



# Digitale Lehre

*Lernräume im 21. Jahrhundert*

Jürgen Handke

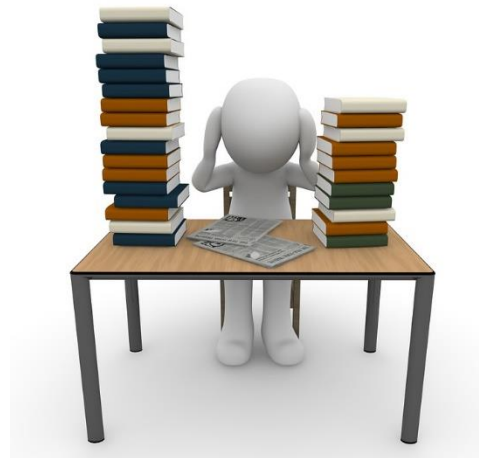
3m-Solutions/Philipps-Universität Marburg

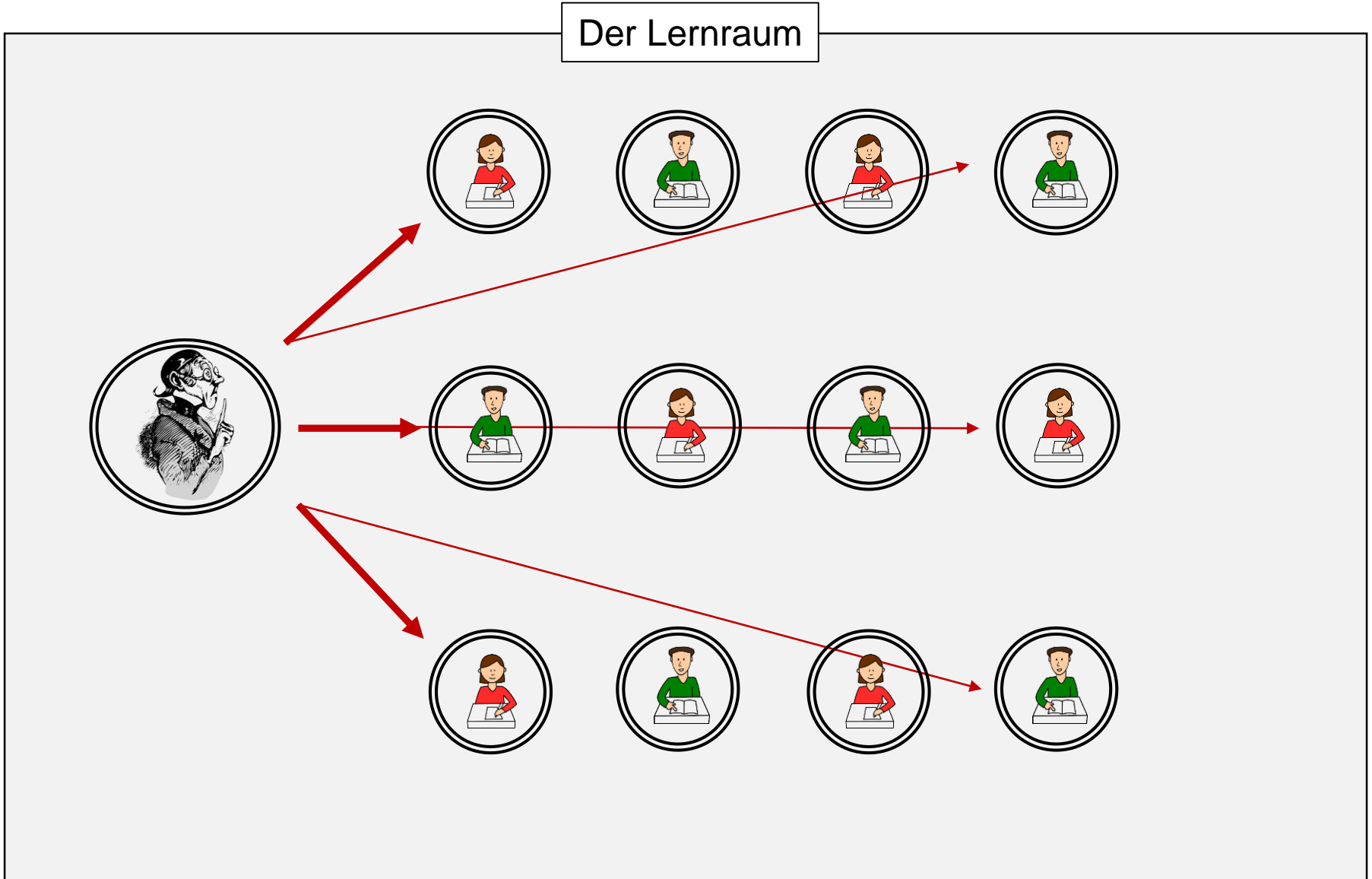
2018

1. Lernräume gestern und heute
2. Vom klassischen zum digitalen Lernraum
3. Voraussetzungen für digitale Lernräume
4. Lernleistungen in digitalen Lernräumen
5. Wege in den digitalen Lernraum
6. Lernräume heute (und morgen)



