

Transformation of higher education during and after COVID-19

Stefan Klein, University of Muenster, stefan.klein@uni-muenster.de

Mary Beth Watson Manheim, University of Illinois, Chicago, mbwm@uic.edu

Introduction

“It’s clear not only to me but to everyone else who’s running a business — actually for every organization in the world — that this was a gigantic experiment that has been proven quite successful in terms of improving productivity. If someone had come into my office last February and said, “I have an idea. Why don’t we keep everybody working from home and see what’s going to happen?” I would have kicked him or her out immediately. I would have said, “You’re crazy.”” Albert Bourla, Pfizer CEO, In an interview with Ron Chopoorian and Daniel Gross (2021)

The organizational responses to COVID-19 mirror in many ways the candid account of Albert Bourla: from one day to another the lock-down create an unprecedented social experiment, which contradicted established rules and conventions how things are done and how they ought to be done, creating a rare opening to unlearn (Hsu, 2021) and an interruption in the relentless pace of a digital society.

The goal of our analysis is to reflect on the organizational changes and the transformation (and future) of academic work through the framework of Bartunek and Moch (1987). We do so by distinguishing three phases during March 2020 – August 2022: Months 1-6 the immediate onset of the pandemic; months 7-18 as period of ongoing adjustments; and months 19-30 as transition to a (new) normal. A core tenet of our analysis is the dialectic between enforced decentralized innovation and improvisation with high degrees of individual freedom (“make this work”) and the subsequent backlash of regulating the return to the office and the classroom justified as essential for the identity of the university.

Theoretical lens - Orders of change

We apply and extend Bartunek and Moch’s (1987) framework of three orders of change for to reflect on processes and practices of transformation (**Error! Reference source not found.**). We use “temporal

Effects	Explanation
First-order	... convergent change (Tushman and Romanelli, 1985), ... occurring within a relatively stable structure, such as when an organisation improves its efficiency and effectiveness without re-thinking its core processes (Besson and Rowe, 2012 p. 104).
Second-order	... unintended and typically unexpected effects trigger modifications in the organisational schemata , ... the organising frameworks that guide cognitions, interpretations and actions of organisational actors (Bartunek and Moch, 1987 p. 484) ..., but still within a given structure.
Third-order	... effects outside the scope of existing operating reference systems ... change in organisational schemata (Bartunek and Moch, 1987). Third-order effects represent the emergence of entirely new schemata , reshaping views about the nature of work and how it is done, and the corresponding organisational structures.

Table 1: Three order of change adapted from (Baptista, Stein, Klein, Watson-Manheim, & Lee, 2020)

bracketing” (Langley et al.2013, p. 7) to structure the analysis based on different dynamics and themes we have identified ex-post.

Research design

This extended abstract is based on a multi-method approach, combining autoethnographic, dialogic reflections, surveys and literature reviews. Autoethnographic observations, reflections and the subsequent conversations and joint sensemaking of two scholars working in different institutions in different countries (US, Germany), are the main anchor of our work.

Analysis and reflection: Dynamics of Transformation

Phase 1 First 6 months of pandemic of lock-down - Opening the floodgate: individual and institutional (re-)configuration and figuring out

1st order - Change as crisis response

The lock-down in March 2020 required a swift and resolute response to the crisis. Faculty were asked to set-up online classes and to figure out how to make enforced teaching and learning from home work. Key characteristics were: 1) The need for swift innovation at the intersection of teaching formats and didactical concepts on the one side and digital tools and infrastructures, some of which were made available as response to the pandemic, and 2) the regulatory guardrails have been (de facto) relaxed or adjusted to provide individual's with leeway to 'just make it work'. This left scope for decision making at the school level, with experimental approach(es) enabled initially by fewer administrative guardrails, allowing innovation and figuring out by individuals (Klein & Watson-Manheim, 2021).

2nd order – Where are meaningful guardrails?

