

Roundtable Discussion: Envisioning the University of the Future

Abstract

In this roundtable discussion, we invite participants and higher education professionals to engage with us in a stimulating discussion concerning the future of higher education. We will present and discuss different scenarios based on our own Future Skills research initiatives and emerging trends in higher education. We will also ask participants to envision their utopia of future higher education - and compare participants' visions to the scenarios presented. We will then discuss in what way these future scenarios are already visible now - and how we can promote future-ready teaching and learning in higher education.

Keywords:

Future Skills; Future Higher Education; Future Scenarios

Title: Envisioning the University of the Future

Introduction

What will the university of the future look like? What trends can already be identified today?

These questions have not only arisen since the Corona pandemic – topics such as digitalization, globalization and climate change are also presenting higher education institutions with new challenges in preparing students for a future that is still uncertain.

Our research group is conducting research in various national and international initiatives on different topics and aspects that affect the future of higher education teaching and learning, and is already implementing learnings from these in their own teaching. In this roundtable discussion, we invite participants and higher education professionals to engage with us in a stimulating discussion concerning the future of higher education. We will present and discuss different scenarios based on our own Future Skills research initiatives and emerging trends in higher education. We will also ask participants to envision their utopia of future higher education - and compare participants' visions to the scenarios presented. We will then discuss in what way these future scenarios are already visible now - and how we can promote future-ready teaching and learning in higher education and already contribute to a good future of higher education today. The multitude of educators' perspectives will be considered and valorized to discuss this complex subject.

Theoretical Foundation/Teaching Implications

The four scenarios for future higher education which stand in the heart of the Roundtable Discussion have been developed in a Delphi Survey, part of a Study on Future Skills in higher education as described in Ehlers (2020).

Based on the changed framework conditions in an educational society and the pressure for change that affects academic qualification processes, new demands on higher education institutions for a modern, further developed higher education model are emerging.

In the study, it was possible to reconstruct indications within the research data that indicate four dominant development strands of future higher education institutions. These were submitted to the Delphi experts for discursive validation. The experts were asked to do two things: on the one hand, they were asked to assess the relevance of the influencing factors formulated in each case. On the other hand, they were requested to assess the so-called time to adoption, i.e. the estimated period for effectively shaping and implementing the influencing factors at higher education institutions.

The study results indicate four different influencing factors that are referred to as pillars of change or key drivers in higher education. The identification of these factors constitutes the first methodical step within a scenario method in which scenarios for higher education development will be identified. As an expert-oriented consensual procedure, the Delphi allowed the experts to initially adapt the formulations in the first Delphi round and to add or change components and weightings of the formulations. They were able to indicate their agreement with the four factors on a five-stage Likert scale which ranked between the two poles 1 = “strong rejection” and 5 = “strong agreement”. In case they wanted to comment on a factor – for example for the purpose of item reformulation or as specification/explanation for their response behavior – a separate commentary field was provided. In this way about 26 notes and comments have been collected to improve the depth and range of formulation. In the second round, these more precise formulations were then reassessed by all participating experts with regard to the period in which these influencing factors would be implemented at higher education institutions. In the following, these are described as the key drivers bracing the space for the development of future higher education.

Four key drivers in the higher education context can be described. Each driver has a radical change potential for higher education institutions. They mutually influence each other and span the room in which higher education will likely develop. There are two content and curriculum-related drivers (i.e. (1) personalized higher education and (2) Future Skill focus) and two organization-structure related-drivers (i.e. (1) multi-institutional study pathways, (2) Lifelong Higher Learning). The profile, shape and nature of higher education in the future will be most probably a certain pattern of configuration along the impact each of the four key drivers, called “pillars of change”, and will influence the development of higher education strategies.

As part of the research initiative, experts were presented with four different scenarios based on the four factors. They all are based on a baseline scenario in which all drivers are set to low intensity. Based on this baseline scenario, the four possible future scenarios were elaborated. They are based on a cumulative logic – the next scenario is always adding another factor into the elaboration, as demonstrated in table 1. Delphi respondents were asked to indicate their level of agreement with the proposed scenarios on a five-level Likert scale, ranging from strong agreement (=5) to strong rejection (=1). In addition, respondents were given the opportunity to provide written justification for their decision or comments for potential reformulations of the scenario description.

