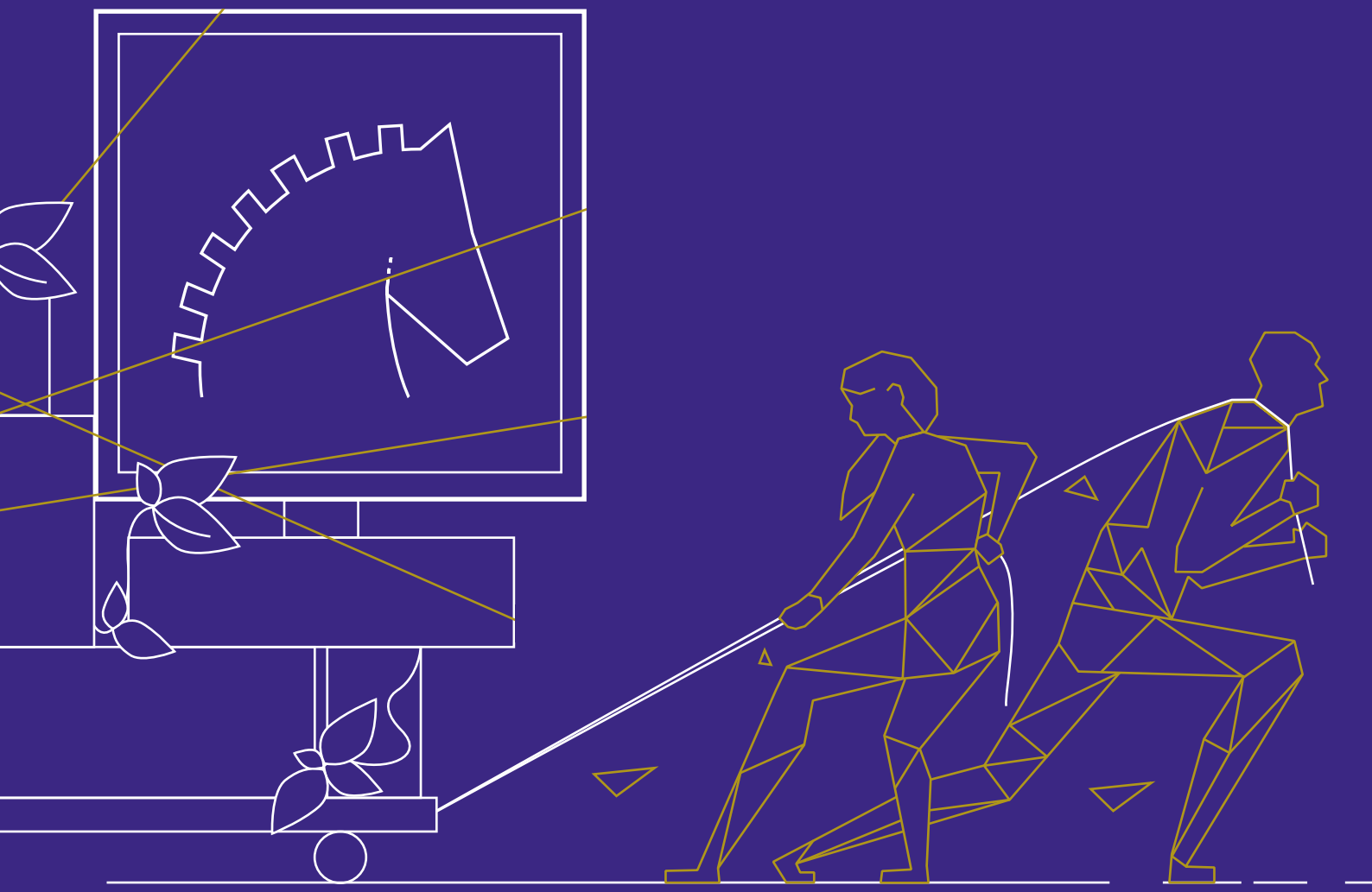
Synergie

FACHMAGAZIN FÜR DIGITALISIERUNG IN DER LEHRE | **#07**



NACHHALTIGKEIT

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

NACHHALTIGKEIT

Nachhaltige Digitalisierung oder digitale Nachhaltigkeit (in der Lehre)

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Circadian and eutark reduction of the energy trace of a digital school

„It may be the case that the strongest eco-value of circadian and eutark devices does not reside in energy savings per se, but rather in habits these devices would help to reinforce and amplify."

