

# Brain-based teaching and learning

## Results and potentials of a blended learning scenario in Higher Education Didactics

International Week, 2014-11-25

Andrea Hempel, M.A.

Dept. of Higher Education Didactics

# Agenda

- Higher education training for teaching staff at Stuttgart Media University
- E und blended learning initiatives at other universities in Germany
- Theory: Didactical triangle of online learning
- Blended learning scenario at Stuttgart Media University
- Evaluation & results
- Discussion

## Warming up

- Do you have time to attend practical trainings during work time?
- How much time is weekly available to discuss teaching experiences with your colleagues?
- Ask your neighbour: How should a blended learning scenario concerning brain-based learning look like for you to be willing to attend?

# Higher education training at Stuttgart Media University

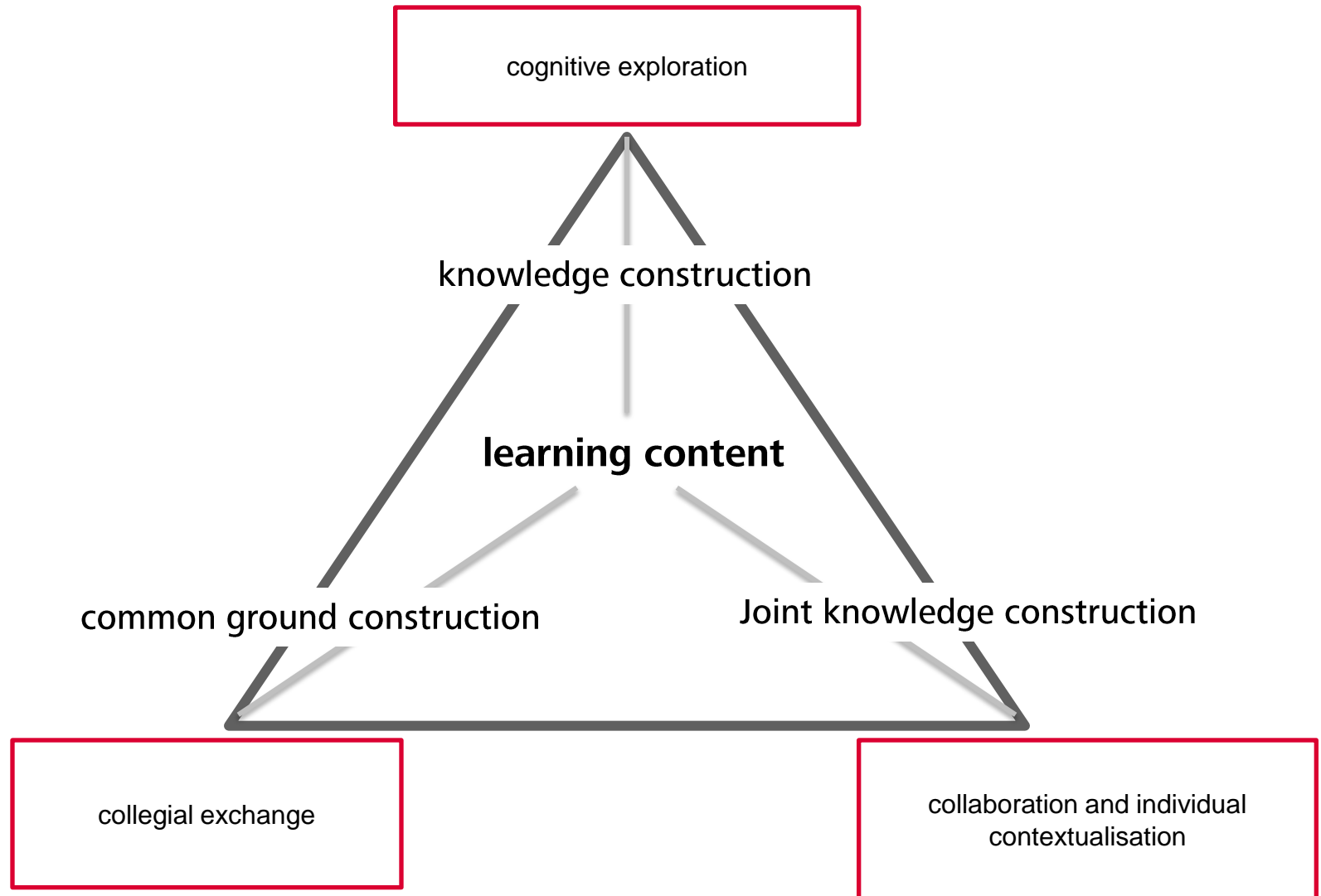
Teaching conditions	Trainings in Higher Education
<ul style="list-style-type: none"> <li>• 18 SWS (13,5 hours per week) teaching load at universities of applied sciences</li> <li>• Number of research tasks increases</li> <li>• Professors have less time to attend practical trainings</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop-programme by GHD</li> <li>• Workshop-programme by Neckar Connection</li> <li>• Onboarding coaching for new professors</li> <li>• Individual counselling</li> </ul>

