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Cultivating a culture of experimentation in higher-education teaching and learning: Evaluation of recent experiences and transfer to the new-normal

## Vorwort

Als wissenschaftliches Publikationsorgan des Vereins Forum Neue Medien in der Lehre Austria kommt der Zeitschrift für Hochschulentwicklung besondere Bedeutung zu. Zum einen, weil sie aktuelle Themen der Hochschulentwicklung in den Bereichen Studien und Lehre aufgreift und somit als deutschsprachige, vor allem aber auch österreichische Austausch für Wissenschafter/innen. Plattform zum Hochschulentwickler/innen Praktiker/innen. Hochschuldidaktiker/innen dient. Zum anderen, weil die ZFHE als Open-Access-Zeitschrift konzipiert und daher für alle Interessierten als elektronische Publikation frei und kostenlos verfügbar ist.

Ca. 3.000 Besucher/innen schauen sich im Monat die Inhalte der Zeitschrift an. Das zeigt die hohe Beliebtheit und Qualität der Zeitschrift sowie auch die große Reichweite im deutschsprachigen Raum. Gleichzeitig hat sich die Zeitschrift mittlerweile einen fixen Platz unter den gern gelesenen deutschsprachigen Wissenschaftspublikationen gesichert.

Dieser Erfolg ist einerseits dem international besetzten Editorial Board sowie den wechselnden Herausgeberinnen und Herausgebern zu verdanken, die mit viel Engagement dafür sorgen, dass jährlich mindestens vier Ausgaben erscheinen. Andererseits gewährleistet das österreichische Bundesministerium für Wissenschaft, Forschung und Wirtschaft durch seine kontinuierliche Förderung das langfristige Bestehen der Zeitschrift. Im Wissen, dass es die Zeitschrift ohne diese finanzielle Unterstützung nicht gäbe, möchten wir uns dafür besonders herzlich bedanken.

### Zur Ausgabe:

Answering the question of effectiveness of educational interventions is no easy task for a multitude of reasons. The effectiveness of an intervention depends not only on the intervention itself but also, for example, on the target group, the available infrastructure, the current legislation, the time of implementation or the expertise of the teachers. This special issue shows the diversity in the goals pursued and the interventions used to achieve them. It also shows methodological differences in effectiveness research and argues the need for nuanced interpretation and for explicitly considering the context for the intervention.

Seit der Ausgabe 9/3 ist die ZFHE auch in gedruckter Form erhältlich und beispielsweise über Amazon beziehbar. Als Verein Forum Neue Medien in der Lehre Austria freuen wir uns, das Thema "Hochschulentwicklung" durch diese gelungene Ergänzung zur elektronischen Publikation noch breiter in der wissenschaftlichen Community verankern zu können.

In diesem Sinn wünschen wir Ihnen viel Freude bei der Lektüre der vorliegenden Ausgabe! Martin Ebner und Hans-Peter Steinbacher Präsidenten des Vereins Forum Neue Medien in der Lehre Austria

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Editorial: Cultivating a culture of experimentation in higher-education teaching and learning: Evaluation of recent experiences and transfer to the new-normal

# **Thematic Introduction**

In 2020, higher education institutions (HEIs) worldwide had to shift to emergency-remote teaching due to the COVID-pandemic (ERT, HODGES, MOORE, LOCKEE, TRUST & BOND, 2020), which has stimulated research on higher education teaching and learning like few situations before. This by itself is already an interesting fi nding, since teaching and learning at HEIs has not always been in the focus of researchers' interest.

Before making any bold statements on how long or durable the changes might be in the future, we suggest looking deeper into conditions of such change and possible longerterm amendments in higher education teaching and learning. In our view, it is necessary to further develop the teaching and learning *cultures* within HEIs for change to become persistent. Defi ning teaching-and-learning cultures as SCHEIN (1990) and others did, the cultural approach especially focuses on every day, normal behavior and artifacts and their relations to deep convictions and beliefs (cf. ALVESSON, 2002).

In our view, the cultural approach is appropriate here because of three reasons:

First, this perspective is best suited to explain long-term changes in institutions. Adopted by research in the fi eld of business administration and change management, it can explain factors relevant to both successful as well as nonsuccessful long-term

change efforts. Second, the cultural perspective considers the often-complex conditions in teaching and learning institutions, including strong traditions surrounding teaching and learning, both across, but especially within disciplines (e.g., JENERT, 2014), the organizational and managerial peculiarities of educational institutions, the technological conditions, the sociological peculiarities as well as the psychological specifics of the people involved. This analysis, often based on a multi-method approach, thus, offers deeper insights into how processes and structures change.

