

Lehrwende

A New Architecture for Universities of Applied Sciences in the age of AI.

presented by

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I have prepared this presentation as a moderate form of Pecha Kucha. I will go through the slides fast and there will be room for debates afterwards.

I would like to share with you some conceptual thoughts about the future of our universities. **A disclaimer upfront:** Nothing of what I am talking about is particularly new. Nevertheless I firmly believe that it is time to think about a new architecture.



The University's Monopoly is Broken.

For centuries, lectures were the primary source of **knowledge distribution**. But the emergence of generative AI represents a fundamental **disruption**, challenging the historical supremacy of one to many broadcasting via lectures.

All the knowledge taught on the BA Level modules is **commodity**. It is available. We are about to witness the collapse of the traditional '**sage on the stage**' model.



Generative AI: The Personal Tutor

Why will it collapse?

Because AI systems will soon act as **dialogue-capable agents**.

Unlike static textbooks, these '**personal tutors**' allow students to acquire content individually and in a needs-oriented manner. They are available 24/7, infinitely patient, and personalized.

We now have a **competitor**.

The Cognitive Economy



Knowledge is Abundant.



Attention is Scarce.

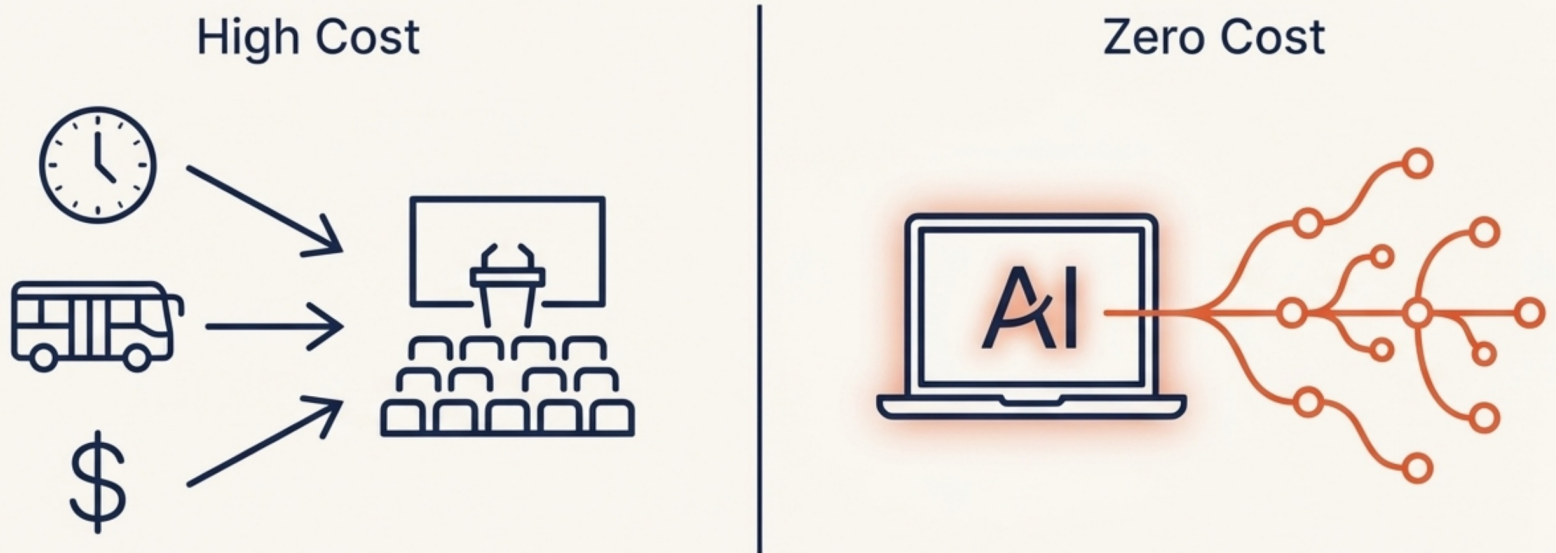
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We have moved into a 'Cognitive Economy.' In a digital society where factual knowledge is ubiquitous, access to information is no longer the limiting factor—attention is.

Our old model was built on scarcity.

