#SemesterHack
We hack the digital summer semester 2020!
Online hackathon on digital higher education in times of Corona on 6 and 7 May 2020

29 April 2020

The summer semester 2020 will take place digitally. What does this mean for teachers, students, lecturers, university staff and the entire university system? It requires new approaches and solutions for studying and teaching, which can be found in individual seminars, at the entire university and also comprehensively at state and federal level.

An online hackathon for the digital summer semester will take place on 06 and 07 May 2020.

With this, the HFD wants to take up suggestions from universities and great, already successfully implemented examples like the #WirVsVirus-Hackathon and work together with the higher education community on innovative solutions for teaching and learning in times of corona.

The aim of the hackathon is to create added value for teaching and learning at the participating universities already during the summer semester 2020 and to focus on the perspectives, needs and ideas of students and teachers.[1] Therefore, we will work closely with you already in the planning stage and let your concrete needs flow into the design of the hackathon.

[1] This hackathon also serves as a pre-hackathon for the #DigiEduHack that HFD is planning with the European Commission and other stakeholders for November 2020. We believe, that through such approaches, the year of the crisis should become a year of education innovation. Digital Education Hackathon is an EIT initiative under the European Commission's Digital Education Action Plan, led by EIT Climate-KIC and coordinated by Aalto University. This year the main stage event is organised by Hochschulforum Digitalisierung and DAAD (German Academic Exchange Service) under the German Presidency of the Council of the European Union. digieduhack.com

This concept-sheet serves as an orientation for universities, with a general overview, a presentation of the participation possibilities, the personnel resources required for this, the registration procedure as well as an outlook for the follow-up and sustainable implementation of ideas.

1. Overview

The concept of the hackathon is inspired by the very successful #WirVsVirus hackathon supported by the German government. During this hackathon, several tens of thousands of participants have developed and partly programmed solutions to different challenges over a weekend (48 hours).

However, (digital) higher education in times of Corona was not the focus of the hackathon. This gap is to be filled by the offer of Hochschulforum Digitalisierung (HFD) together with KI Campus, the DAAD and especially universities. The focus will be on questions concerning the digital summer semester 2020.

Within the framework of this participatory online event, various perspectives and ideas are to come together. The hackathon is therefore aimed at students, teachers and university staff, but also at stakeholders outside universities who are involved in (digital) higher education.

The Hackathon will take place over a period of 36 hours. This will allow teams working on ideas to invest two full days in their projects. The teams will either get together in advance or at the beginning of the hackathon. They work on previously submitted challenges that are assigned to topic clusters. Challenges can be submitted by universities, teams or individually. Demand-oriented challenges relating to the summer semester 2020 from participating universities are particularly welcome.

Challenges are subordinated to topic cluster. The clusters were decided in a steering team together with universities. In this way, we hope to establish a link to the current reality at the universities.

2. Topic Clusters

1. Qualification & support of lecturers

Screencasting, videoconferencing, learning platforms and various tools for online teaching - many lecturers face the challenge of implementing digital teaching without any pre-preparation whatsoever. Technical and didactic knowledge tend to be barriers, as face-to-face teaching cannot be digitalised converted 1:1. How can lecturers therefore best be supported and qualified for digital teaching? How can online teaching be implemented by very simple means? How can fears of digital teaching be overcome? And: Does everything have to be digital in the digital summer semester?

2. Digital Teaching in Practice

What technical infrastructure is required to implement online teaching on a large scale and does the infrastructure of the university function reliably? What hardware and software can lecturers expect from students and what hardware/software must the university provide for everyone? What new ideas can be developed for suitable tools? What happens if the media server fails or the network is overloaded? How do lecturers prepare students for online formats or support them in implementing these?

3. Collaborative work and interaction (synchronous and asynchronous)

Collaborative work usually takes place in presence at universities. How can this be differently implemented in the current situation? Should other constellations of assignments be chosen and which tools would be suitable? What challenges do digital interaction/ communication pose, especially with regard to video conferences? How should the didactics for such formats look like?

4. Digital tools and data protection

Time and again, universities use digital tools that uncertainly comply with the General Data Protection Regulation (GDPR). How can such uncertainties be avoided and still implement tools that meet the needs of the users as well as guarantee the necessary efficiency and stability in performance? Is it allowed to use freeware tools in teaching or recommend these to students without exactly knowing how they handle data? What possibilities are there to solve legal difficulties?