Not only were the **guardrails** of rules and conventions of how one teaches and how one behaves as a student disrupted, but also a common, coherent interpretation of the challenge. New tools and relaxed rules provided space for experimenting, reflecting and learning. The crisis led to an openness of conversation about teaching and learning among faculty, staff and students, including an increased focus on data and privacy protection.

The constraining and isolating effects of the pandemic and the effects of new, digitalized modes of teaching & learning became **conflated**. Faculty had to adjust to working from home and to teach (and work) digitally only. Students had to consider their accommodation, technical infrastructure and importantly their social life.

3rd order – Meaning lost and regained

This first phase of the pandemic saw deep structural changes with respect to individuals (and in turn departments and schools) embracing the crisis as a situation of unknown degrees of freedom, which required creative responses and personal engagement. At the same time there has been a **widening rift** evidences by individuals who disengaged, lamented about the situation or tried shortcuts. Unresolved issues arose: Who are we as

an institution and as faculty? Overall the crisis proved to be in many ways **revelatory** as the role and importance of what was lost during enforced teaching and learning from home became visible and evident, for example the homogenizing role of the classroom, which shielded social differences, housing conditions, etc., but also created mutual visibility.

Phase 2 Months 7-18 - Confusion and differentiation, and ongoing adjustments

Some of the adjustments during phase 2 reflect experiences and learnings from phase 1.

1st order – Extended infrastructuring, while still in a limbo

As the pandemic continued in fairly unpredictable ways, institutions and individuals were muddling through waves of the pandemic, accommodating different modes of online teaching and, by and large, managing surprisingly well. New practices and formats of online teaching emerged, thereby extending the repertoire of teaching options.

2nd order – Tentative routinization accompanied by detrimental effects

During this phase we see diverging responses by schools, faculty and – partly as a response – by students. Despite steps of **routinization** and incremental improvements, students' needs were not adequately met. New, pragmatic rules for online education emerged quickly, there was a burst of innovation in terms of formats of teaching materials such as podcasts, or activity-based teaching elements, and there were processes of learning how to best use the online tools, e.g. to turn off the self-image on Zoom to reduce online fatigue.

The **interpretations of the problem** were diverging: negative effects of online teaching vs. COVID health risks for students and faculty. We observed growing **divides** – digital and otherwise - across levels of hierarchy, among faculty, between different groups of students, different organizational settings. For example, engaged and committed faculty vs. overwhelmed and undermotivated faculty who focused on pre-recorded teaching material. While the enforced digitalization might have created a level playing field, in practice it revealed and underscored existing differences and a very uneven playing field.

Detrimental effects of enforced teaching and learning from home become visible: profound insecurity and uncertainty, exhaustion, Zoom fatigue, even burnout (Gewin, 2021), also loneliness and mental health issues (Ettman et al., 2022). Some students as well as faculty experience severe mental health issues, such as depression, while the institutions are not prepared for an adequate response. The US has reported a historic drop in college persistence rates (<https://nscresearchcenter.org/persistence-retention/>).

Deep structural changes at an institutional level have been **postponed** as the situation is widely interpreted as temporary and transitory.

Phase 3 Months 19-30 - Disjoints and discrepancies

1st order – Back to the traditional classroom

High vaccination rates among students and staff amidst dwindling hospitalization rates have prompted return to the campus, combined with a call to enable online participation. Call's for online participation options, or hybrid teaching and learning, reflects students'

and faculty preferences to have both options.

2nd order – Post COVID transformation: back to normal vs. forward to a new normal

The pandemic yielded innovation, which however was bracketed as pandemic response rather than a building block for a future model of teaching. We observe a “roll backward into classroom teaching” (Matthes, 2021) and romanticizing the pre-COVID teaching and learning conditions. Many institutions experience a conundrum: students are quite adamant in their expectation that digital options of class attendance or at least digital learning materials will be provided next to a classroom option. Yet many lecturers have experienced an erosion of class-room attendance over the course of a semester, when this option has been provided.

