## Chapter 4 Outlook on a New University Landscape in 2030



Abstract Reflecting the change in perspective taken in this book, our survey put questions about institutional support, governance, quality assurance or financial issues aside. Moreover, digitization is not only a technical innovation but always a social one as well. This fundamental change of perspective leads to questions such as "What does the learner need?" that universities will have to face in the future. Within the survey, international experts were requested to assess the quantitative success of the different learning pathways, distributing current and future students among the four models. Unsurprisingly, the "new" learning paths were expected to become more important, although the actual prospective importance of these learning paths will depend on the supply and demand for academic studies, allowing decision-makers to rethink the educational designs based on the AHEAD modeling.

## **4.1** A New Focus on Learning Pathways in the Era of Digitization

To Lego: "I think it is an interesting, innovative, and sustainable model! However, the German university landscape is neither prepared nor positioned for this in the short nor medium term."

On the whole approach: "We need more and more of such approaches in higher education.

Thinking outside of the existing, firm, and relatively standardized systems." Source: anonymous quotes from the international survey.

The four learning paths of the AHEAD study were developed during the summer of 2018; they have subsequently been discussed, in various discussion groups, by university representatives, students, political decision-makers, and business people. The vision of a higher education landscape designed around the learner spurred

discussions in a very constructive way. Questions about institutional support, governance, and quality assurance, as well as the institutional financing required for restructuring and infrastructure, would normally shape any debate about the future of higher education or higher education institutions. In this case, these topics were moved to second place, reflecting the change in perspective.

Questions of digitization also benefit from a change of perspective. The current debate on digitization in social processes aims to shift from a technology-first approach, which originates with technology and then searches for applications, to the view that digitization is always a social innovation. Daniel Buhr emphasizes this distinction in his position paper "Social Innovation Policy for Industry 4.0" (cf. Andersson et al., 2016; Buhr, 2015):

Social innovations have a decisive influence on whether a technical invention becomes a widespread innovation (according to Schumpeter), along which paths and channels it spreads (diffuses), and what effect it unfolds in the process. A social innovation is a targeted reconfiguration of social practices with the aim of better solving or satisfying problems or needs than is possible on the basis of established practices, and thus contributing to social progress.

The Vice-Presidents of IT systems and the so-called CIOs (Chief Information Officers) of universities now emphasize this changed perspective: "When implementing digitization, we must focus on the users and no longer on departmental silos. What does the individual need?"—says Hans Pongratz from TU Munich (Kaufmann, 2019, p. 6f.). The present study goes one step further, asking: What does the learner need?

The practical examples detailed above (Minerva, 42, MIT MicroMasters, and DNB) show how technology can be fully embedded in educational initiatives. They provide examples of a strategic approach that is not additive and does not attempt to embed technology in old structures, without significant reforms.

## **4.2** The Future Relevance of Learning Pathways for the Higher Education Landscape of 2030

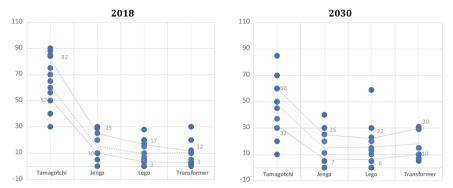
In the various expert interviews, participants were asked what proportion of students was following these learning paths today, as well as will be in 2030. There were major differences of opinion in each group, but the experts showed particular interest in the Jenga and Lego models, which many saw as offering future promise. At the same time, many people commented that the classical model of higher education (in this case, Tamagotchi) would change considerably during the next decade.

The survey of international experts carried out between November 2018 and January 2019 also asked participants how to assess the quantitative significance of various learning pathways. Experts and stakeholders were asked to distribute current students and the future students of 2030 among the four learning paths. Figure 4.1 shows the trend of responses. These initial assessments are not surprising. They

<sup>&</sup>lt;sup>1</sup>Unfortunately, few survey participants were willing to answer this question. Obviously, many people found it difficult to allocate students to different learning paths, in accordance with this new

## Assessment of the importance of the respective learning pathways in 2018 (left) and 2030 (right)

a) Estimated share of students in 2018. The distance between the lines shows the range in which half of the assessments lie.



b) Mean value of the assessments for the respective learning pathways (size of the respective blocks represents the expected proportion of students).

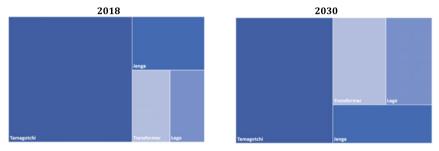


Fig. 4.1 Assessments on the current and future significance of the four learning paths. Source Own illustration

show that all three of the "newer" learning paths (Jenga, Lego, and Transformer) are expected to become more important, while Tamagotchi will lose some of its relevance.

However, the actual importance of each learning path will depend on both supply and demand. This means that political decision-makers, university authorities, and a range of other educational institutions should rethink the design of their educational offers and accompanying services, on the basis of AHEAD modeling. In this way, they can develop new strategies. Of course, educational institutions will be free to

perspective. More than 800 people visited the survey website and 28 people completed the survey, but only 14 were willing to answer this particular question. Their assessments are nevertheless important for explorative studies such as this one. In addition, these subjective assessments roughly reflect the opinions that project team members expressed during personal discussions.

provide a range of different learning paths.<sup>2</sup> For this purpose, the AHEAD learning paths offer initial goal-orientation patterns.

Over the past 20 years, the new public management model has become the focus of higher education policy measures and strategies (Jongbloed, 2015). The processes used to make courses more flexible and individualized have been partly restricted by this focus (Henderikx & Jansen, 2018, p. 78 ff; Orr & Usher, 2018). At this point, it may be helpful to consider the United Nations' educational goal 4.3 as a touchstone for higher education in Germany and Europe: "To ensure equal access for all women and men to affordable and high-quality technical, vocational, and tertiary education, including university education, by 2030" (United Nations, 2015) and to use digitization to effectively achieve this goal.

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<sup>&</sup>lt;sup>2</sup>For example, Hamdan Bin Mohammed Smart University (HBMSU), investigated in the OOFAT study, concentrates on four groups of students to provide orientation values for study program planning: casual learners, concentrated learners, committed learners, and continuing learners (Orr, Weller, et al., 2018).