Today knowledge is abundant, and many students are drowning in it.

Transaction Costs



Attending lectures is becoming increasingly ineffective

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Let's look at this through Transaction Cost Theory.

Attending a physical lecture has high costs: travel, money, rigid schedules and external control.

Instructors teach to the median, boring the best and losing the weak. Rational students are doing the math, and the lecture is losing.



For Knowledge Transfer, AI is Structurally Superior.

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Here is the hard truth:

If a session's primary goal is **mere knowledge transfer**, AI is structurally superior.

It offers near-zero transaction costs and adapts dynamically to the learner.

Instructors offering standard content delivery, will become obsolete.

The Paradigm Shift

Instruction  *Enablement*

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To survive, our institutions need to shift from 'Instruction' to 'Enablement'. Or from instructor-centered teaching to student-centered teaching

We need to stop **being delivery drivers of content** and become partners in a responsibility structure.

Faculty have to curate content and provide a learning infrastructure and the students contribute their autonomy.

From Sage
on the Stage



to Architect
of Learning

This changes our job description entirely. The lecturer transforms into an **architect of learning environments**.

We are no longer broadcasting to the collective; we are designing paths for self-regulated learning.

Not only one, several. Tailored to the needs of the different Learners preferences and requirements.

We move from the podium to the sidelines.



Scaffolding Autonomy: Helping Students to Help Themselves.

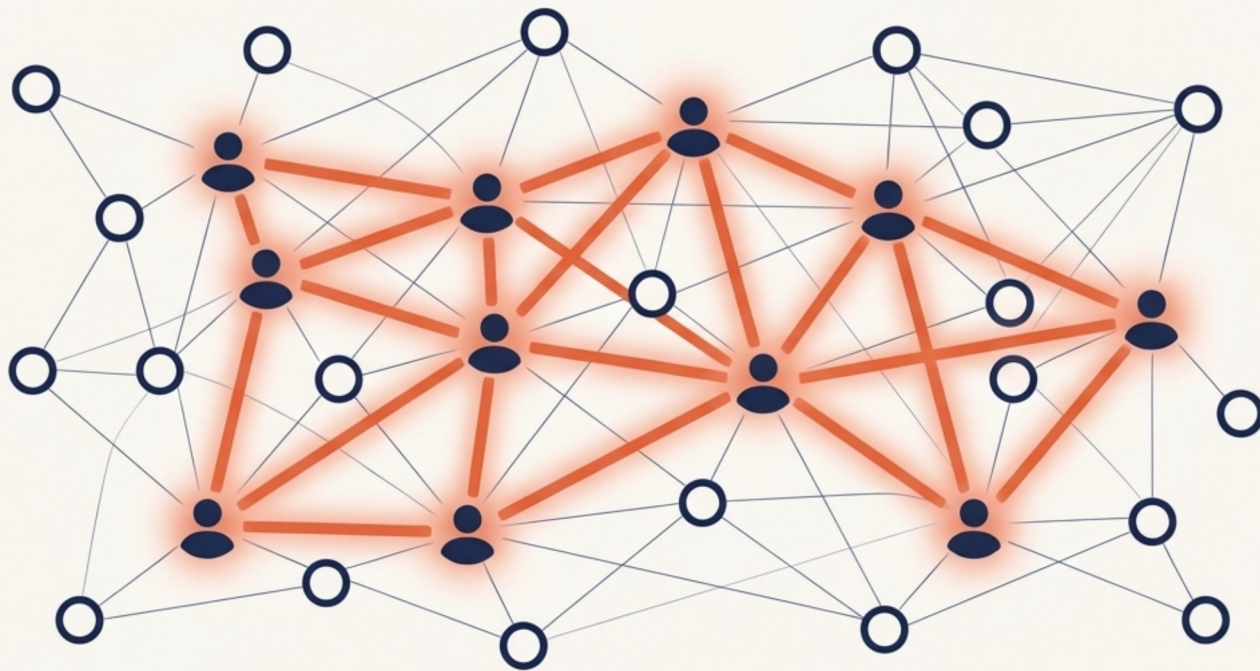
We call this 'Scaffolding Autonomy.' We provide the support structures that allow students to grow.

