The Digital Turn from the student perspective

Thesis Paper on Digitalisation in Higher Education

AUTHORS

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1. Introductory remarks

Students are often not sufficiently involved in current debates and scientific discourses about opportunities and challenges of the so-called "digital turn" in higher education policy. Consequently, they usually only play the role of passive participants; for innovative ideas and new perspectives, there is neither an open process, nor a fundamental willingness to think and act starting from the end user. However, some university and non-university projects and initiatives in Germany and Europe impressively show in what an innovative and active, but also critical and constructive manner students can help shape digitalisation processes at various levels - if they are given the opportunity to do so.

Therefore Hochschulforum Digitalisierung has initiated the working group Digital Changemakers and offers students the opportunity to work together on higher education-related topics in a new, creative and innovative way and to actively participate in shaping discourses in an exciting community of experts from different backgrounds.

In September 2018, the working group Digital Changemakers was constituted. The core team comprised of 12 student experts from all over Germany aims to create new opportunities for committed students to discuss the future of their digitally influenced learning environments and to find ways of actively shaping this future. During this process, own questions, demands, solutions and participation models will be developed while at the same time existing examples of good practice are to be collected and made more visible.

With this thesis paper, the discourse on digitalisation in higher education will finally be complemented by a decisive student perspective. The following theses were developed during the working group's meetings. They are to be understood as an impulse, as a suggestion, which neither claims finality nor complete representation of all students' opinions. Rather, the aim is to open new spaces for student participation and thus to gradually open up the discussion on innovative higher education in the digital age.

2. Why Digitalisation?

Thesis 1: Educating instead of training

Many study programs involve the acquisition of specific skills for a professional career. But neither universities nor colleges fulfill the same purpose as vocational schools. They are places where education should be given its own value. Humboldt is still up-to-date in the digital age. The digitalisation in study and

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teaching must not be driven by 'employability', but must be based on the question of what maturity means in the 21st century.

Thesis 2: Facilitating self-determination and participation

Only self-determination and participation enable intrinsically motivated studies that turn students into citizens who can act responsibly in the digital age and thus show 'digital literacy'.

Through targeted linking of online and offline media, as well as presence and digital teaching/learning scenarios, a degree of self-determination is possible that would have been unthinkable in the past. Students can help shape the focus of their studies and topics can be individually deepened within self-determined study times. In terms of content and technological methodology, this can be supported by digital tools. Digital technologies open new possibilities, especially for the support of participative and collaborative methods of teaching.

Thesis 3: Interdisciplinary thinking

A society that is concerned with cooperation and the solution of real-world problems requires interdisciplinary education. For this reason, courses from different disciplines and subject areas should be more closely coordinated during the time of study. Individual courses should be offered jointly by teachers from different disciplines. Students should have the opportunity to think about the added value of courses outside their own fields and to take such courses. Digital tools can help translate this kind of multidisciplinary learning into practice.

User-friendly digital course catalogues can increase the transparency of courses offered by different departments or faculties. Cooperation can be supported better through digital platforms: Wikis create a common understanding of terms, digital learning content can be provided and communication tools can promote the exchange of content and materials. An appropriate platform can also be helpful as a basis for discussions outside of traditional face-to-face courses. Through joint interdisciplinary teaching, the exchange of digital methods in the respective disciplines is made possible beyond the actual teaching.

Thesis 4: Creating equal opportunities

There is an enormous deficit concerning equality within the German education system which is reflected in the German school system early on and continues in the higher education system. Digital teaching and learning scenarios offer new forms of learning independently from time and location. New target groups such as working people and single parents can study more easily than previously. However, experiences with MOOCs also show that hopes for greater accessibility have not been entirely fulfilled. Due to the participants' different personal circumstances, it is not enough to only make knowledge electronically accessible. The participants who successfully complete MOOCs are largely those who know the higher education system well and even benefit from it. The goal of accessibility and equal opportunities must be pursued in a targeted manner. Digital tools can certainly provide support, but MOOCs nonetheless must account for the different needs of different target groups. In addition, digital communication channels can be used to increase inclusivity.

Thesis 5: Promoting internationality and mobility

We live in a globalised world. Universities should support students to study at other universities, to deal with global and international perspectives and to work together with foreign students.