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I wish I were a Dutch student—student perspectives on the peer-to-peer exchange with the Netherlands

„Three days in November 2018, 17 university representatives from all over Germany, three Dutch cities and uncountable impressions – a peer-to-peer exchange on digitalisation in higher education."

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SCHWERPUNKTTHEMA

NACHHALTIGKEIT

Bildung für nachhaltige Entwicklung als Öffnungsprozess für einen virtuellen Hochschulraum?

„Nachhaltigkeit lernen heißt die Welt als ganze Gestalt in den Blick nehmen und die individualisierten Nebenwirkungen von Forschungs-, Produktions- und Konsumprozessen auf Mensch und Natur abbilden zu können.“

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RUBRIK **INFRASTRUKTUR**

Der Einfluss der Digitalisierung auf die Wissensgenese im Kontext einer nachhaltig-gerechten Entwicklung

„Eine nachhaltige Entwicklung erfordert eine Neuorganisation der Wissensbestände und ihrer Verfügbarkeiten. Dabei geht es im Kern auch um ein neuartiges Verständnis einer Beteiligung an der Wissensgenese.“

ALEXA BÖCKEL
Hochschulforum Digitalisierung
Studentische AG #DigitaleChangeMaker
boeckel@leuphana.de
www.hochschulforumdigitalisierung.de/de/themen/digitale-changemaker-studentische-zukunfts-ag-zu-hochschulbildung-im-digitalen-zeitalter

JAN BAUMANN
Hochschulforum Digitalisierung
Studentische AG #DigitaleChangeMaker
kontaktbmn@googlemail.com
www.hochschulforumdigitalisierung.de/de/themen/digitale-changemaker-studentische-zukunfts-ag-zu-hochschulbildung-im-digitalen-zeitalter
ORCID: 0000-0003-3679-7341

RONNY RÖWERT
Hochschulforum Digitalisierung, Koordinator
Studentische AG #DigitaleChangeMaker,
https://hochschulforumdigitalisierung.de/de/studierende

Unterwegs

I wish I were a Dutch student—student perspectives on the peer-to-peer exchange with the Netherlands

Synergie bittet in jeder Ausgabe eine Person, von ihren Eindrücken „unterwegs" zu berichten. Wie stellt sich Digitalisierung mit Bezug zum Lernen an verschiedenen Orten, in anderen Ländern dar? Welche Unterschiede fallen auf, welche Gemeinsamkeiten begegnen ihr? Wie erlebt sie die Begegnung und bewertet die Eindrücke? Dabei stehen bewusst der subjektive Blick eines und einer jeden im Zentrum sowie die Frage, inwiefern Austausch und Reflexion vom „Unterwegs-Sein" profitieren .

In dieser Ausgabe: Alexa Böckel, Jan Baumann und Ronny Röwert auf HFD-Delegationsreise in den Niederlanden. Im November 2018 war eine Gruppe von Digitalisierungsexpertinnen und -experten deutscher Hochschulen zu einem Peer-to-Peer-Austausch eingeladen und konnte an drei Hochschulstandorten unseres Nachbarlandes miterleben, wie Digitalisierung dort schon ganz selbstverständlich zum Studienalltag gehört.

Figure 1: Group picture of German expert delegation on digitalisation.

Three days from November 26th to 28th 2018, 17 university representatives from all over Germany, three cities and uncountable impressions—that is how we experienced the peer-to-peer exchange on digitalisation in higher education with the neighbouring Netherlands, organised by Hochschulforum Digitalisierung and SURF. We, Jan Baumann, Alexa Böckel and Ronny Röwert, had the chance to join experts from German higher education institutions to explore the Dutch way of managing digitalisation. While Jan and Alexa represent the student perspective as part of their engagement in the student working group #DigitaleChangeMaker, Ronny has a more systemic view on the higher education landscape as he organised the delegation visit for the Hochschulforum Digitalisierung.