We can then gradually remove it as their competence increases.

We must break the **culture of 'spoon-feeding'**.

We must ensure that students take back **responsibility for their own learning progress.**

Value is in the Network



• Social. • Critical. • Creative.

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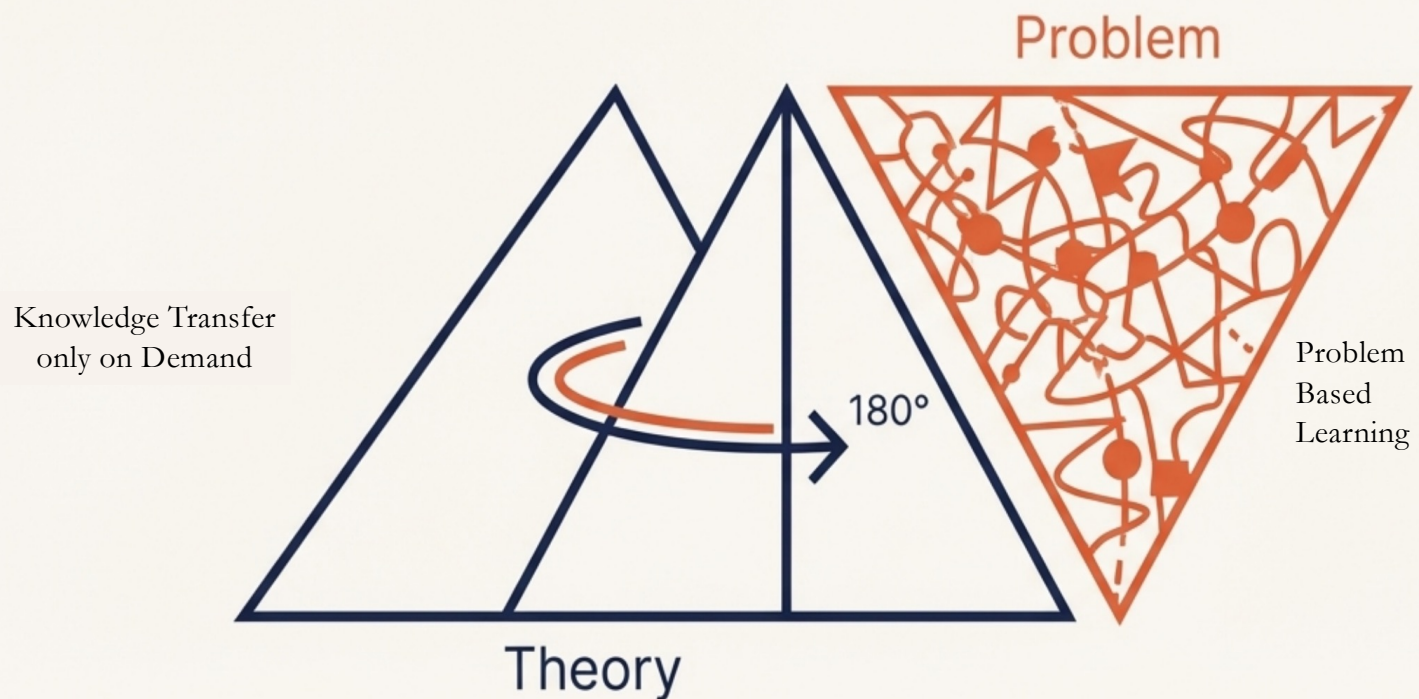
The Lehrwende model builds on the 'Connectivist' approach: learning happens by connecting nodes in a network.

Content delivery by lectures is not the primary source of learning.
Learning from peers, Internet, AI, Podcasts, Youtube is already the new reality.

The campus has to become a place for discourse, deep processing, and social exchange—the unique human elements that no algorithm can replicate.

Lehrwende, the architecture I am proposing here, rests on 3 Pillars


Pillar 1: Invert the Curriculum. Problem First.




Let's stop instructing what we believe students need to know in lectures.

We need to invert the curriculum. Instead of front-loading theory for years, we switch to Problem-Based Learning where knowledge 'follows the problem'. Students learn the fundamentals only when they need them to solve a concrete challenge.

