







The Tension Field of Digital Teaching From the Perspective of Higher Education Teachers



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studiumdigitale is the centre of Innovations on Technology-Enhanced Learning at the Goethe-University Frankfurt.

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Overview





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Introduction





"Allen Menschen recht getan, ist eine Kunst, die niemand kann."

(German proverb, 1829)

"To do right by all people is an art that no one can do."

Advancing teaching after the COVID pandemic:

- First reaction of many universities after the end of the full lockdown was to return entirely to on-site teaching.
- As experience reports show, this also has many disadvantages for students and teachers, and especially the aspect of (digital) accessibility.
- Which path does one choose as a teacher after the pandemic?

Introduction





Analyzes the patterns of argumentation:

- How do university teachers justify their decisions for or against digital teaching?
- Identify possible reservations about digital teaching, and the advantages teachers see in digital teaching
- Aim: Illuminate a possible area of tension caused by different needs and teaching requirements

Research questions:

- RQ 1: What reservations do higher education teachers express about digital teaching and how does this impact the future conception of their courses?
- RQ 2: What advantages do teachers see in digital teaching and what should be retained after the pandemic induced onlin semesters?

Method





Qualitative interview study:

- 13 semi-structured interviews with higher education teachers and deans of studies (30 -45 minutes per person)
- Material was analyzed in a Qualitative Content Analysis (QCA)
- Inductive evaluation method, category system is developed from the material guided by the research questions

Interview questions for teachers:

- How do you assess your experiences with digital teaching during the past Corona semesters? What are the reasons for your assessment?
- What negative effects of digitalization processes in teaching do you see? What kinds of downsides emerge from them?
- Has your attitude towards digital teaching changed as a result of the pandemic? In what way?
- Have you used digital teaching practices, methods and tools from the Corona semesters in this semester? - If not, what are the reasons for this?

Results

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Reservations about digital teaching (RQ1):

- Social: Lack of contact and absence
 - interviewees complain that there is no direct contact in online scenarios and thus no real discourse and dialogue as well as no sufficient interaction
 - lack the spontaneous small talk as online lectures end abruptly, student communication is assumed to suffer due to a lack of opportunities for exchange:

"On the way to the seminar, they talk about the content of the seminar, as well as about the lecturer. They reflect in the process. This reflection is lost." (IP05)

- Pedagogical-didactical reservations and motivational aspects
 - willingness and ability of students to perform decreases in online teaching
 - possibilities of digital teaching are less effective
 - Teachers also perceive the "digital divide" associated with online teaching as problematic, i.e. the effect that high-achieving students benefit more from digital teaching than lower-achieving students, who tend to be disadvantaged by the use of online teaching

"I think that to those who are good didn't matter that much because they dealt with it well. But those who are not so good, you lost them to a certain extent because you couldn't nudge them directly." (IP08)

Results

Reservations about digital teaching (RQ1):

- Organizational and legal barriers
 - Digital teaching is above all time-consuming
 - must first create or prepare additional materials or provide additional online support
 - respondents also fear that their digital course material will be distributed uncontrolled and illegally on the web





- Technical barriers
 - the available digital system is criticized as being inadequate, especially for "beginners"
 - insufficient internet connection of the students
- Personal reservations and lack of teaching skills
 - teachers have the opinion that a majority of their colleagues would prefer face-to-face teaching to online teaching
 - lack of competences

"Of course, there were enormous difficulties in dealing with a digital format, for example. So how do I actually do an online session or something?"

"For me, it was relatively clear that the know-how was still lacking on the part of the teachers, both from a didactic and a technical point of view. Above all from a didactic point of view." (IP05)

Results

Advantages of digital teaching (RQ2):

- Pedagogical-didactical and motivational advantages
 - temporal and spatial flexibility of digital, asynchronous teaching
 - Learning at one's own pace

"So some like it, appreciate it very much, that they can schedule things themselves, that they can work independently at home, when they want to." (IP11)

"We've made the observation that highperforming students actually show performance improvement from online teaching." (IP04)





- Organizational advantages
 - easier delivery of learning content
 - reusability of digital materials
 - time flexibility through asynchronous teaching

"I have a lot of teacher trainees who have a lot of problems with overlap in their curriculum. For them, of course, it was a blessing that now in the lecture, that they can also participate asynchronously." (IP05)

Discussion

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- Disadvantages of digital teaching:
- desire for on-site teaching and the associated direct contact with students and colleagues
- pedagogical and didactic difficulties
- motivational and performance-related problems

- Advantages of digital teaching:
 - pedagogical-didactical possibilities and potentials,
 - motivation,
 - organizational facilitation









• Overlooking diverse needs

- different prior knowledge, interests, cognitive abilities, motivations as well as social and cultural backgrounds of students
- Disadvantages of a purely verbal and fluid face-toface teaching
 - difficulties following due to auditory perception disorders, physical hearing impairments, reading/spelling difficulties, grief or ADHD/ADS, problems actively participating in presence due to shyness or anxiety



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Advantages of digital teaching

- A continuous asynchronous learning offer or the possibility to make use of it in addition to face-to-face teaching
 - students with reading and spelling difficulties have enough time to read texts, use reading programs and apps for written assignments, and enter their own written submissions, e.g., via Readspeaker, and have them automatically checked for spelling and grammar
 - in the case of concentration difficulties or simply different discussion and learning speeds
 - some students in special life situations, e.g. when they are prevented from attending due to illness, parenthood or other care work







- Reflection on the specific opportunities and threats of digital teaching and face-to-face teaching on the institutional level and individual level of the single teachers
- have different possible solutions in mind in a multiperspective sense and to choose solutions that take several of these positions into account
- "So it's neither a demonization of digital possibilities, but also not a clear prioritization of face-to-face presence. Yes, perhaps not just prioritization, but really the mix, it's the mix that makes it. Both have their place, digital teaching, face-to-face teaching, and you can't replace one with the other." (IP 9)