Flipped Peer-to-Peer Exchange

Recently, the Hochschulforum Digitalisierung (HFD), under the slogan "Bologna Digital", has strengthened its activities with a European perspective and is constantly expanding its international expert community. In the spirit of a "Bologna Digital in practice", the HFD hopes that innovative and effective examples of good practice from other European countries will provide important impulses and calls for action for the German higher education system. For many years, the Netherlands in particular have played a pioneering role in the development of digital teaching and learning innovations. The heart of the delegation visit was a so-called "flipped peer-to-peer exchange", in which the German participants met their Dutch counterparts in real life after having been matched beforehand and being advised to exchange virtually before the physical exchange. Coordinated by the Dutch partner organisation SURF, a large number of suitable German-Dutch tandems were created. Me, Ronny, I was more than surprised how fruitful and concrete the exchange was among the pairs of experts who met virtually before. This is one example how digitalisation is not only a technical approach, but also changes the mode in which exchange and thus innovation can occur.

Sunday, 25.11.2018

Utrecht in winter—a beautiful city ablazed with light

As soon as I, Alexa, entered the train to Utrecht from Berlin, I could feel the excitement creep into my stomach and my brain. The prospect of discussing topics around digitalisation and higher education, getting to know experts from all over Germany and being able to exchange with peers from the Netherlands was thrilling. Additionally, being the only student except Jan and not knowing the other participants, made me think about how we will be integrated in the group and if we will be taken seriously without any academic title. But my worries were unnecessary. After having checked in, I walked to the restaurant where the second part of the social program on Sunday took place. Before that, some participants already attended a canal cruise to explore the beautiful city in its festive outfit.

The whole city seemed like a big Christmas market, there were attractively illuminated houses and it smelled like roasted almonds and harmony.

I opened the door to the restaurant and loud laughter welcomed me. Everybody was already in active discussions and I barged in a talk with Oliver Janoschka as Managing Director of the Hochschulforum Digitalisierung and Cornelis Kater as member of the Managing Board of the open source learning management platform Stud.IP about learning management systems and environments. During the meal, we reflected upon Stud.IP, Moodle and the framework conditions in education and changing it in Germany.

To me, it was obvious that the HFD managed it to bring together a group of people that was more than motivated to

interact, exchange and share their insights. After a short excursion to a bar in the Dutch catacombs, I was finally certain that the participants are also interested in the student perspective and our insights in digitalisation of higher education. Further, I had no feeling of hierarchies between the participants, we were just representing different perspectives. Hence, I went to bed knowing that I would learn a lot in the next days and already being thankful for the experience.

Monday, 26.11.2018

From SURF to the outskirts

The first stop on our delegation trip was at the organisation SURF which can be described as the Dutch equivalent to HFD even though we noticed fundamental differences. They call themselves "the collaborative ICT organisation for Dutch education and research". At the beginning of the visit, Janina van Hees presented the work of SURF and Oliver Janoschka introduced the HFD to the present Dutch colleagues. After that, we had the chance to participate in different workshops from experts at SURF, for example on educational resources, digital learning platforms, open badges, blended learning and learning analytics.

Learning Analytics

As I, Alexa, did not really have a clue what "learning analytics" is about and I am always interested in gathering and analysing data of any kind, I decided to go for that workshop hosted by SURF experts. It turned out that "learning analytics" refers to the process of collecting data from different platforms and systems (for example administrative and learning management systems) with the aim of supporting students that face problems or need a tailored offer in their study program. The discussion after the input evolved around the question of data security, students' autonomy and the responsibilities of lecturers. I left the workshop with two impressions. On the one hand, we could use data more professionally for improving learning content and increasing study success but on the other hand, I like the German attitude towards data security and being critical about the risk of surveillance. I was slightly shocked about the underlying message of this discourse á la: "If you don't want to be tracked as a student, you are not allowed to study here".