## E and blended learning in Higher Education

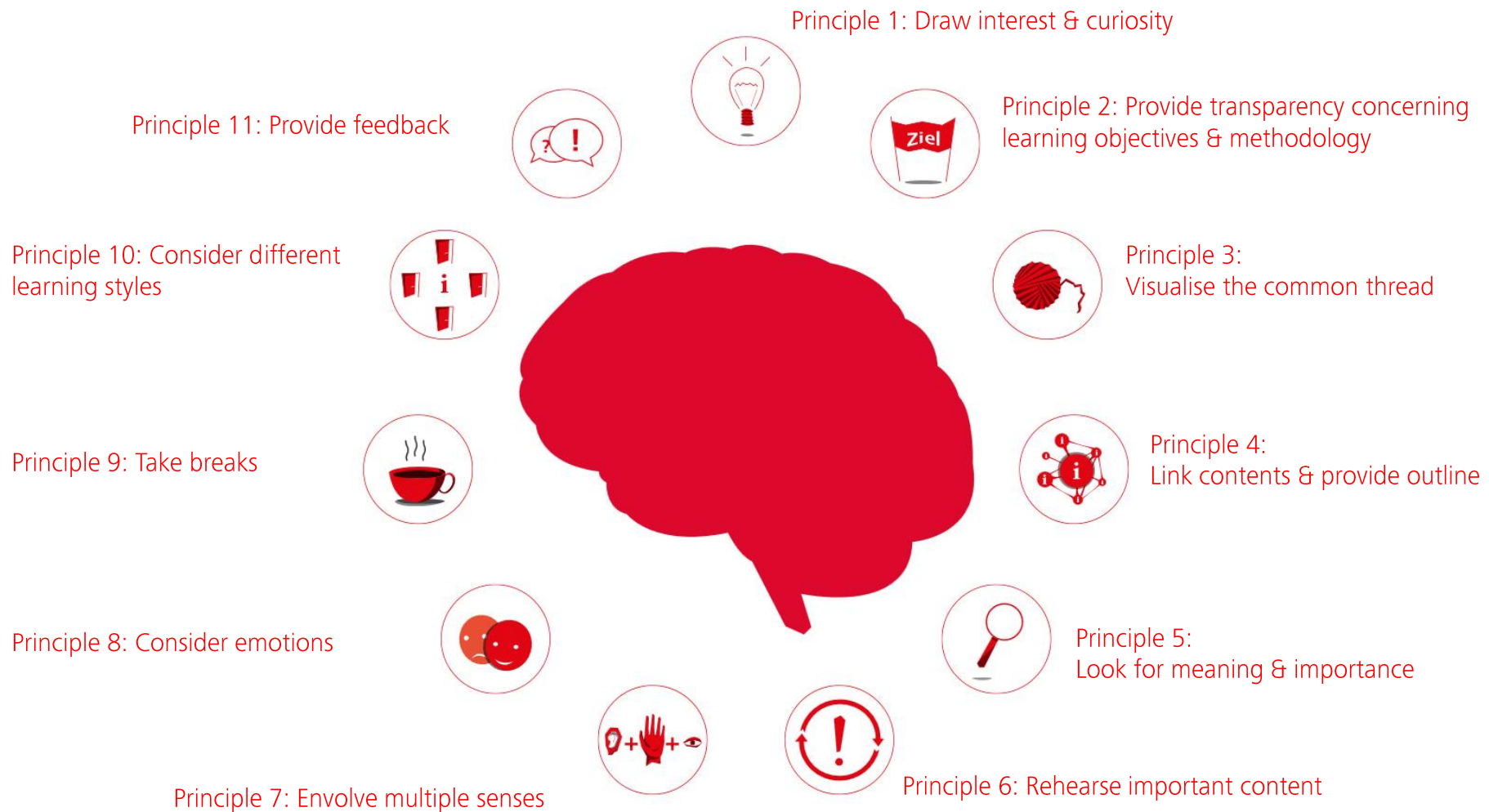
## E und blended learning initiatives at other universities in Germany

- [Goethe University Frankfurt am Main, Studium Digitale:](#) Online-seminars for lecturers; certification possible
- [University of Hamburg, BASISQualifikation:](#) teaching input by email newsletter during term (Gunda Mohr, University of Hamburg)
- [University of Hamburg, Master of Higher Education:](#) use of ePortfolio (OLAT, Mahara)
- [Bielefeld University of Applied Sciences:](#) website „Lehridee“