If you looking for suitable problems for the projects: Ask your Students **How to make this word a better place!**



Just-in-Case
Knowledge



Just-in-Time
Learning

From Stockpiling Knowledge to Situational Relevance

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We are moving from 'Just-in-Case' stock-piling of knowledge to 'Just-in-Time' learning.

Professional life demands situational relevance, not static repertoires. This strategy **increases intrinsic learning motivation** because the **purpose of the learning** is immediately visible.

A very important Future skill in this respect is „**How to cope with knowledge gaps**“. That is the actual skill that is needed in the workplace.



Pillar 2: AI Literacy is a Transversal Competence.

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In the Lehrwende model, AI is not what we want to withhold from Students. 'AI Literacy' becomes a key competence.

It's not just about using AI tools; it's a critical-dialectical approach.

Students must learn to integrate machine intelligence into their own work but not without adopting a critical stance

Students need to develop a clear understanding when AI shortcuts help and when it hinders their learning.

Pillar 3



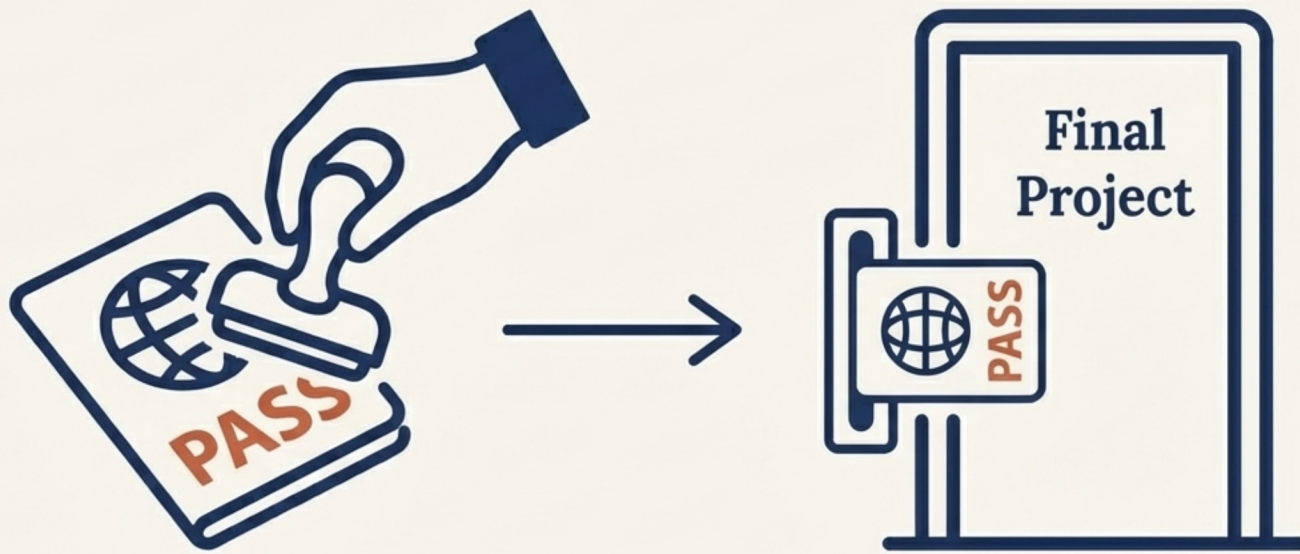
The Dual Assessment Architecture.

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A new pedagogy requires a new assessment culture.

We propose to separate the verification of basic knowledge from the **application of competences** in specific contexts.

We stop pretending a written exam measures competence.



**Knowledge Verification: 'Admission Tickets' (WTMs).
Assessed Pass/Fail.**

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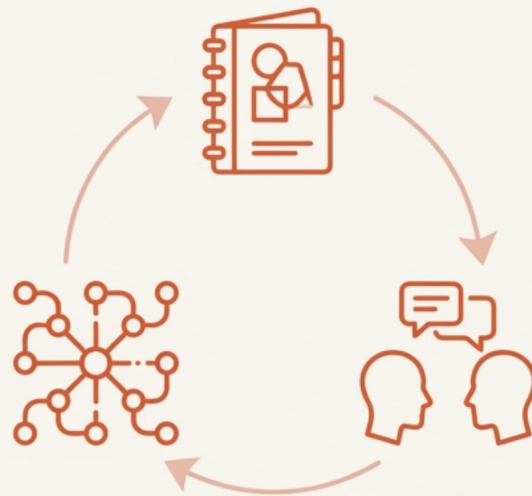
We propose to offer 'Knowledge Transfer Modules.' in form of knowledge nuggets. These act as 'admission tickets.' Students identify gaps, learn the material, and pass a check.