And third, instead of viewing the COVID-induced crisis as the potential origin of possible long-term changes in higher-education teaching and learning, the cultural approach considers this rather as a catalyst of change. This way, it considers the complex cultural conditions like different cultures' coherence and content prior to the emergency state of remote teaching.

Hence, we invite you to adopt a cultural perspective on the recent changes in higher education teaching and learning when reading the following contributions. When doing so, it might be useful to distinguish a cultural quantity dimension – relating to the number of underlying convictions and values changed – from a quality dimension – relating to the content of the new normal such as the higher acceptance of digital teaching, changed role expectations such as power shifts caused by the online format, and the role of experimentation in teaching.

The nine articles in the special issue highlight two main issues related to the pandemic-induced experimentation in teaching and learning:

As indicated by the diversity of the authors' physical locations, COVID and emergency-remote teaching affected HEIs at a nearly global scale. Authors in this issue come from European countries (Switzerland, Germany), North America (the USA) as well as the southern hemisphere (South Africa). Given the breadth of COVID-related (change) experiences, the insights presented in this issue can be relevant to many HEIs across the globe, notwithstanding their cultural and institutional specificities. In addition, and of high relevance to us, the articles collected here focus both on different positions or roles (students, faculty, management) as well as on different levels of teaching and learning in higher education (teaching and learning, curricular or institutional levels, cf. BRAHM, JENERT & EULER, 2016). While most contributions focus on the student during COVID, investigate experience others faculty/instructors' perspectives including faculty development. Yet another group takes a more systemic, institutional point of view. It could be argued that highereducation research takes up a multi-level perspective when exploring change and the new normal.

The opportunities to go further in these topics were offered by hosting the 2021 annual conference of the Swiss Faculty Development Network (SFDN) as well as by editing the conference-related special issue that you are currently reading. With both outlets, we aimed at exploring what it can mean to cultivate a culture of experimentation not just within a crisis, but also beyond.

# Overview of contributions

Chaka Chaka opens the special issue with an overview over 18 reviews related to COVID-19 as a driver for change in higher-education teaching and learning. In addition to highlighting some of the technological aspects of the current (2020–21) pandemic-induced online teaching, the research paper indicates the importance of the variety of topics and themes, for this specific situation, including challenges and quality aspects of (virtual) teaching. Many of these are, of course, relevant beyond the COVID-pandemic.

The following four articles focus the students' experiences and their view related to the COVID-induced online teaching.

In the article by *Ronja Büker* and *Tobias Jenert*, the focus is on first-year students and their challenges during their transition to university, especially in the light of the pandemic-induced online teaching. The authors developed a short intervention that includes positive self-verbalization to reduce students' anxiety and enhance their self-efficacy. Conducted as an experimental-control group study with a pre- and post-test, data indicate that for the class with lower self-efficacy, the intervention resulted in an increase of students' self-efficacy over time. The study therefore gives evidence to important challenges that students experience

during the pandemic as well as ways how to deal with them on an institutional level.

Laura Otto and Anna Wanka explore – through a mixed-methods study – how teaching and learning have changed among students during the pandemic. The study, done within social sciences and humanities programs at a German university, indicates that the university largely has lost its function of structuring learning. In addition to the loss of time and space frames of learning, virtual teaching and learning has reduced opportunities of learning together with other students and of being in contact with their instructors. Interestingly and importantly for the issue's theme, the authors dare to predict some medium- and long-term consequences of the pandemic, for higher-education teaching and learning.

Taking up a different perspective on students' roles, *Thomas Tribelhorn, Roman Suter* and *Sevgi Isaak* explore the value of student ecoaches as change agents. The research paper investigates this implementation of a reverse mentoring scheme in higher education at a Swiss university. Results stress the importance of cooperation and ability for success, in addition to organizational matters. The authors derive conclusions regarding this kind of unusual cooperation between students and teachers, thereby developing ideas for future experimentation with higher-education teaching and learning.

Ruth Puhr examines the impact that the COVID pandemic might have for the workplace preparation of hospitality-management students – a field that was hit especially hard by the pandemic. Based on a theoretical discussion of the two concepts, she argues for replacing the concept of employability by work readiness. Following the discussion, job profiles and responsibilities may be changing too rapidly

so that the former concept could be questioned. In a mixedmethods study, the author surveys students' views on these concepts and investigates factors that may have a positive effect on the development of work readiness.