## 1. Lernräume gestern und heute







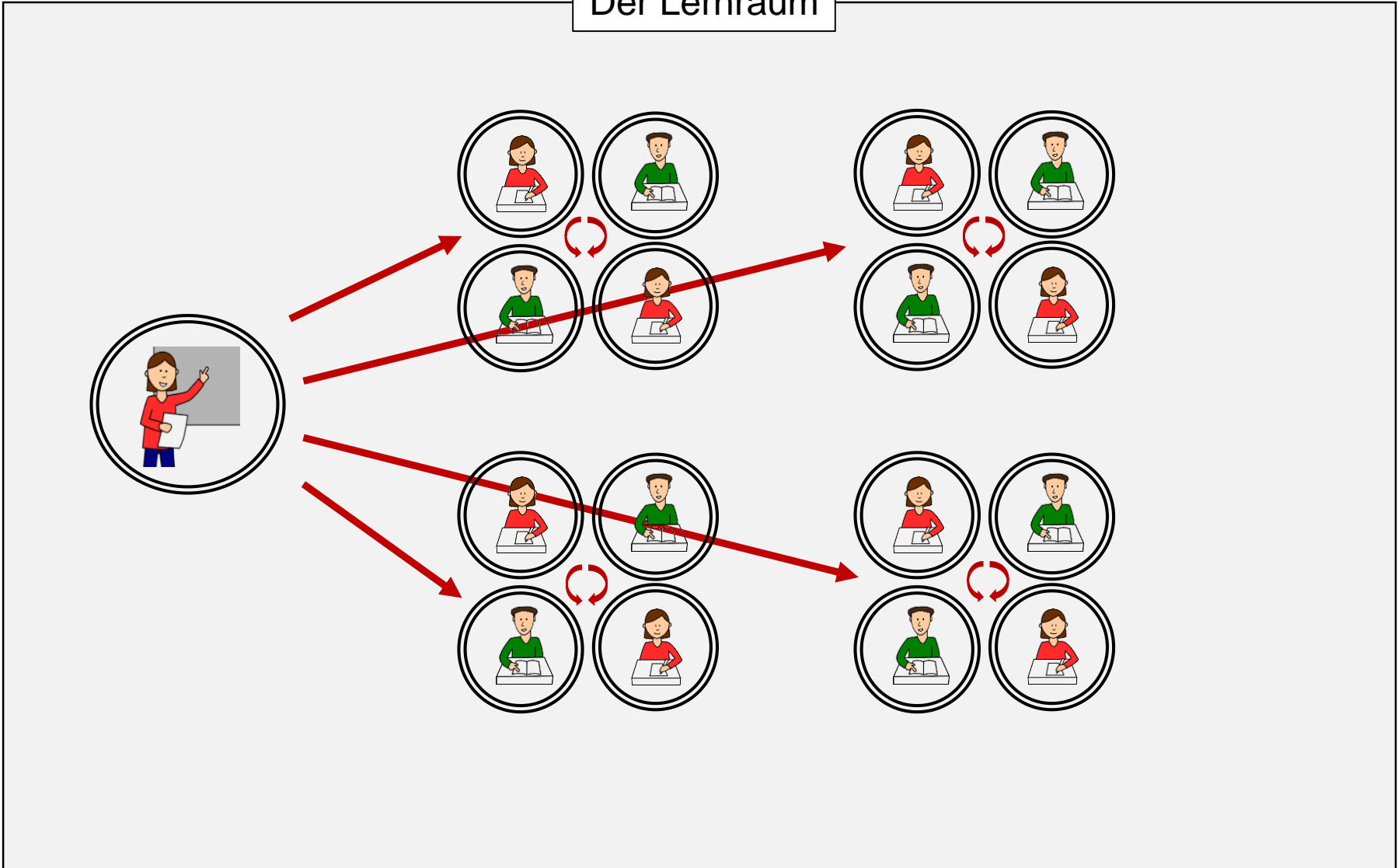
## Inhaltsvermittlung und Inhaltserschließung



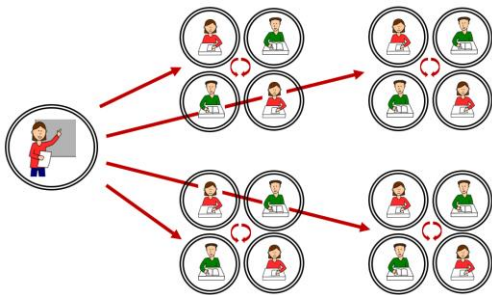
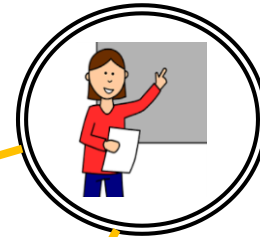
## Inhaltsvermittlung und Inhaltserschließung



## Der Lernraum







... eigentlich, immer noch wie damals ...