5. Digital examinations

No exam, no credits! In the digital semester, examinations that require the presence of students are only possible under special conditions. Which common forms of examination are nevertheless possible and how can presence examination formats be best digitised? What requirements must be fulfilled in order to be able to conduct examinations online (remote online examinations)? What requirements must a software fulfill? How can a secure identity check be carried out without violating data protection rights? Can the analog exam tasks be transferred 1:1 into digital formats? What about the use of additional tools? What other legal and technical issues need be considered? What new approaches can be developed?

6. Digital course guidance

Advice is provided at universities on many occasions: During choice of study, staying abroad, in the subjects, in Career Services and for students in special situations. Professional advice is client-centred and open-ended. How can this special form of communication be digitally designed? What new solutions are required for the digital summer semester?

7. Digital campus life

The common coffee in the lecture break, working on exercises or the party organised by the General Students Committee are non-existent. University groups also have to find digital ways for their projects. How can the campus feeling be virtualized? Is student involvement and the usual informal exchange also digitally possible? What ideas are there to keep campus life on-going even now?

8. Peer support/help-seeking among students

Online services for learning require that students are equipped with technical devices and know how to handle hardware and software. The ability to handle them competently is just as important as IT support. In addition, complex learning material during studies is a challenge, especially for first-year students. Peers / other students are often a preferred resource for support. However, the assessment of and exchange with other peers is made more difficult by the current situation. How can students support each other when questions about study contents arise? Which information and tools can be helpful to facilitate "matching" of students? How can incentives for mutual exchange be created?

9. Internationalization & virtual mobility

The semester abroad unrealistic and many international students also have minimal opportunities to access at the German university. At the same time, distance hardly plays a role in the digital world. Lecturers, staff and students can virtually move around the world. Studying in European and global university networks is even easier. How can this potential be digitally exploited? What does the corona crisis mean, for example, for international practical projects, for exchange programmes?

10. Practical study parts & practical projects

Studying does not only consist of lectures and seminars, but sometimes of practical parts. This includes project studies in student teams, obligatory internships, laboratory work, sports and artistic studies, or practical work in the dual study programme. Empirical projects with e.g. surveys and field studies are also often part of research-based teaching and learning. Which solutions can support these practical parts of the studies? Does the corona crisis perhaps offer opportunities for new practical projects, e.g. in the field of service learning or civic engagement?

11. Research

Research at universities is also massively restricted, practical work and empirical surveys in experimental subjects are hardly possible. Employees and professors are in home office. How can research projects still be advanced in the digital semester? And: Are there new fields of research through Corona? What contribution can universities make to the research of medical, societal, social and ethical aspects in the context of the Corona crisis? What is the social mission of science and research in the corona crisis?

12. University management (including change process & third mission)

The digital transformation is a major change process for universities. The digital semester also demands university management and administration. What does good university management look like in these times of crisis? What missions should universities dedicate themselves to in the digital era? And how can the cultural change that allows lecturers to fail be successful? Which new ideas do sustainable change and transfer opportunities create?

13. Digital student participation

Students are the largest status group at universities. How can it be ensured that students are also involved in the organisation of the university during the digital summer semester? What visions do students have for university teaching, even after Corona? How can participation take place at equal terms and what opportunities for cooperation arise for lecturers and students? What role can digital solutions play?

14. Educational equity & accessibility

If teaching takes place in virtually, students definitely need access to technical equipment. Digital space thus also brings along the challenge of a new digital divide. At the same time, new opportunities and challenges for barrier-free studies arise. How can educational equity and accessibility in the digital world be ensured?

15. AI in digital higher education

Artificial intelligence can become a game changer in teaching at universities. AI also promises great opportunities for the digital semester. At the same time, the necessary AI skills are needed, for both lecturers and students. Whether in digital learning offers or for individual study management, innovative solutions based on artificial intelligence have an enormous potential. What ideas are there for the digital summer semester?