After the workshops and the exchange at SURF, we took the bus to the University of Wageningen. Travelling the geographical distances also helped to overcome personal barriers and we used the driving times for an exchange within the German delegation. Therefore, we not only learned from the Dutch peers, but we also gained insights throughout Germany. Realising the differences concerning organisational structures of universities, financial resources and German degree of innovation were as valuable as the comparison between the two European countries.

Life campus in Wageningen

Arriving at the campus in Wageningen, the architecture attracted my attention directly. It was the exact opposite of a grey university campus in the outskirts of Utrecht. The architecture of the university buildings was impressive and the offices were surrounded by plants and water basins. But not only the analogue environment was inspiring, their attitude towards digitalisation of higher education beared in my mind for a longer time. The strategy of digitalisation

Figure 2: Visiting the research-focused University of Wageningen.

explained by the Programme Director Open & Online Education Ulrike Wild offered a useful summary of the quality criteria and goals of digitalisation for me: "Independent from time and location: accessibility, scalability and connectivity". This impression continued in their perspective on Open Educational Resources and MOOCs (Massive Open Online Courses). Their goal is to individualise and customise courses, but at the same time, they want to scale up the amount of learners they can reach. It was striking, that they talked about "spin-offs", "revenue-models" and "business models" and thus have an entrepreneurial perspective on developing teaching and learning programms. Even though I would generally criticise the commercialisation of higher education and understanding universities as companies, but in this case it offered innovative potential to the University of Wageningen.

The second day ended with a dinner in a modern restaurant and I somehow got into a discussion on visions, strategies

and narratives for universities which had a perfect fit with my reflections on the universities' need of positioning themselves in the 'market'. It initiated the thought of using the pressure of profiling for the students' interest which merged into one of the main insights from the trip.

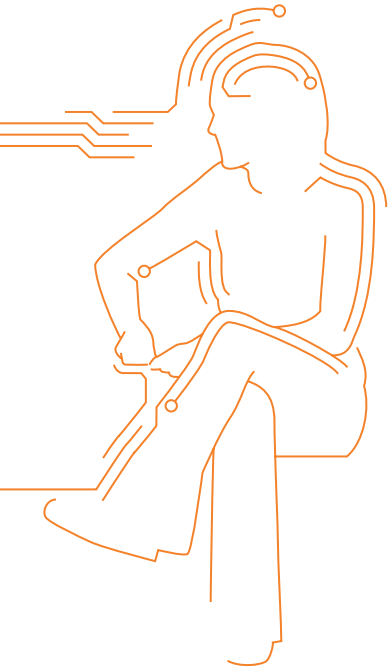
Tuesday, 27.11.2018

Leiden University—a dreamlike place for medical students

Day two was dedicated to visiting Leiden University and its Faculty of Medicine. This was for me, the medical student Jan, the personal highlight, because I knew from previous visits of Dutch universities that a modern study landscape would await me.

As an introduction, there was an overview of the principles how digital education is organised according to the university and the views of those being responsible. In the second part it became more special and the Center for Innovation in Medical Education gave an exciting talk on integrating MOOCs into classroom teaching.

Let's start with the beginnings of digital learning at the university and then I will report on one MOOC and the experiences of the Leiden University Medical Center. The University has identified some points that seem to have had a positive impact on the development. For example, a decentralised start and integration of interested lecturers. These have sown the first seeds—in 2012 the first MOOC was created at the university—and then within a few years an online education landscape developed. The first steps were individual and experimental, then gradually the experiments were scaled larger and more professional, so that 35 MOOCs and SPOCs (Small Private Online Courses) were created by 2017. After further evaluation, an update of the online learning strategy followed in 2018, because meanwhile there are many MOOCs and now there is a support unit and further funding. The digital education innovation is driven by the vision of ambidexterity. Existing and new should go hand in hand. In order for this to work even better in future, there are hubs and centers, support for teachers, seven faculty digital education teams, six studios/video teams and a a well-funded innovation acceleration program.