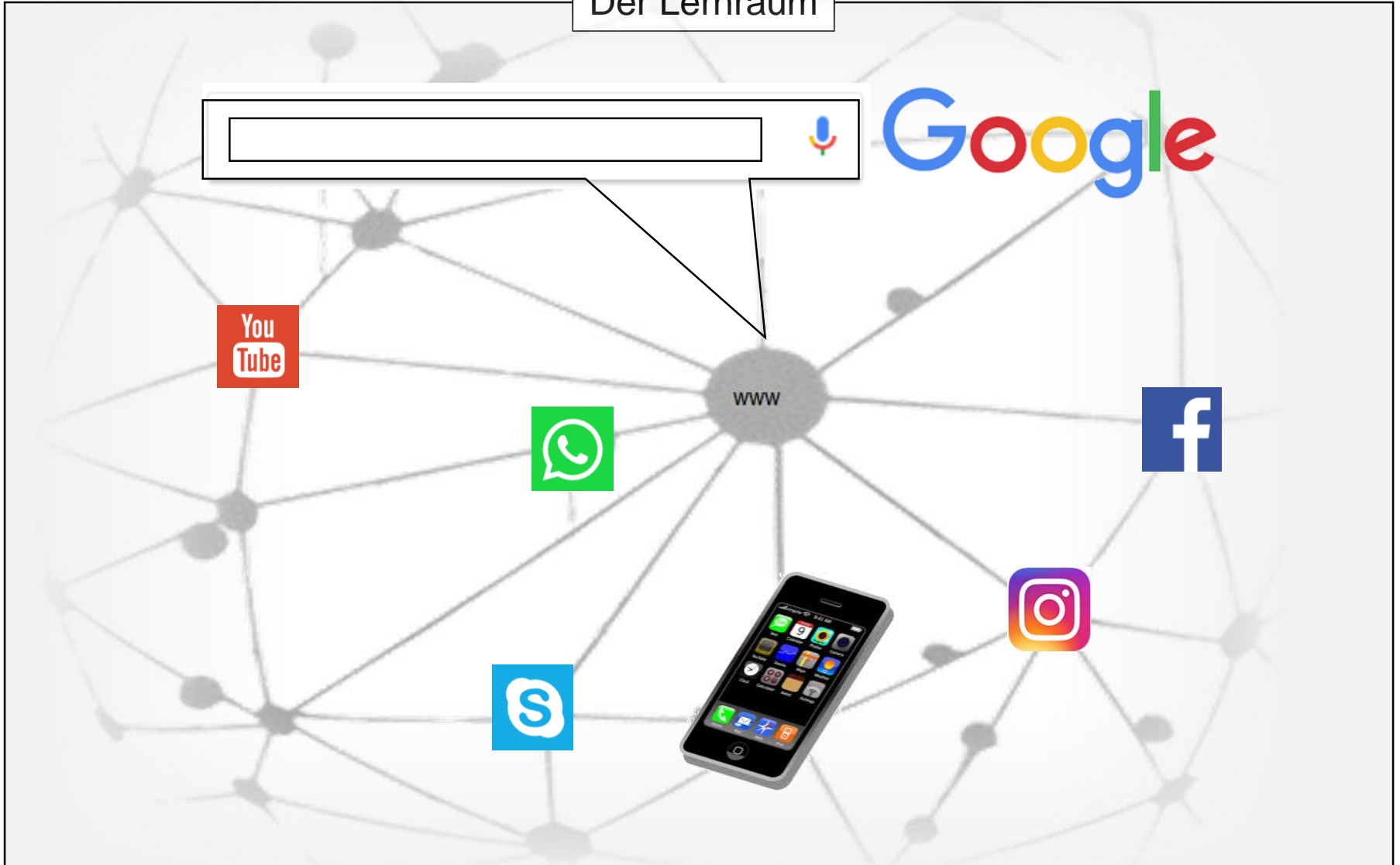


## Der Lernraum

*The Internet is the engine of the twenty-first century  
....., students can now meet up virtually and study  
together – or with the leading experts on the planet.*

<https://www.project-syndicate.org>; The Global Classroom, 6 Dec, 2013

Der Lernraum





Die „Poppy“  
Architektur



Die Chinese University in Hong Kong





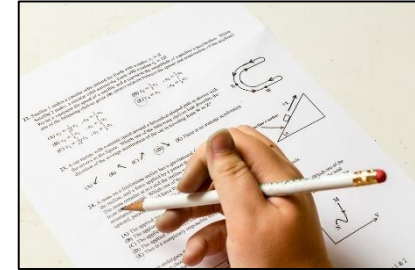
## 2. Vom klassischen zum digitalen Lernraum



## 1: Inhaltsvermittlung



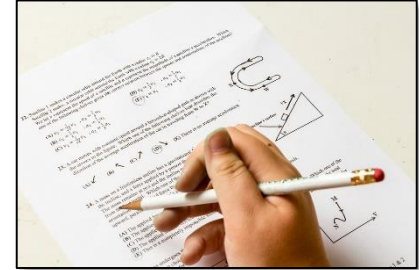
## 2: Inhaltsvertiefung



## 1: Inhaltsvermittlung



## 2: Inhaltsvertiefung



### Hörsaaltechnologien



### Digitale Elemente & Szenarien

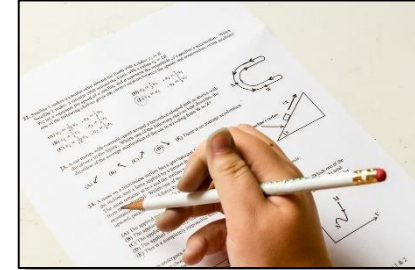




## 1: Inhaltsvermittlung



## 2: Inhaltsvertiefung



## 1: Inhaltsvermittlung



--- On Campus --->

## 2: Inhaltsvertiefung



In-Class

----- Off Campus ----->

## 2: Inhaltsvertiefung



Online

## 1: Inhaltsvermittlung



**FLIPPED**  
CLASSROOM



## 2: Inhaltsvertiefung



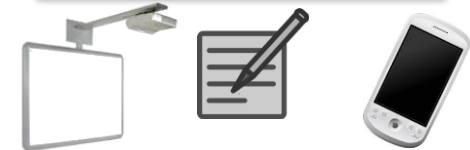
Baker, Wesley. 2000. *The Classroom Flip*.  
Selected Papers from the 11th Conference on Teaching and Learning.  
Jacksonville, Florida.

Bergman, Jonathan/Sams, Aaron. 2012.  
*Flip your classroom: reach every student in every class every day*.  
Eugene, OR.; Alexandria, VA.: ISTE ; ASCD

## 1: Inhaltsvermittlung



## 2: Inhaltsvertiefung



# INVERTED CLASSROOM



Lage, Mauren/Platt, Glenn/Treglia, Michael. 2000.  
*Inverting the Classroom: A Gateway to Creating an  
Inclusive Learning Environment.*  
The Journal of Economic Education 31(1):30-43.



## 1: Inhaltsvermittlung



# INVERTED CLASSROOM



## 2: Inhaltsvertiefung



**alpha**<sup>®</sup>  
AKD • Bildungsmagazin



**Campus**  
Magazin

Zukunft der Lehre - Teil I

## Au revoir, Frontalunterricht?

Ein Beitrag von: Lisa Böttinger, Florian Falzeder

12.11.2015

**alpha**<sup>®</sup>  
AKD • Bildungsmagazin



**Campus**  
Magazin

Zukunft der Lehre - Teil II

## Au revoir, Frontalunterricht?

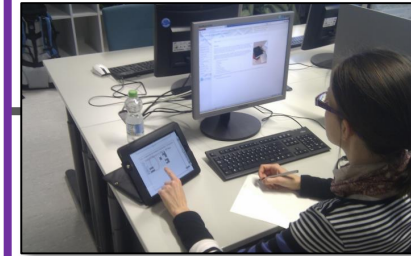
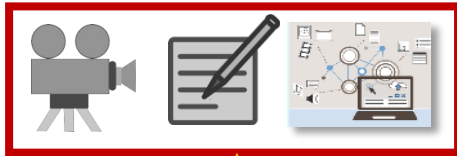
Ein Beitrag von: Lisa Böttinger, Florian Falzeder