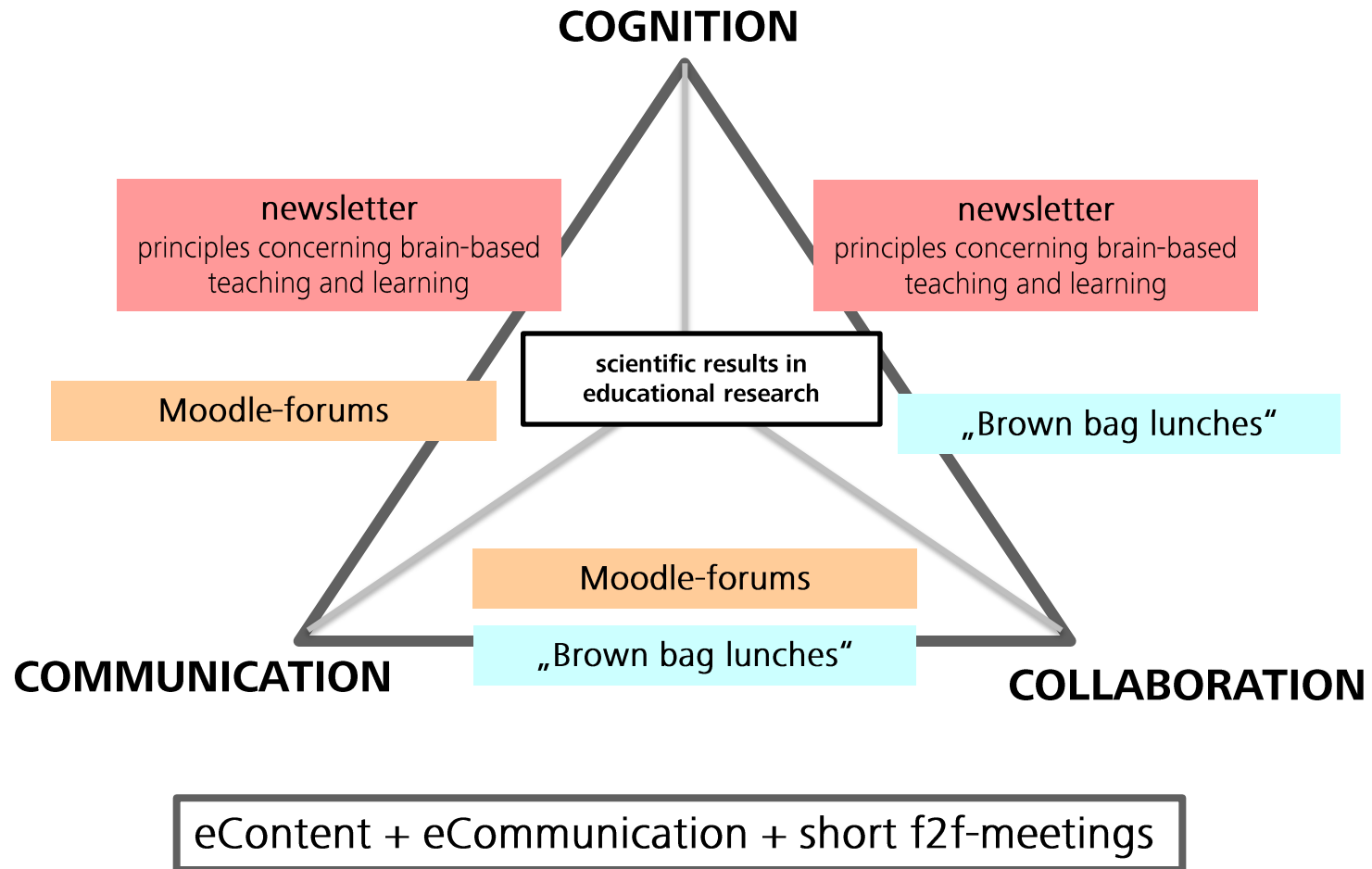
## Theory: Didactical triangle of online learning (Schulmeister 2004, 8)



# Learning content



# Blended learning scenario at Stuttgart Media University (1)



Schulmeister 2004, 8



# Blended learning scenario at Stuttgart Media University (2)

## newsletter

principles concerning brain-based teaching and learning

- Monthly (December 2013 - October 2014)
- PDF per email to an internal mailing list (about 310 people)
- Participants: professors, faculty staff, administration and central facilities
- For each principle is described
  - questions to activate previous knowledge
  - description
  - transfer ideas
  - questions for future consideration
  - relevant literature