After presenting the actions in general, I would now like to briefly present the MOOC "Clinical Kidney, Pancreas and Islet Transplantation" which is provided on COURSERA. It has defined learning goals and addresses a defined target group. Students at advanced undergraduate or graduate level, medical professionals or even anyone interested should understand basic and clinical transplant medicine. Learners are guided through the process from the beginning of the illness to the transplantation in the operating room up to the aftercare. This is done via interactive content: animations, games, video lectures, patient interviews, weekly quizzes, moderated online tasks and a forum help you to understand the topic. In this way one not only learns the theory but also learns critical moments in the transplantation process and receives assessment and peer review. The high level of interest and positive student feedback show that one can certainly speak of a successful MOOC here.

Teaching and learning Lab in Utrecht

After having visited University of Wageningen (12 000 students) and Leiden University (27 000 students), Utrecht University with 30 000 students offered an additional perspective. We started our tour in the room of the "Sticky Campus" and proceeded with the "Teaching and Learning Lab" (TLL).

Figure 3: Utrecht University equipped with modern learning spaces.

Both are flexible and experimental rooms for teaching and learning and it showed again, how physical learning spaces can release the potential for innovation. Not only the tables could be moved up- and downwards, the students were able to share their private screens from their laptops and mobile phones on the screens in the classroom. In the TLL, the tables could be arranged according to the teaching format and cameras offered the equipment for studies in didactics and teaching. Another highlight of the visit was as simple as imposing: a glass wall lightened from the sides which enables teachers in online courses to draw content on a wall, while talking and not standing with the back to the camera.

Figure 4: Simple but effective glass board for learning videos.

Since the visits of the three universities, I could notice several emotions and thoughts. I felt something between envy and awe and my thoughts circulated around strategic actions from a student side to enable my university make progress towards digitalisation. The impressions were already overwhelming but I was still curious about the institution that makes a lot of this possible—SURF.

Wednesday, 28.11.2018

Surf versus HFD—similarities and differences

After several decades of digital media integration into higher education teaching and learning practices, there is a widespread and very fragmented pool of knowledge. Now, more and more higher education institutions aim at condensing this intra- and interorganisational knowledge in order to make best use of it to mainstream digitalisation in all university-wide teaching and learning processes. Since 2014, the German Hochschulforum Digitalisierung fosters mainly

the university-overarching exchange around digital learning. It is a consortium project of the Stifterverband, the Centre for Higher Education (CHE) and the German Rectors' Conference (HRK). As the German higher education system is organised in a federal way, the HFD also adds to the landscape of regional e-learning initiatives in the German states. The Dutch approach is very different. In a rather centrally organised higher education system, SURF as the main central stakeholder exchange platform is not a project but a well-established organisation where higher education institutions are member. It therefore not only provides technical solutions as a service provider (for example eduroam was developed by SURF) but is also more visible across and within universities by being the central and only digital learning hub in a rather small country. Higher education institutions in the Netherlands can for example use the SURF office in Utrecht, in the very center of the Netherlands, to have meetings or host events. In effect, SURF employees have more direct and close links to many actors at different higher education institutions all over the country. Overall, we the staff from the Hochschulforum Digitalisierung—were highly impressed by the way SURF takes its responsibility serious to be the community building spider in the web, as you can say.

Inspirations we took home

Our main takeaways are different intervention points that could steer universities in a better direction. One relates to the continuous need of acquiring students for the universities' programs. Thus, we have to strengthen the transparency of digital courses and infrastructure in order to establish innovativeness as a decision criteria for students when they choose their study program.

Another influence factor is the educational federalism in Germany that leads to less collaboration between the universities even though they often are not located far from each other. Without sharing resources and experiences, a lot of money is spent across Germany on the same experiments. The idea of adding the federal ministry as a funding actor via the "Digitalpakt" is a first attempt to improve our situation and should be developed and realised for higher education as well (key word "Digitalpakt Hochschule").

Our third insight is the need for increasing the innovative capacity at our universities by establishing digitalisation working groups in which all status groups are included to start collecting ideas and resources.

In a nutshell, Germany needs to catch up to the Netherlands especially in the context of the Bologna Process and the students' possibility to study in any European country. So let's learn from the Dutch experience and let students participate in strategic decision-making!