12.11.2015

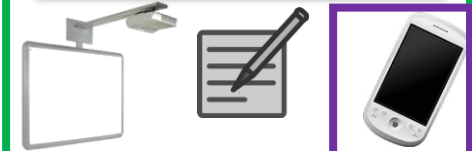
## 3. Voraussetzungen für digitale Lernräume



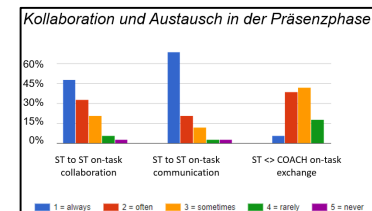
## 1: Inhaltsvermittlung



## 2: Inhaltsvertiefung



- hohe Qualität der digitalen Elemente
- Anreize zur Erschließung der Inhalte
- hohe Qualität der Präsenzaktivitäten
- vielfältiges Assessment
- permanente Evaluation

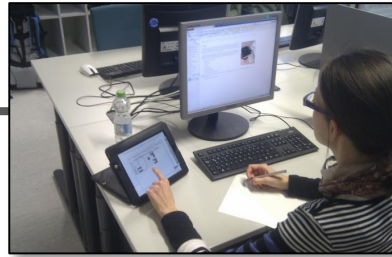


## 1: Inhaltsvermittlung



Integrierter Test

Selbsttest  
(Spielcharakter)



Formativer Test

(Show Mastery)  
(Highscore-System)

## 2: Inhaltsvertiefung



Live-Voting

Re-Teaching?  
(anonym)





## Formativer Test

## Wissen

- Single Choice
- Multiple Choice
- Dynamic Choice
- Freitext



### Questions about Suprasegmental Features

A type of secondary articulation is ...

True  False **glottalization**

True  False **labialization**

+2  
more



Level: Standard  
Total No. of Questions: 10  
Required for this level: 60%  
Question No.: 3  
Correct: 0 %

### My Worksheets

Linguistics and Phonetics Part I  
(Student Registration Number: )

No.	Unit	E-Worksheet	Passed	Highscore	Student's Score	Submission Date
1	Language and Linguistics	Questions about Linguistics	Yes	100 %	70 %	17 Oct 2016, 19:42:57 CEST
2	Phonetics	Questions about Phonetics	Yes	100 %	83 %	19 Oct 2016, 16:59:13 CEST
3	Consonants	Questions about Consonants	Yes	100 %	70 %	26 Oct 2016, 18:17:28 CEST
4	Vowels	Questions about Vowels	Yes	100 %	85 %	26 Oct 2016, 18:43:43 CEST
5	Suprasegmental Features	Questions about Suprasegmental Features	Yes	100 %	73 %	6 Nov 2016, 15:56:04 CET
6	Phonetics, Phonology and the Phoneme	Questions about Phonology	Yes	100 %	78 %	9 Nov 2016, 20:47:26 CET
<b>Overall Score for the Class:</b>					<b>29 %</b>	<b>2016-11-13 17:01:38 CET</b>

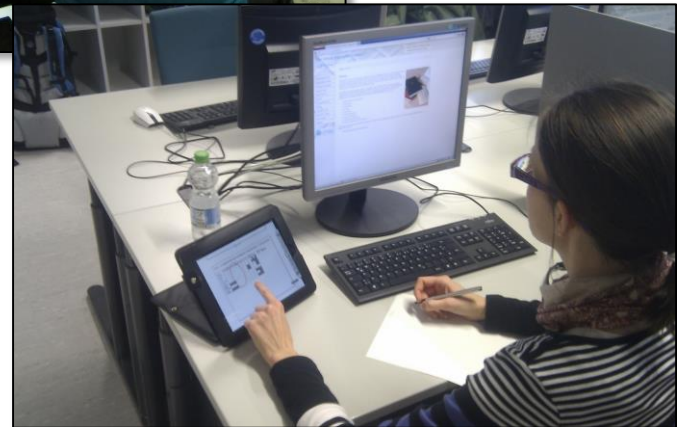


Kompetenzen





## 4. Lernleistungen in digitalen Lernräumen



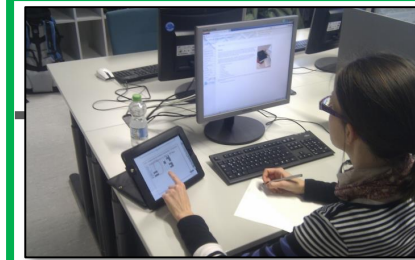


## 1: Inhaltsvermittlung



	Language and Linguistics
	<b>Phonetics</b>
	Basic Segments of Speech
	...

JIT-Online-Accesses



## 2: Inhaltsvertiefung




	Language and Linguistics
	<b>Phonetics</b>
	Basic Segments of Speech
	...