Table 1 - Scenario Building: current and future higher education

Drivers	Scenario: Today	Scenario: Future 1	Scenario: Future 2	Scenario: Future 3	Scenario: Future 4
<i>Future Skills</i>	Low intensity	High intensity	High intensity	High intensity	High intensity
Multi-institutional	Low intensity	Low intensity	High intensity	High intensity	High intensity
Personalization	Low intensity	Low intensity	Low intensity	High intensity	High intensity
Lifelong learning	Low intensity	Low intensity	Low intensity	Low intensity	High intensity

The research initiative takes a student’s perspective on the Future of the University. Four scenarios for the Future University can be described as gravitation centres of organisational development: (1) the Future Skill University scenario, (2) the Networked University scenario, (3) the MyUniversity scenario, (4) the Lifelong Learning University scenario. Three out of four scenarios score with a time of adoption of more than ten years from today with the majority of experts involved. Only the lifelong higher learning scenario scored for a time for adoption within the next five years with the majority of experts (see figure 1).

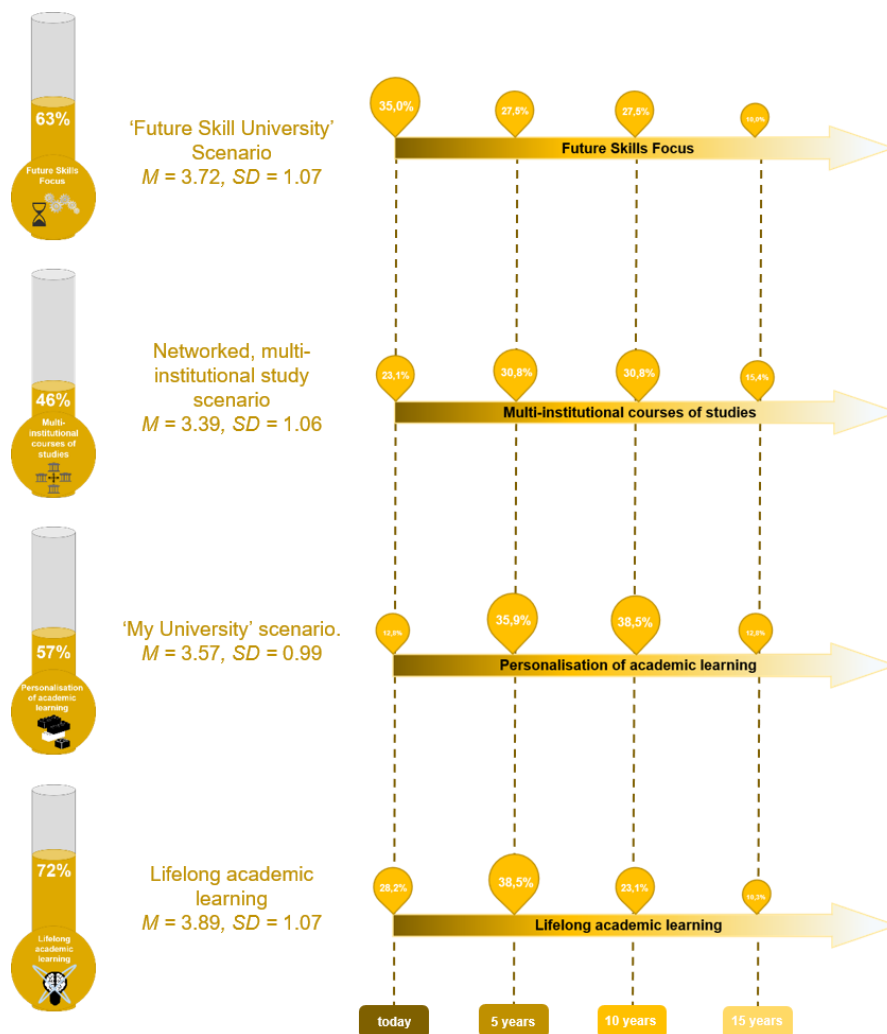


Figure 1 - Experts' evaluation of importance and time of adoption of the scenarios for higher education (N (Round 1) = 46, N (Round 2) = 38)

1. The Future Skill University scenario: The Future Skill university scenario suggests that higher education institutions would leave the current model that focusses on knowledge acquisition. Instead, new profiles would be developed that emphasize graduates' Future Skill development. In this scenario, higher education would mainly be organized around one key objective: to enable the development of graduates' Future Skills, i.e. complex problem solving, dealing with uncertainty or developing a sense of responsibility, etc. This would not replace but go beyond the current emphasis of knowledge acquisition and studying based on defined curricula for fixed professions.