Digitalisation offers many opportunities in terms of student mobility and thus the internationalisation of universities. With the help of digital tools, students can inform themselves about courses at partner universities, participate in online-based courses even before the start of their time abroad and reach out to other students at the partner university. Digital examination formats also allow for exams to be taken anywhere and to overcome organisational difficulties caused by postponed semester periods. Furthermore, it is possible to work on joint projects in a digital and location-independent manner.

Thesis 6: In the long term, digitalisation at universities can contribute to the sustainability of the higher education landscape

The social development of recent years has been marked by global trends towards digitalisation and the pursuit of sustainable development. So far, these transformation movements have rarely been considered combinedly (cf. also WBGU's "Our Common Digital Future"). When designing future universities, digitalisation and sustainability should be brought together.

The consumption of resources and global power structures are only two of the new challenges that sustainable development must meet regarding digitalisation. A positive example of this is the pos-

sibility of enabling international exchange using digital tools without having to travel long distances. However, the expansion of digital infrastructure also leads to an increasing demand for rare earths which implies far-reaching health and environmental risks due to mining processes. This is an example of the possible negative effects digitalization can have regarding ecological sustainability.

On the other hand, digitalisation processes simultaneously create the opportunity to support the pursuit of economic, social and ecological goals of sustainability. Universities play an exemplary role here and can shape future developments through the appropriate training of decision-makers, teachers and leaders. The basis for this is a university landscape which takes up on current social challenges and integrates them in a sensible manner.

The 4th objective of the UN Sustainability Goals is "to ensure inclusive, equitable and quality education and to promote lifelong learning opportunities for all". Education is one of the focal points here. This also gives universities a decisive role. In November 2018, the German Rectors' Conference advocated a culture of sustainability at German universities. This culture is increasingly being promoted by students and student initiatives ("bottom-up") but should be reflected in teaching and learning structures, too. This design of universities must be supported by innovative approaches through digitalisation towards sustainable development.

3. The process of digitalisation

Thesis 7: Get students involved

Students need to be involved in change processes towards a more digitally supported university from the beginning. This is the only way to ensure that digital tools can meet the expectations and needs of this central user group. Such participation processes should be designed as continuously as possible. Students do not only want to give feedback, but also actively shape strategy processes and concrete teaching and learning formats. Therefore university management and those directly responsible for digitalisation should seek formal and informal exchange opportunities with student representatives and enable unrestricted submission of ideas. In addition, we plead that universities should strive for further digital and analogue participation formats such as workshops on innovation in higher education (e.g. as part of the Teaching Day) and online voting on relevant topics.

Thesis 8: Creating room for experiments and contact points

Digitalisation of teaching and research challenges universities to rethink and reorganise their structures. Students are in need of central contact persons for innovative ideas in teaching and student related matters. Contact persons and structures must be accessible and known to students both on-site and digitally. These contact persons can also be in charge of strategic tasks, such as the Chief Information Officer (CIO). In order for the student perspective to be taken into account, student CIOs are necessary.

Developing and testing innovative formats for students and teachers requires space, financial resources and creative resources. Innovation hubs similar to the Education Lab in Rotterdam are suitable formats for this. When these factors are met, students can actively participate in the further development of their university and test teaching formats together with teachers.

Thesis 9: Focussing on good teaching

The discourse on digitalisation in education is still centred around issues of technical infrastructure. Of course, the technical infrastructure, in particular stable WLAN and sufficient server capacities, is a fundamental prerequisite for being able to use the possibilities of digitalisation.

Nevertheless, it should not be forgotten that even simple digital teaching and learning scenarios can be enormously helpful. The scarce resources for teaching should be used meaningfully and above all invested in the didactic qualification of teachers as well as the establishment of new digital teaching formats. It is about didactic training instead of the provision of smartphones and tablets.

Thesis 10: Considering and reflecting on risks

Digitalisation processes bring with them new dangers and risks. We should remember phenomena such as cyberbullying or data protection issues. Universities should be a place where, with the participation of all university members including students, teachers and staff, the digitalisation process is reflected and critically monitored. For example, this concerns control mechanisms, restrictions on personal freedom as well as the question of which data is collected and processed for which purpose. Transparency is important in this respect. The influence of the use of digital media on mental illness should also be considered.

