implemented in schools in both countries.

The joint history book project has profited appreciably from the considerable expertise gained since the foundation, in 1972, of the Joint German-Polish Textbook Commission, which is coordinated by the GEI. The 'recommendations' published by the Commission in 1976 provided a significant impetus to history teaching and textbooks in both countries. In those early days, however, talk of a joint textbook was still a long way off.

WORKSHOP

History Teaching and Historical Reconciliation Processes in Germany/Europe and Korea/East Asia since 1945

In collaboration with the Global Institute for Japanese Studies, the GEI hosted a workshop in Braunschweig on 19 July. The workshop examined the extent to which European experiences can be applied to other contexts.



ACADEMIA MEETS POLITICS

The Leibniz Association programme 'Leibniz im Bundestag' provides the opportunity for Members of the Bundestag to speak directly with scholars on a range of different themes. The GEI, which has taken part in these political consultations several times since the initiative was launched in 2008, was one of the major contributors among the Leibniz Institutes, having arranged eleven discussions.

Subjects such as 'Digital Educational Media in Schools' by Felicitas Macgilchrist and 'Islamic Religious Education and Textbooks' by Riem Spielhaus proved very popular, as did the 'Study of Migration and Integration in Textbooks' by Inga Niehaus. However delegates were also interested in topic such as Tobias Ide's 'Climate Change and Conflict: Reality and Depiction in German Educational Media' as well as 'German-Israeli Textbook Discussions' by Dirk Sadowski.

Carola Reimann, the SPD member of the Bundestag for Braunschweig, took advantage of the diversity of the research projects and met with four scholars from the Institute (see picture).

'I think "Leibniz im Bundestag" is wonderful. The opportunity for discussion between politicians and academics is very important and of great benefit to both parties. We are able to learn more



v.l.n.r.) Dirk Sadowski, Riem Spielhaus, Carola Reimann (Mitte), Tobias Ide, Inga Niehaus

about the decision processes in parliament, certainly in relation to themes surrounding educational policy, and the members can take advantage of our research-based expertise', said Inga Niehaus, Research Coordinator at the GEI.

This year's 'Leibniz im Bundestag' programme involved 250 researchers from 53 Institutes within the Leibniz Association, who were available to discuss 344 different topics. 171 one-on-one conversations were arranged with 82 members of the Bundestag between 31 May and 1 June.

CEREMONY IN BRAUNSCHWEIG

Two scholars honoured with Georg Eckert Research Prize 2016

The Georg Eckert Institute for International Textbook Research honoured two scholars for their exceptional work in the field of international educational media research at a prize ceremony on 11 November in the Braunschweig Old Town Hall, attended by Stephan Weil, State Premier of Lower Saxony, and Gabriele Heinen-Kljajic, Minister for Science and Culture.

‘Open-mindedness, a focus on values and high academic quality are the trademarks of the GEI. We are proud to have a research institute in Lower Saxony that contributes internationally to peace and reconciliation’, said State Premier Stephan Weil in his welcoming speech.

The Georg Eckert Research Prize 2016 is endowed with 5,000 euro and is sponsored by the Westermann Group. This year’s recipient is Dr. Anja Kirsch for her dissertation *Weltanschauung als Erzählkultur* (Ideology as Narrative Culture) which investigates the relationship between religion and socialism in civics studies books from the former GDR. The work pays close attention to the role of narrative in the construction of a socialist memory culture. During her research Anja Kirsch visited the GEI four times. She completed her work of the Philosophical and Historical Faculty of the University of Basel, and it has been published by Vandenhoeck & Ruprecht in their series ‘Critical Studies in Religion / Religionswissenschaft’.

This year’s award for young academics was awarded to Anna Heym for her master’s thesis on digital educational media and the factors that influence the strategies of textbook publishers ‘Digitale Bildungsmedien – welche Faktoren beeinflussen die Strategien der Schulbuchverlage’. Her work examines the commercial aspects that affect the production and development of digital educational media. Anna Heym considers textbooks in their economic context, analyses the strategic focus of the textbook publishing companies and attempts to anticipate how digital media will develop in the future.

‘These prizes are a clear sign that the region not only achieves success in technology and the



“hard” sciences but also produces outstanding research in cultural and social sciences’, declared Prof. Eckhardt Fuchs, director of the Georg Eckert Institute.

Ralf Halfbrodt, managing director of the Westermann Group, highlighted the socio-political significance of educational media, describing it as the basis for the lively exchanges that have taken place over many years between the Georg Eckert Institute and the publishing group: ‘We are linked by a mutual and vital task; that of quality assurance in educational media.’

This is the fourth time the Georg Eckert Institute has awarded the prize for outstanding research in the field of international educational media research. The prize honours monographs, dissertations and habilitations. The first young academics’ prize for an exceptional student thesis was awarded in 2014. The award for young academics is endowed with 500 euro.



IMPRINT

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