The discussion about alternative modes of teaching has increased the visibility of political and economic logics of campus-based education. Campus-based teaching is a key rationale for tuition and student fees, in other words the current level of fees would hardly be acceptable, if a substantial part of teaching and learning would happen online. Even in countries without student fees for public universities, the physical infrastructure is a key component and rationale for the extent of state funding. Many US universities compete for good students on amenities such as upgraded student dormitories, workout facilities, etc. that are place-based and those amenities and the campus experience are important to create loyal alumnae.

3rd order – Visions for the future?

Vision papers by independent institutions have been published e.g. the German Forum for Higher Education in the Digital Age (Hochschulforum Digitalisierung, 2022) in order to build on the experience of the past years to develop a vision and road map for the transformation of third level education. Cowell (2021) has identified a few **paradigmatic changes**, such as extending of learning places as a result of technology available to students anywhere, anytime and rethinking engagement and assessment of students. While the themes are not new *per se*, they have gained a bit more traction and are recognized as more feasible than prior to the pandemic. Yet we found little evidence of a continuing momentum to think about a different future.

5 Discussion and theoretical reflection

We have used the three orders of change as a lens to examine transformation of academic work engendered by university responses to COVID-19. The framework focused our attention on unexpected effects and deeper structural issues. The enforced experimentation during the pandemic has proved to be revelatory with respect to responses from faculty, students and management. It also brought to light beneficial as well as detrimental secondary effects that had not been anticipated and left individuals, communities and institutions with a lot to grapple with. Importantly it raised profound – third order issues - issues about models of education, the role of the university, digitalization of education, and the role of the university as a physical space.

The crisis **enforced digitalization** in ways that would otherwise not have happened. Yet responses were quite diverse: what was a god-send for some, had turned into a nightmare for others, some tried to make it work as well as possible while others resented it or suffered silently. The transformation provided unknown freedoms to innovate, but at the same time highlighted the substantial amount of configuration work (Klein & Watson-Manheim, 2021) that not everyone was willing or able to commit.

The outcomes are – not surprisingly – highly contextualized, reflecting different systems of education but also different management styles and organizational cultures. In this way our different vantage points proved productive as they forced us to contrast and compare and enabled us to reflect on contextual differences and influences. Nevertheless, the analysis relies on plausible reasoning as causal linkage are not only hard to establish but may not be clear.

6 Conclusions

COVID-19 has become a revelatory polycrisis (Tooze, 2021) for the education system, which we have explored with a particular focus on second and third order effects. The analysis revealed a number of lingering crises:

- (1) An **identity** crisis: the recipes and guardrails of the past do not offer guidance for the future of education and there is no agreement as to the appropriate responses and learnings. Instead, many seem content and happy to leave the pandemic behind and go back to the known, structured and predictable situation before the crisis, while paying lip service to retaining important lessons from the past, which however are typically not articulated.
- (2) An intellectual and **value crisis**:
How do universities decide about complex trade-offs such as protecting health and well-being vs. the benefits of classroom teaching and campus life?
Students and faculty have (ab-)used the freedoms of not having to come to the classroom in many ways. The widespread calls for more flexibility and attendance options from students conflict with a strong push to go back to the physical classroom. Amidst good (and bad) arguments, the focus on classroom attendance conflates attendance and engagement (Edyburn, 2021) or classroom attendance and students' social life.
- (3) A **crisis of governance**, innovation and regulation:
The crisis prompted – or even forced - university and school management to provide faculty a high degree of freedom to innovate. The decentralized innovation model yielded a strong innovation dynamics, yet at the same time, some faculty disengaged and provided mediocre or poor teaching material and online experience for their students. Once the situation had a bit stabilized, management took back control and mandated that teaching in person and in class had to resume, as if the classroom had become the remedy for the ailments of the pandemic. In the German case, the only exemption from going back to campus are often didactical reasons.
The pandemic has revealed profound shortcomings of the educational system, discontent and many students have dropped out. An unknown number may be suffering from mental health issues (Ettman et al., 2022).

The reference list is available from the authors upon request.