Thesis 11: Implementing digitalisation

The goals pursued by digitalisation in studies and teaching must be firmly anchored in a university's strategy. This can involve new role concepts and responsibilities, structural changes or a change in resources. From administrative processes to teaching content to digital examination forms, there must be a clear objective as to how the university will change and adapt to technological change. But the process must not stop there. The concrete objectives and demands must also be followed by a participatory implementation process.

Thesis 12: Thinking critically about financing

Even if considerable financial resources are necessary, but not sufficient for well implemented digitization processes, hardware and software cost considerable amounts of money. Contrary to what was expected only a few years ago, digitally supported teaching and learning are not arbitrarily scalable with constant resource expenditure and require continuous support. First of all, it must be recognised that technical innovations are only possible with the necessary basic financing. Digitalisation should not be seen as a rationalisation measure and cannot function as such. In order to keep the dependency of universities on financial backers as low as possible - especially in the software area - and to enable adaptation into the culture of individual universities, open source solutions should always be the preferred choice.

Thesis 13: Enabling discourse

In the context of digitalisation, various terms such as "data literacy", "smart city" and "big data" are used, the exact meaning of which often remains unclear. This conceptual approach makes it diffi-

cult to participate in the current discourse on digitalisation - both within and outside of the university. The subject remains elitist and inaccessible.

From our point of view, a broad social and intergenerational discourse on digitalisation is necessary in order to achieve a targeted and legitimate approach to digitalisation and the associated change. In order to advance digital literacy, a simple and accessible choice of language and terms is needed that invites people to take part in the discourse and to think along with it.

4. Use of tools

Thesis 14: Learning management systems

Students and lecturers often find themselves confronted with a multitude of different platforms and tools at their university. This causes many problems. It is often unclear which platform fulfils which function. Users must familiarise themselves with each tool and often create multiple profiles and accounts. The training effort also prevents teachers from using existing digital tools to support their teaching. When changing the university, a transfer of data is often not possible due to a lack of compatibility between different platforms.

For these reasons there is an urgent need for quality rather than quantity as well as uniformity in learning management systems. Existing solutions should be provided and developed further across universities. This requires, on the one hand, central coordination and on the other hand, decentralised differentiation. Interoperability can only be reached if platforms interact with each other through intersections and allow for cross-modular solutions.

Thesis 15: Open Educational Resources (OER)

Open Educational Resources (OER) are educational materials of any kind and in any medium published under an open license. The potential synergies are enormous: Teachers do not have to design every course themselves but can get inspiration and adopt content. This potential should be exploited. OER also enable students to adopt different perspectives and theoretical approaches. Example: A teacher at a given university may have a rather conservative perspective on economic theory, but his students can use OER to inform themselves about alternative approaches, such as post-growth theory, and incorporate them into their own teaching. Likewise, international or other national approaches are also important for understanding real-world problems with a global impact - not only from a German or European perspective.

Thesis 16: Learning analytics & privacy protection

The concept of Learning Analytics can basically follow the positive approach of identifying difficulties of students at an early stage and supporting them to overcome challenges of any kind.

At the same time, there is a risk that students might be monitored and controlled without their consent. For example, Moodle collects the latest log-in times and teachers can check when the students last downloaded materials or edited tasks. This contradicts the notion of "independent stu-

dents" and reminds of a teacher-student relationship comparable to primary schools where supervision is a common feature. Additionally, universities have a self-interest in collecting student learning data since they try to fulfill quotas and benefit from bringing as many students as possible through their studies in a short period of time. Students must be able to decide which data may be collected from them and who has access to it, e.g. whether learning data is transferred to service facilities. The dystopia of a controlling university subject to a non-democratic system must be avoided by all means. Instead, universities should address the question of how to pursue learning analytics approaches that comply with data protection regulations and are carried out with the consent of students proactively and with broad participation of student representatives.

Thesis 17: Private sector tools

At present, a large proportion of students are forced to resort to tools from the private sector in the context of their studies. Digital solutions provided and managed by the university should be used to ensure social equity, data protection and equal opportunities. If they are user-friendly and easy to use, this increases the chance of them being used exclusively.

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