The two following contributions add on the student perspective by focusing on the faculty or higher-education instructors during and related to the pandemic.

In their research paper, *Michael Eichhorn, Alexander Tillmann* and *Hendrik Drachsler* apply an almost classic topic, higher-education teachers' approaches to teaching, to digital teaching. The quantitative study design and statistical analyses is based on data from about 300 higher-education teachers at a German university. Although the study was done in the high time of the pandemic-induced virtual teaching (summer 2020), their results are important beyond current conditions: The finding that, for instance, student-oriented instructors seem to better adapt to the crisis by using a greater variety of teaching methods has direct relevance for future university teaching.

Taking the crisis in pandemic seriously, *Rachel Plews* and *Laura Zizka* introduce, in their workshop report, a trauma-informed approach to faculty development in and during the pandemic. The authors describe a workshop held at the 2021 SFDN conference that was based on seven principles of trauma-informed work with higher-education instructors. In addition to this relatively new approach, they offer insights produced by the workshop participants, connected to their experiences with this and similar approaches during the pandemic, many of which could be connected to principles of good practice in faculty development.

The final two contributions take a more systemic, institutional perspective.

Jennifer Blank, Sonja Sälzle, Linda Vogt and André Bleicher explore opportunities in higher-education institutions post-COVID. Based on a discussion of Luhmann's terms contingency and possibility space, the report describes results of a series of interviews and focus groups with teachers, students, and university management. Building on the main findings of acting under uncertainty, especially concerning the first weeks of emergency-remote teaching, the authors develop institutional recommendations for arranging areas of experimentation in higher education post pandemic.

*Julia Nitsche* and colleagues analyze the change that their university executed due to the COVID-pandemic in a research paper. In addition to describing and theorizing about the change process on the institutional level, the from facultysupport authors data use or development sessions, combined with responses from student surveys on their perception of the digital teaching. Intriguingly, both data sets indicate a need for systematic development of teaching competences, which seems to be one of the main conclusions of experiences with teaching online at many places.

# Acknowledgements

We would like to thank all authors who contributed to this issue – especially since conditions have not always been conducive to scientific work including data collection, analysis, writing, etc. The issue's theme and content were strongly influenced by the 2021 SFDN conference, so our thanks are extended to this conference's participants and

the SFDN board. Special thanks go to the ZFHE editorial board and to the ever-supportive ZFHE editorial team.

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# References

**Alvesson, M.** (2002). *Understanding organisational culture.* London, UK: Sage.

**Brahm, T., Jenert, T. & Euler, D.** (2016). Pädagogische Hochschulentwicklung als Motor für die Qualitätsentwicklung von Studium und Lehre [Pedagogical higher-educational development as motor for the quality development in teaching and learning]. In T. Brahm, T. Jenert & D. Euler (eds.), *Pädagogische Hochschulentwicklung. Von der Programmatik zur Implementierung* (pp. 19–36). Wiesbaden: Springer VS.

Hodges, C. B., Moore, S., Lockee, B. B., Trust, T. & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

**Jenert, T.** (2014). Implementing Outcome Oriented Study Programmes at University: The Challenge of Academic Culture. *Zeitschrift für Hochschulentwicklung (ZFHE), 9*(2), 1–12.

**Schein, E. H.** (1990). Organizational culture. *American Psychologist*, 45(2), 109–119.

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# COVID-19 as a prime driver of rapid technological experimentation in higher-education teaching and learning: An overview of reviews

#### **Abstract**

The COVID-19 pandemic has given rise to a new era of rapid scholarly publications (e.g., peer-reviewed journal articles and non-peer-reviewed preprints). Included among such publications are reviews and reviews of reviews, both of which take longer to publish under normal circumstances. This is more so for overviews. Therefore, the current overview reviewed 18 review articles published between March 2020 and March 2021. It did so by investigating online technologies for teaching and learning used by higher education institutions (HEIs) during the COVID-19 pandemic, and by examining major themes, main fi ndings, key conclusions, and other characteristics of these 18 reviews. One of its fi ndings is that online pivoting tends to signal a necessary change and innovation embraced by HEIs during the COVID-19 pandemic. It is a pandemic technological change and innovation that underpins their SoTL.

## **Keywords**