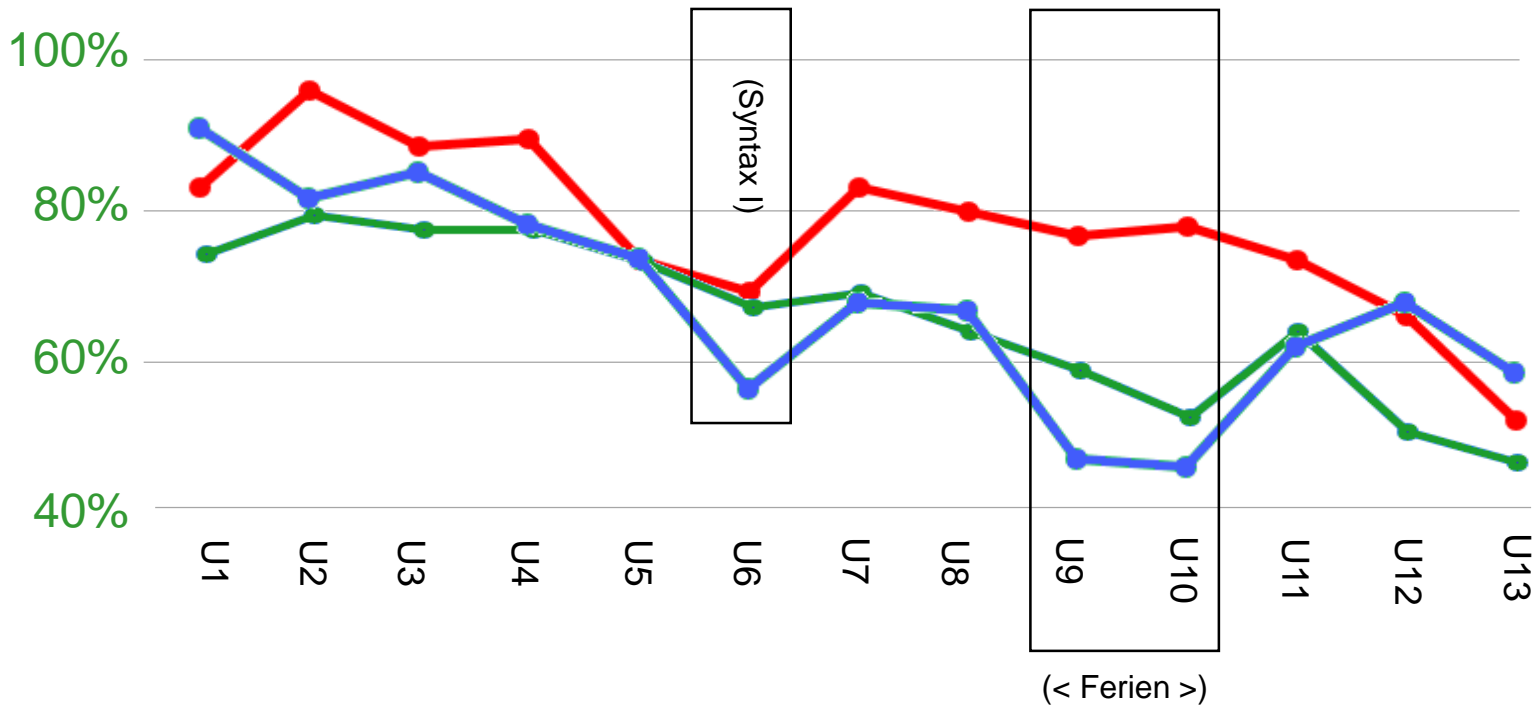
In-Class-Präsenz

	Language and Linguistics
	Phonetics
	Basic Segments of Speech
	Phonology
	Building Words
	....

*Linguistics & Phonetics*  
Einführungsveranstaltung  
WS 2017/18  
Präsenztermin:  
Do. 8 - 10, 10 – 12  
Wöchentliche Datenerfassung  
Do 6.30 bis 7.00



Linguistics & Phonetics  
Einführungsveranstaltung  
WS 2017/18  
n = 85



■ JIT-Online-Accesses:	77%
■ JIT-Mastery Level:	66%
■ In-Class-Präsenz:	69%

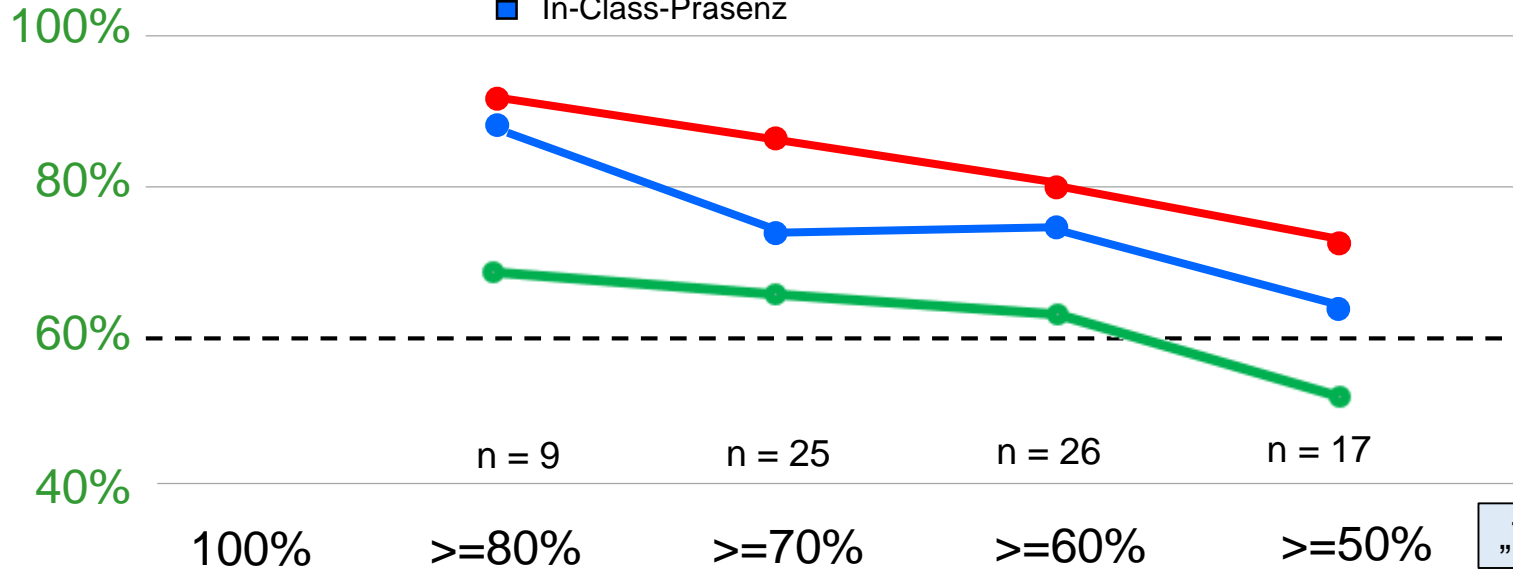
Ø 3 von Ø 59 Tn.  
ohne „Mastery“-Nachweis