These are Pass/Fail checkmarks.

We remove grades from this stage to stop strategic '**grade hunting**' and focus on the basics.

Holistic Assessment of The Project Team Results

Defence of ... Output, Individual Contributions, Solving Process



Oral Defence
Duration 2-4 h
External Examiners

Graded.

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The real grade comes from the 'Holistic Assessment Center at the end of the semester' A multi-hour, structured **simulation of a professional review**. Students defend their project outcomes, justify their design choices, and reflect on their process. As a group and individually.

AI can write a text, but it cannot defend a decision in real-time. Here it becomes clear that **taking shortcuts has a price!**

When it comes to implementing the Lehrwende Model I see **2 major challenges:**



New Pedagogy Demands New Spaces: Hubs, not Halls.

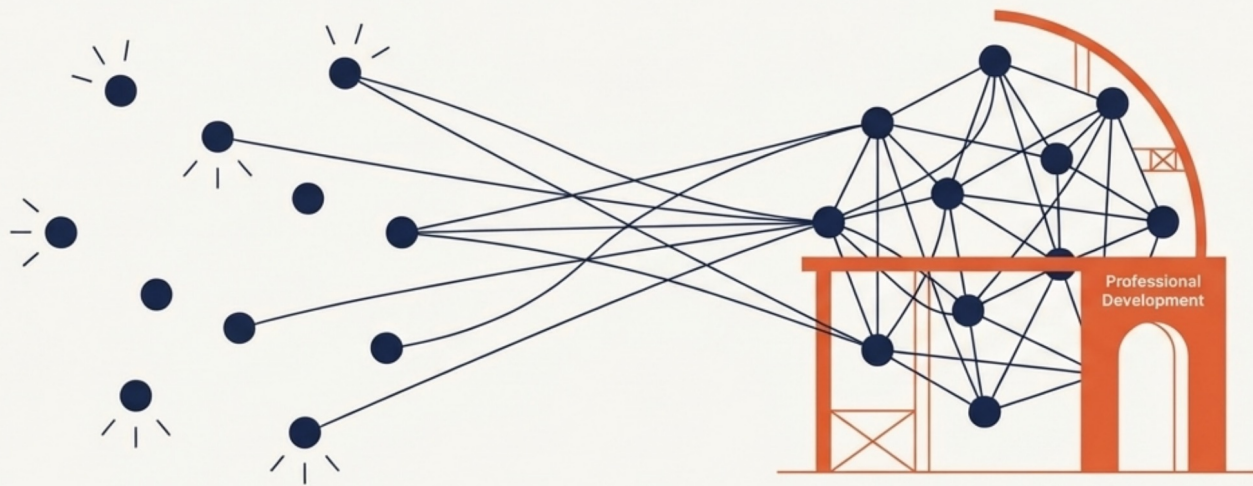
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'Lehrwende'—requires a different infrastructure.

Large **lecture halls designed for one-to-many broadcasting** are dead space. If a room looks like a cinema, students will act like an audience.

We must physically transform our spaces from places of instruction to **hubs of co-evolutionary learning**. We need rooms that look like workspaces.

Invest in People: From Laissez-Faire to a Community of Practice



The biggest hurdle however is us—the faculty.

We need to professionalize faculty development, moving from a 'laissez-faire' culture to active communities of practice.

We have to move from Teaching to coaching. Coaching is not a fixed talent; it is a subject of continuous development. For that instructors have to be willing to be trained. Typically we dislike the role of learner.

The choice is no longer if we change, but how.



The question is not **if** this transformation will occur, but **how**: proactively designed by us, or reactively forced by market obsolescence.

The Lehrwende model offers a path to reclaim the university's value: the social, critical discourse that makes us human.