3. Agenda & (digital) Infrastructure

36-Hours-Online-Hackathon[6 and 7 May 2020 // Wednesday and Thursday]

Wednesday, 6 May	**10-12h:**	**Orga, Onboarding, Teambuilding / -finding**
Wednesday, 6 May	**12-20h:**	**Working on Challenges in Teams**
Thursday, 7 May	**10-20h:**	**Working on Challenges in Teams**
Thursday, 7 May	**20-22h:**	**End of the Hackathon / Joint Conclusion**

The teams can of course also work together beyond core hours. HFD, KI-Campus and DAAD provide **continuous support from 10-24 on day 1 and from 6-22 on day 2.**

Furthermore, HFD provides the overall digital infrastructure and tools for coordination and communication with and amongst the participants.

1. From **Monday 27 April 2020**, an online form for submitting challenges and for registration will be available on the HFD website There you can also indicate your university.

2. A Mattermost instance (open source, local server) will be set up, where all participants can register for communication and information from **Tuesday, 5 May 2020**.

3. A platform for public documentation and presentation of the hackathon results will be provided.

The tools and services used during the hackathon itself are at the discretion of the individual teams. Universities can provide support here through their infrastructure and the HFD will provide a collection of recommended tools for different purposes.

4. Possibilities to participate / Roles

→ **Challenge-Patron**
You can submit your own challenge in the topic clusters and represent it as a "patron". You present the challenge at the beginning of the Hackathon in the respective topic cluster and accompany the team building. Participation in the group work of individual teams is generally also possible for a patron. However, the person can also act in the background. The role can also be taken by students.

→ **Mentor / Expert**
People who bring either subject-specific or organisational expertise to support the hackathon teams. These persons are available to all teams for thematic / technical questions. Thematic questions can relate to specific issues of the project idea, but soft skills such as teamwork or business model development can also be part of the expertise. In case of participation in seminars or modules without submission of a challenge, also teaching staff is asked to support as mentors.

→ **Hackers / Participants**
Individuals or teams who work on and solve a challenge through a specific project idea. Hackers select their favourite topic clusters in the registration process and assign themselves to a corresponding challenge. The hackers can be students, teachers or university employees who work on a challenge either within or across universities. They can also be external actors who are committed to (digital) higher education. Hackers are creative problem solvers - they don't have to know how to code. The results of the hackathon can be both digital prototypes and good concepts.

5. Submission of Challenges

Universities are currently facing major challenges in the implementation of the digital summer semester. Many of these challenges are also shared by other universities and can be tackled together. Certainly, at the same time there are also tasks and needs that are individual, only concern a seminar, a learning platform or an individual administrative task. When submitting a challenge, you can indicate whether it is an internal or inter-university challenge.

Challenge submission:

- → Central submission of challenges via the University Management, Media Centre, University Didactics, Career Service, International Office, etc.
- → Submission and participation via student initiatives / student councils / student unions, etc,
- → Submission from individual seminars / lectures in the summer semester / or from individuals (also outside of universities)

6. Resources from Universities / Higher Education Institutions

The Hackathon is to be oriented towards the needs of universities, teachers and students in the digital summer semester. We are therefore preparing it in close cooperation with the universities. There should be close cooperation between all the stakeholders involved, particularly in determining the overall topic cluster priorities, applying for the hackathon, involving students and lecturers, selecting the challenges and supervising participants during the hackathon. In addition to the nomination and recruitment of participants for the roles mentioned above, universities can also participate in the steering team and the jury:

- → **Steering-Team**
  By 29 April, one representative* per participating university should be appointed as part of the steering team. In joint meetings, goals, the planning status and to-do's are discussed and open questions are answered. The team serves as a platform for inter-university exchange even before the event. The universities in the steering team are also communicated as partners of the hackathon.

- → **Jury**
  The best results of the hackathon are to be awarded in the follow-up of the hackathon (no matter whether it was worked on internally or across universities).

  We are happy about the nomination of one jury member per participating university.

7. Follow-up / Outlook

After the end of the hackathon, the submitted results will be viewed and evaluated by a jury. Each university is also asked to develop an implementation strategy in cooperation with all involved stakeholders (students, teachers, ...). HFD will continue to make the ideas developed during the hackathon visible through its website and the exchange with different stakeholders.

In the winter semester 2020, HFD plans to participate in another hackathon in cooperation with the European Commission (#DigiEduHack). HFD will organise the main stage event in Berlin (or online) together with DAAD in the context of the German Presidency of the Council of the EU.

Particularly good results and approaches from the first hackathon will be taken up again in this international hackathon and further developed with an international perspective.

8. Contact

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