Linguistics & Phonetics  
Einführungsveranstaltung  
WS 2017/18  
n = 85



Klausur

- JIT-Online-Accesses
- JIT-Mastery Level
- In-Class-Präsenz



„Teilnahme“




Kompetenzen



- Inverted Classroom Manifesto

How the *Inverted Classroom* works

How the *Inverted Classroom* works: A manifesto to students  
Jürgen Handke, Philipps-Universität Marburg




Many classes in linguistics and web-technology at the Department of English are supported by multimedial learning environments, electronic assessment and pre-recorded E-Lectures on YouTube. The availability of these sources of content acquisition has led to a unique and award winning model of education, the *Inverted Classroom Mastery Model*.<sup>1</sup>

Since the *Inverted Classroom* tends to engender a lot of uncertainty, we are hoping to pre-empt those feelings with this manifesto. It will show you how the *Inverted Classroom* works and why it opens new horizons in learning and teaching.

**The Central Idea**


In traditional teaching, content delivery and content acquisition are realized in class where several dozens of students have to gather at the same time to be "entertained" by their teacher. In a second phase, students practice on their own: on the basis of additional exercise material, homework tasks, etc.



- Hinweis auf Klausurstatistiken
- Formative Kompetenzeinschätzung

- Welcome Mail

Dear Class Participants,



Welcome to the class "*Linguistics and Phonetics*". The class has just been activated and is ready for use. Between now and Monday (16 October), go through the "*Class Preliminaries*". ...

- Class Preliminaries

Shift Activities - E-Education on the VLC



In a traditional learning scenario, the phase of content delivery precedes the phase of practicing. The VLC "Inverted Classroom Model" (ICM) flips these two phases of learning: In short, the ICM looks like this:

- Phase 1 (digital): content delivery and acquisition (anywhere, any time)
- Phase 2 (in class): practicing, deepening, gaming etc.

The video below explains why we use such a teaching and learning scenario.

Start the Video "Free your Lecture"

Its main topics are:

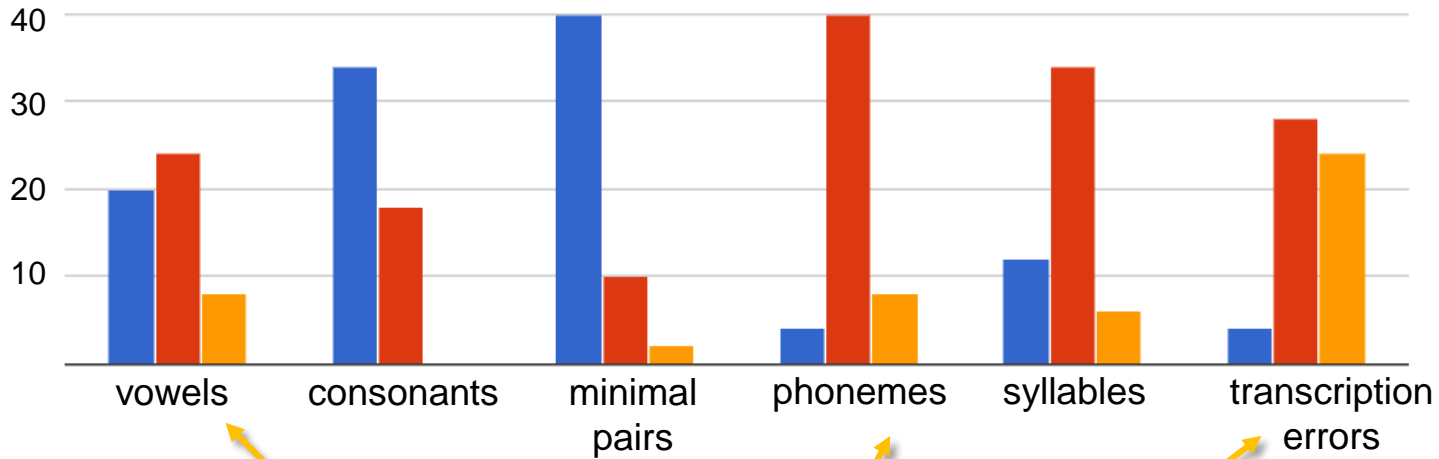
- From digital content to the Inverted Classroom
- The Teacher's view



Linguistics & Phonetics  
Einführungsveranstaltung  
WS 2017/18  
n = 85



Beispiel: Phonetics  
*I can identify and classify ...*



■ yes  
■ ...  
■ no

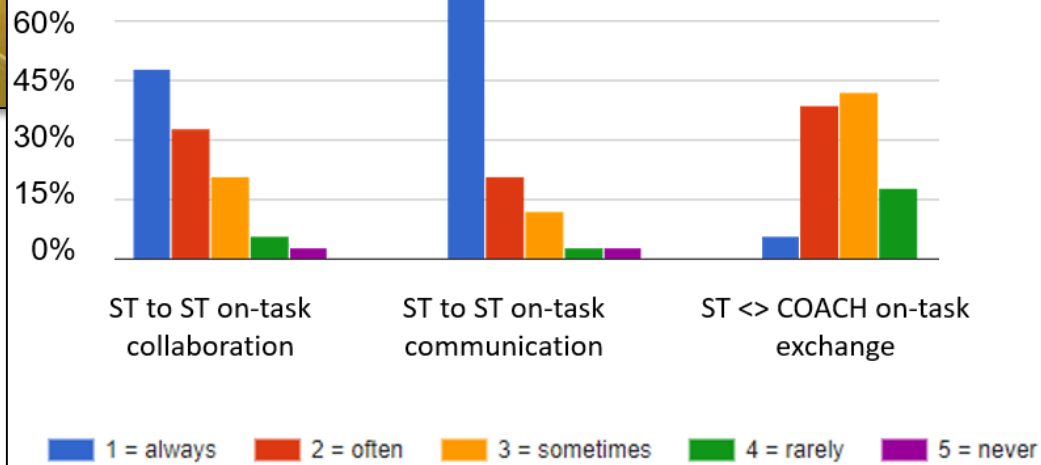


**Formativer Effekt:  
Konzentration auf ...**

Linguistics & Phonetics  
Einführungsveranstaltung  
WS 2017/18  
n = 85



## Kollaboration und Austausch in der Präsenzphase



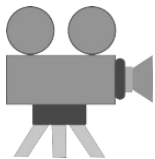
## 5. Wege in den digitalen Lernraum





Die Infrastrukturen „stehen“.