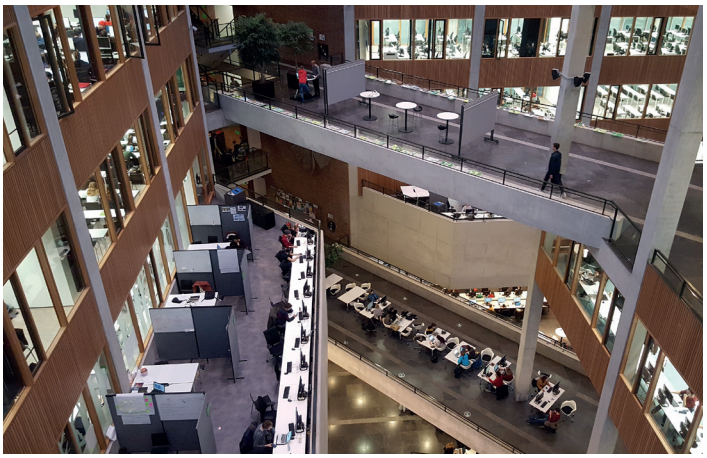


Figure 5: Modern infrastructure makes the campus more lively—library at University of Wageningen.

BEITRAG ALS PODCAST
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#DigitaleChangeMaker

As a centre of innovation and competence, Hochschulforum Digitalisierung informs, advises and connects higher education institutions and policy makers on the path towards education in the digital age. The student working group #DigitaleChangeMaker of the Hochschulforum Digitalisierung aims to integrate innovative and creative solutions perspectives of students into discourses around digitalisation in higher education teaching and learning. Since September 2018, the team of twelve students from all over Germany reflect upon and develop new ideas and solutions for different aspects of digital media usage in higher education contexts, for example sustainability, student participation, learning and communication platforms or strategy development.

DOI 10.25592/issn2509-3096.007.019

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Bei einer Weiterverwendung soll dieser Beitrag wie folgt genannt werden: Böckel, A., Baumann, J. & Röwert, R. (2019). I wish I were a Dutch student—student perspectives on the peer-to-peer exchange with the Netherlands. In *Synergie. Fachmagazin für Digitalisierung in der Lehre #07*, (S. 84–88).

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IMPRESSUM

Synergie. Fachmagazin für Digitalisierung in der Lehre
Ausgabe #07
Erscheinungsweise: semesterweise, ggf. Sonderausgaben
Erscheinungsdatum: 22.05.2019
Download: www.synergie.uni-hamburg.de
DOI (PDF): 10.25592/issn2509-3096.007
DOI (ePub): 10.25592/issn2509-3096.007.000
Druckauflage: 1000 Exemplare
Synergie (Print) ISSN 2509-3088
Synergie (Online) ISSN 2509-3096

Herausgeberin: Universität Hamburg
Schlüterstraße 51, 20146 Hamburg
Prof. Dr. Kerstin Mayrberger (KM)

Redaktion und Lektorat: Benedikt Brinkmann (BB), Britta Handke-Gkouveris (BHG), Nadine Oldenburg (NO), redaktion.synergie@uni-hamburg.de

Gestaltungskonzept und Produktion:
blum design und kommunikation GmbH, Hamburg

Verwendete Schriftarten: TheSans UHH von LucasFonts, CC Icons

Druck: LASERLINE GmbH

Autorinnen und Autoren: Oliver Ahel, Reinhard Bauer, Jan Baumann, Nils Bernstein, Alexa Böckel, Claudia Bremer, Stefanie Brunner, Ronald Deckert, Wolfgang Denzler, Bianca Diller, Johann Engelhard, Peter England, Kristina Färber, Nina Grünberger, Jörg Hafer, Tobias Hölterhof, Daniel D. Hromada, Mareike Kehrer, Michael Kerres, Thomas Köhler, Hans-Christoph Koller, Elke Kümmel, Steffen Lange, Lara Lütke-Spatz, Kerstin Mayrberger, Maren Metz, Johannes Moskaliuk, Georg Müller-Christ, Angelika Paseka, Thorsten Permien, Sophie van Rijn, Ronny Röwert, Tilman Santarius, Gianna Scharnberg, Claudia T. Schmitt, Nadine Schröder, Sandra Sprenger, Thore Vagts, Markus Vogt, Thomas Weith.

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