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Transforming higher education

Driving innovation in higher education
through digital transformation?

LeLa and other digitalisation projects in higher education didactics aim to achieve a range of educational innovation outcomes by enhancing digital skills.¹ In this article, we explore how this digital transformation initiative in higher education relates to organisational innovation more broadly. This raises an important question: How can such projects foster organisational change that results in meaningful and sustainable innovation? To address this, we offer insights from an organisational change perspective, focusing on how the LeLa project could extend its impact beyond its initial conclusion and achieve wider influence. We argue that the inherent complexity of the processes involved necessitates a context-specific, multi-level approach – distinguishing between different levels such as didactic and organisational.

1 Cf. LeLa, 2025.

A multi-level framework for organisational innovation through digital skills

Advancements in technology – such as hybrid formats or the use of generative artificial intelligence (AI) – have been urging higher education institutions to adapt their teaching methods to meet the evolving needs of students. While some adopt short-sighted, commercial approaches² that risk reducing education to standardised knowledge, others take a more agentic stance,³ leveraging technology for institutional renewal. The latter involves fostering openness, collaboration, and the creation of new connections within education. It is often unclear whether digitalisation projects in higher education operate with a focus on the micro-level (didactic) or whether they could expand to the meso- and macro-levels (curriculum, organisation, society). This ambiguity makes it challenging to address organisational change and drive innovation in education. Meaningful digital transformation needs to explicitly address the multifaceted nature of higher education – for example, by differentiating aspects of the micro-, meso-, and macro-levels.⁴

Projects such as LeLa exemplify this agentic perspective, aiming to enhance digital skills among faculty members and enrich pedagogical practices within Zurich's higher education landscape. LeLa seeks to respond to the need for digital transformation by integrating digital tools into teaching and supporting faculty in leveraging these tools for improved student outcomes. It focuses on digital skills (micro-level) while also addressing institutional and societal questions.⁵ The three levels are also reflected in LeLa's framing programmes: 1) as part of the swissuniversities programme P-8 Digital Skills, LeLa targets students and lecturers (micro-level) as well as institutions (meso-level);⁶ 2) in the context of the Digitalization Initiative of the Zurich Higher Education Institutions (DIZH), LeLa adopts a broad definition of innovation that encompasses all disciplines and asserts that innovations arise through

- 2 Output and outcome-oriented, quantifying and saleable rationales.
- 3 Iterative, interactive, process-oriented and self-reflective rationales.
- 4 Cf. Weil, 2023; Eaton, 2020; Brahm et al., 2016; Schrader, 2011.
- 5 Cf. LeLa 2025; for meso- and macro-level, e.g.: Tag der Lehre@UZH; first LeLa publication; Arbeitsgruppe Educational Design.
- 6 Cf. Swissuniversities, 2025.

cooperation with other social subsystems and may have social, economic and political implications.⁷

We assume that initiatives such as LeLa signal institutional adaptability and a strategic commitment to innovation. By enhancing digital skills at the micro-level, aligning strategies across departments at the meso-level, and addressing broader societal needs at the macro-level, such projects promote systemic change and sustainable digital transformation in education.

In this article, we seek to connect this digital transformation initiative in higher education to an organisational level of innovation in education.⁸ In this regard, a model of micro-, meso-, and macro-levels can provide a preliminary conceptual framework for understanding the multi-level impacts of digital transformation in education, highlighting the importance of context-specific strategies for fostering meaningful and lasting organisational change. We begin by focusing on a potential organisational perspective on digital transformation, followed by the development of a multi-level perspective on innovation through an analytic grid. We conclude with recommendations for a LeLa-influenced transformative perspective at the organisational level and beyond.

Organisational perspective on digital transformation

LeLa represents a response by the participating universities, aiming to enhance the digital skills of university faculty members by integrating digital tools into their pedagogy and supporting them in using technology effectively to improve student outcomes. LeLa follows best practices drawn from research on the digitalisation of education, with the universities committed to sharing the latest advancements in the field. Beyond these practical benefits, LeLa also serves broader organisational purposes, signalling institutional adaptability and a strategic commitment to innovation.

Drawing on recent research on organisational adaptation in the digital age, initiatives such as LeLa act as strategic signals that demonstrate an

7 Cf. DIZH, 2023, p. 1.

8 Cf. Shenkoya & Kim, 2023; Verhoef et al., 2021.

institution's commitment to innovation and technological adaptability.⁹ Signalling theory, which posits that observable actions serve as credible indicators of an organisation's underlying qualities, helps explain how such initiatives convey essential information about an institution's strategic direction and capabilities. In this context, these signals are expected to not only shape lecturer and student perceptions but also to attract investment, support, and a faculty aligned with a culture oriented towards continuous digital transformation.¹⁰ This, in turn, influences student perception, encourages state investment, and builds a culture receptive to ongoing digital transformation.¹¹

By enhancing faculty digital skills and enriching students' learning experiences at the micro-level, while simultaneously signalling institutional commitment to technological advancement, projects such as LeLa not only draw attention to the importance of digital transformation but may also help to secure further funding for these efforts. This dual impact aligns higher education staff and stakeholders – including local and governmental authorities – around a shared vision of digital progression, creating an environment conducive to sustained transformation and encouraging continued engagement from all parties involved.

Multi-level perspective on innovation

A multi-level analysis offers a valuable framework for examining the impact of LeLa on innovation in education. While LeLa primarily drives change at the micro-level by enhancing the digital skills of faculty members, the meso- and macro-levels provide additional opportunities for sustainable digital transformation beyond the immediate scope of the project (see Table 1). The distinction between these levels is well-established in the literature and is essential for adopting a holistic approach to fostering innovation in education.¹²

At the micro-level, LeLa aims to provide tailored digital tools and training to improve teaching and learning for individual educators and students. We assume that by equipping faculty with the necessary digital skills, the initia-

9 Cf. Filatochev et al., 2023.

10 Connelly et al., 2011.

11 Cf. Yu et al., 2023.

12 Cf. Eaton, 2020.

tive enhances the immediate learning environment and supports the adoption of innovative teaching practices – such as network events, publications, and the sharing of best practices.