Die Studierenden nutzen Medien (privat).



Digitale Elemente sind meist vorhanden.

Einfache Entwicklungstools verfügbar.





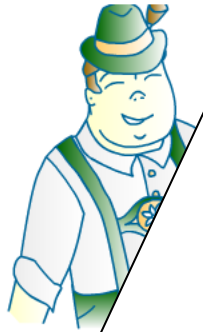
### Digitalisierung steht gerade erst am Anfang



<http://www.fernuni-hagen.de//universitaet/veranstaltungen/ver-2018-03-22-hochschulen-der-zukunft.shtml>



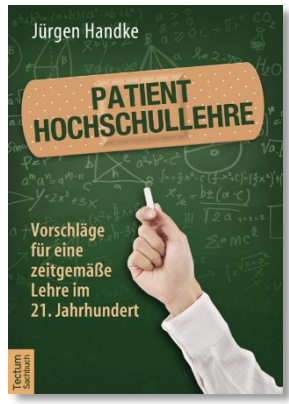
Warum?



Deutsche stehen  
auf dem Weg:

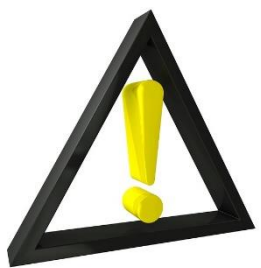


Wir haben Angst  
vor dem Scheitern.



Wir wollen  
kollaborieren

**Digitalisierung beginnt in den Köpfen**




Wir diskutieren immer  
zuerst die Risiken.

er,  
(andere),  
en.



# Reden, Strategien, Publikationen



STRATEGIEN  
WANDEL IN DER HOCHSCHULE  
ANSTOSSEN

...me-based learning Konferenz  
FHD MEDIEN ZENTRUM

**HOCHSCHULPERSPEKTIVEN:**  
Die Zukunft im Blick? –  
Hochschulen in Zeiten  
der Digitalisierung

**DIGITALISIERTE BILDUNG – BILDUNG digital**  
Trends zwischen Hype und Nutzen



香港中文大學  
The Chinese University of Hong Kong

➤ machen, teilen  
und kollaborieren

➤ akzeptieren  
nutzen

**Nicht reden sondern machen!**



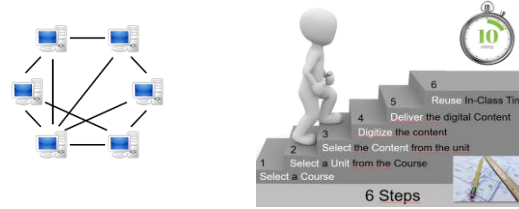
➤ einrichten, Neues  
ausprobieren!

➤ ... und wir ??  
diskutieren die Risiken!





- Kenntnisse über digitale Lehre erlangen, und zwar von den Machern.



- offene Lehr-/Lernmaterialien nutzen



- Neue Kompetenzen



- Integrative Lehrformate erproben

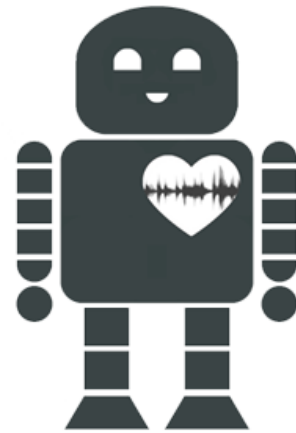
**INVERTED  
CLASSROOM**



... nicht Anreichern !!

- und als „Top-Down“ Bindeglied: Wertschätzung **Lehre**

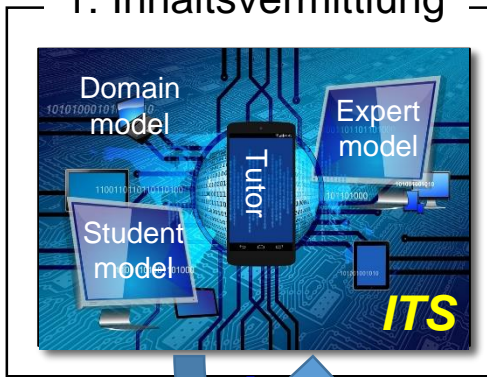
## 6. Lernräume heute (und morgen)



H.E.A.R.T.



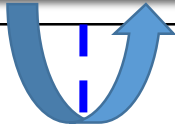
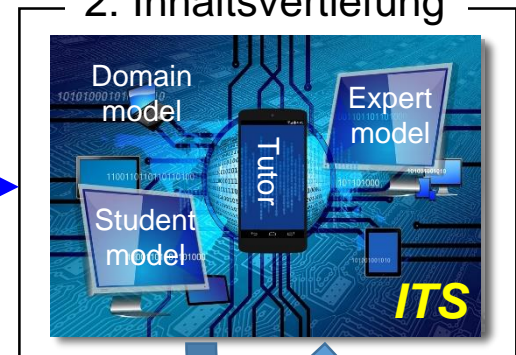
## 1: Inhaltsvermittlung