2. The Networked University scenario: This scenario views higher education as a networked study experience. It will not be down to a single institution providing a student with a certain program, but this role would be split among multiple institutions. This means that 'digital import' and 'digital export' of parts of the curriculum would play a significant role. The standard higher education study structure and experience would shift from a "one-institution" model to a "multi-institutional" model.

3. The MyUniversity scenario: This scenario describes higher education institutions as spaces where the elements of choices enlarge, and students can build their own curricula based on their personal interests. The curriculum of academic programs in this scenario would move from a fully predefined and 'up-front' given structure to a more flexible, personalized and participatory model in which students actively cooperate with professors, teachers and advisors in curriculum building of higher education programs.

4. The Lifelong Learning University scenario: In this scenario, seamless lifelong higher learning would be as important as initial higher education. Learners in the workplace would be the main type of student, choosing their portfolio of modules according to their personal skill needs and competence demands with high autonomy throughout their lifetime. Institutions thus would offer micro-credentials which students assemble individually based on their own interests. Recognition of prior study achievements and practical experience would

enable permeable shifting between different providers, which offer to bundle prior learning experiences into larger certifications.

For each of the four scenarios, we have set up a student persona who is thriving in this specific scenario – and we have identified higher education institutions and programs where this way of teaching and learning is already being embraced today.

Examples:

- Future Skills University: Minerva Schools
- Networked University: European Universities Initiative
- MyCurriculum University: Bard College Berlin
- Lifelong Learning University: FutureLearn

Session Description

The session is planned as an interactive Roundtable Discussion.

In an introduction, we will introduce ourselves and give an overview of the agenda and topics to be covered. We will then engage participants in a survey to learn about their professional backgrounds and work focus. In a short input, we will explain why the debate on Future Skills in higher education matters and how its relevance can be explained. We will then introduce the exercise of imagining a utopia for the future of higher education in order to create an individual vision of it, which will then be shared via a short survey. We will introduce our Future Skills research initiatives and especially the methodology for defining and assessing drivers of future higher education and future scenarios. We will then present these four scenarios with personas of future students and institutions where aspects of these future scenarios can already be found today. Afterwards, we will compare these scenarios to participants' utopia visions. In the following, we will ask participants to engage in group discussions on how these scenarios are already present in their teaching and learning experience and what could be done to promote this. Important aspects will be noted and

shared in plenary – before daring an outlook on how participants can contribute to reaching their individual utopia of teaching and learning. The timeline and structure are summarized in Table 2.

Table 2 - Structure of the Roundtable Discussion

Part	Activity	Duration
Introduction	<ul style="list-style-type: none"> - Introducing ourselves - Overview Roundtable discussion 	5
Getting to know each other	- (Mentimeter-supported) survey on participants' professional background and focus	3
Short Input	- Why should we discuss future higher education right now?	2
Short Input + Survey	<ul style="list-style-type: none"> - Working with utopia: setting directions and defining visions - (Mentimeter-supported) survey: my utopia of future university in one word 	10
Research overview	- Introduction to our Future Skills research initiatives: methodology; main drivers of future higher education	5
Input + Survey	<ul style="list-style-type: none"> - Introduction to the four Scenarios of future higher education - Personas: four future Students - four scenarios - four good practices/institutions that are already approaching these scenarios today - Interactive discussion and (Mentimeter-supported) survey: Which scenario is closest to your utopia? 	10
Group discussions	- One scenario per group: How is this scenario already reflected in my teaching and learning experience? How could I promote this further?	20

	- note on flipchart or cards and share on a whiteboard/ presentation panel	
Conclusion	- (Mentimeter-supported) survey: one word - what I can do for reaching utopia in my teaching?	5

References

Ehlers, Ulf-Daniel (2020). Future Skills. Lernen der Zukunft – Hochschule der Zukunft.

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