On the meso-level, the focus shifts to departmental and institutional structures, ensuring digital strategies are integrated into curricula and aligned with institutional goals beyond mere signalling. Academic leaders can embed digital skills into their programmes, develop institutional policies that encourage digital innovation, and establish support systems such as training hubs or digital resource centres. By reinforcing these strategies within institutional frameworks, the meso-level ensures that individual faculty development resonates across departments, fostering a cohesive and scalable approach to digital transformation.

At the macro-level, broader policies and national frameworks play a key role in shaping the adoption and funding of digital initiatives. Successful outcomes from projects such as LeLa publications, network events, strategy, and organisational culture initiatives (e.g. LeLa-Forum “Hochschulkulturen im digitalen Wandel”) could support policymakers and funding bodies in prioritising digital skills development in higher education. This, in turn, can drive wider adoption of digital strategies and provide the structural and financial support necessary for long-term sustainability.

In this way, LeLa has the potential to contribute to shaping broader policies and fostering systemic change in digital education across institutions. From an institutional perspective, Schrader¹³ highlights additional dimensions – such as didactic, curricular, institutional, national, and supranational levels – that incorporate societal and economic factors.¹⁴ These perspectives offer a comprehensive lens through which to understand the interconnected layers of higher education systems and their broader contexts.

13 Cf. Schrader, 2011.

14 Cf. Weil, 2023.

LEVEL	MEANING	RELATION TO LELA AND TRANSFORMATIVE QUESTION
Systematic	Position within the education system	In the case of Lela, this relates to higher education in general: <i>Could the results also be adapted to other parts of the education system?</i>
Institutional	Position within or among higher education institutions	For LeLa, this applies to the four involved Zurich universities: <i>Could these outcomes also be adapted to other higher education institutions?</i>
Functional	Role and function within higher education	For LeLa, the focus is on higher education didactics: <i>Could this become part of research, education programs, or services?</i>
Social	Connection of various academic settings	LeLa's main approach is community building and sharing of knowledge: <i>What factors could help maintain the community and gained knowledge after the project ends?</i>
Curricular	Relation to higher education curricula	For LeLa, digitalization skills are inherent but not formalized: <i>Could LeLa provide curricular aspects for study programmes or further education?</i>
Didactic	Methodological application in higher education teaching and learning	LeLa includes teaching tools and a didactic perspective: <i>Could LeLa enrich methodology in teaching higher education?</i>

TABLE 1: Explorative questions and multi-level meanings of LeLa¹⁵

These layers serve as a grid for analysis, shaping innovations and defining one's position – or the specific aspect of cooperation. For instance, the framework enables the addressing of both internal and external target groups, positioning academic staff development as an institutional responsibility.¹⁶ LeLa events such as networking opportunities (DIZH & LeLa Netzwerkevent mit Buchvernissage) or LeLa-Forums (Blended Learning – Implikationen für die Gestaltung an Hochschulen) have the potential to address broader social, functional or institutional changes that may extend beyond the current scope and objectives of the project.

15 Own elaboration adapted from conceptual frameworks, Weil, 2023; Schrader, 2011; assignment of questions by levels to LeLa, cf. LeLa, 2025.

16 Cf. Kamm et al., 2016, p. 138.

Conclusion

We have reflected on fostering innovation within Zurich's higher education landscape and proposed two perspectives for examining LeLa's sustainable impact on digital transformation, emphasising its role in 1) fostering organisational change and 2) promoting educational innovation through signalling and multi-level analysis.

LeLa operates within a broader context of institutional change, where transformation could impact multiple levels – micro, meso, and macro – resulting in outcomes that collectively contribute to innovation in education. Achieving sustainability in digital transformation requires clear goals, whether through further training, self-support mechanisms or long-term institutional integration. Institutional cooperation, as LeLa has demonstrated, creates opportunities for learning from other systems and producing joint outcomes, thereby paving the way for multi-level impact. Ensuring sustainability, however, demands the resolution of key barriers through dedicated funding, strong leadership commitment, and structured frameworks for collaboration.

LeLa exemplifies how digital transformation in higher education can drive innovation by enhancing faculty digital skills, fostering collaboration, and aligning efforts across institutional levels. However, achieving lasting impact requires tackling resource constraints, strengthening institutional integration and committing to long-term planning. Based on these insights, some recommendations for fostering sustainable digital transformation in higher education include:

- Clearly defining (and extending) levels of impact
Projects should identify their primary focus and ensure that their goals align with the desired level of change. For example, LeLa's emphasis on enhancing faculty digital competencies aligns with its micro-level objectives, while simultaneously fostering collaboration at the institutional level.
- Integrating organisational perspectives
Align digital transformation efforts with institutional policies, curricula and strategies to ensure that individual initiatives resonate across departments and contribute to broader organisational goals. Encourage both internal (inter-departmental) and external (inter-institutional) partnerships to leverage diverse expertise and promote innovative, interdisciplinary approaches to educational challenges.

- Taking macro-level opportunities
Collaboration with external stakeholders, including policymakers, funding bodies, and industry partners, helps to address societal challenges, influence broader policies, and secure systemic support for digital education initiatives.

In summary, by adopting a multi-layered approach, higher education institutions can signal that digital transformation impacts multiple facets of both the institution and society. Organisational learning strategies, signalling and contextualisation have the potential to drive innovation across all levels of education.

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