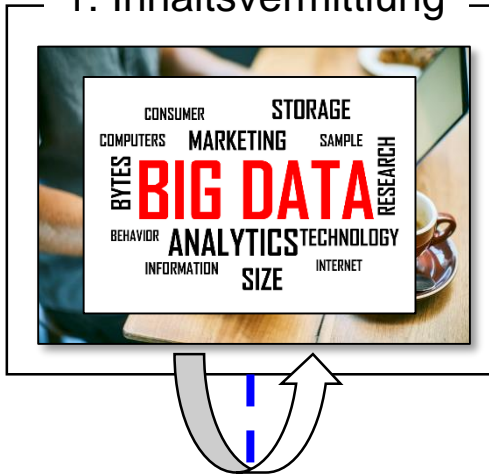
## 2: Inhaltsvertiefung



## 2: Inhaltsvertiefung



## 1: Inhaltsvermittlung



## 2: Inhaltsvertiefung



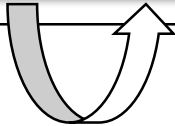
... wirklich neu

## 2: Inhaltsvertiefung

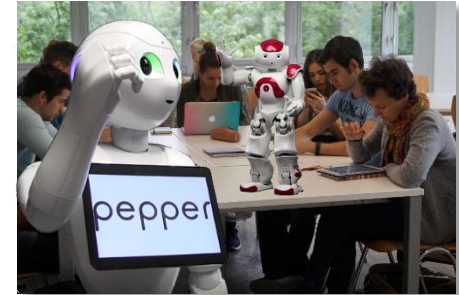




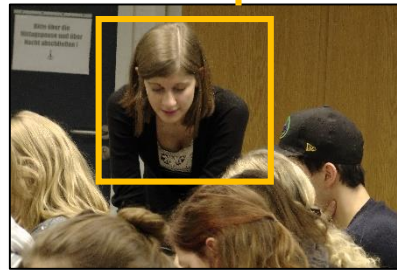
## 1: Inhaltsvermittlung



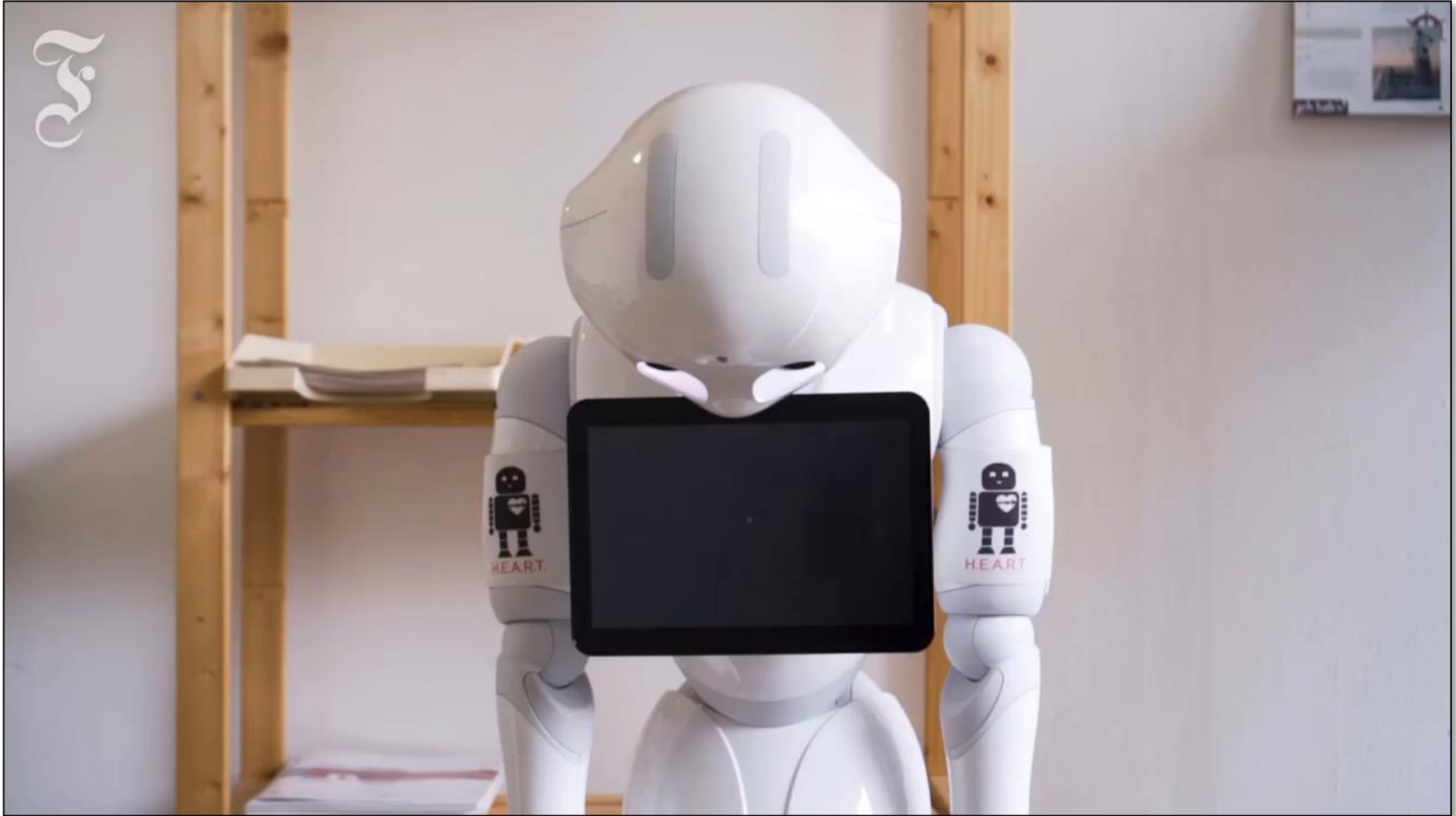
## 2: Inhaltsvertiefung



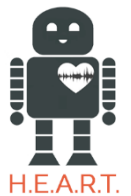
- Beratung
- Unterstützung
- Information
- Training
- Kompetenzen







Assistenzroboter im „digitalen“ Hörsaal  
(Ablauf und Meinungen, 19.10.2017)





**Danke für Ihre Aufmerksamkeit**

<https://www.project-heart.de>

[handke@uni-marburg.de](mailto:handke@uni-marburg.de)