→ Stimulate transfer

## Moodle-forums

- Moodle = learning management system
- One section for each principle
- Each section includes
  - newsletter in PDF
  - questions for future consideration
  - forum for discussion with input from a lecturer/the Dept. of Higher Ed. Didactics

→ Stimulate transfer and communication

## „brow bag lunches“

- Events at lunch time (0,5 - 1 hours)
- Short presentation of one or two principles
- Discuss ideas for transfer
- Documentation in Moodle-forums

→ Stimulate transfer and communication

- Easy access
- Different levels of information processing and participation
- „Learning on the job“

# Evaluation

## 1st Evaluation

2014-04-29 - 2014-05-12

online survey (Unipark)

### Pool

310 (internal mailing list)

### Participants

31

(11 female, 20 male;

$M = 42,97$  years,  $SD = 10,28$ )

professors (n = 22)

research assistants (n = 4)

staff central faculties (n = 4)

guest lecturer (n = 1)

## 2nd Evaluation

2014-10-10 - 2014-10-21

online survey (Unipark)

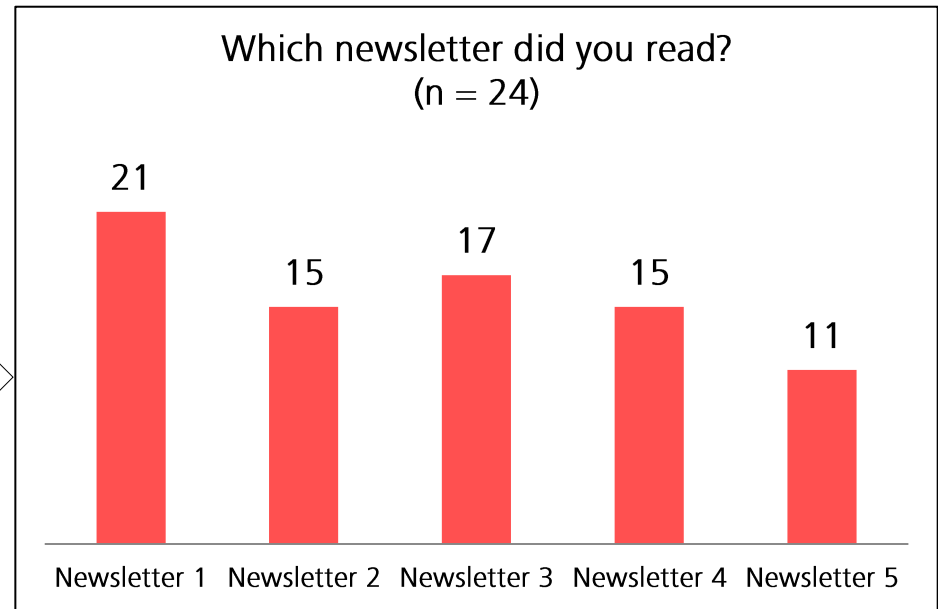
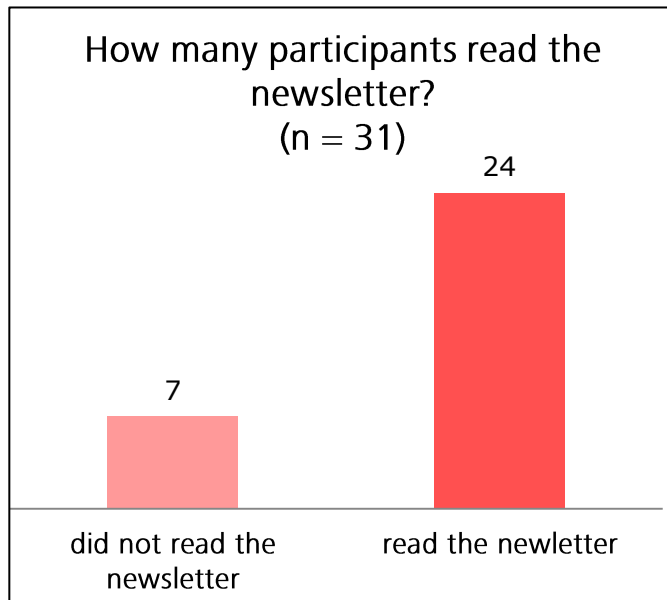
### Pool

310 (internal mailing list)

professors, faculty staff, administrative staff  
and central faculty staff

→ Response rate too low

## Results 1st evaluation: Newsletter



### Why did you decide not to read the newsletter? (n = 7, multiple answers possible)

- No time (n = 4)
- No interest (n = 2)
- Newsletter received unasked (n = 2)
- Not relevant
- Content already well-known

## Results 1st evaluation: Moodle-forums

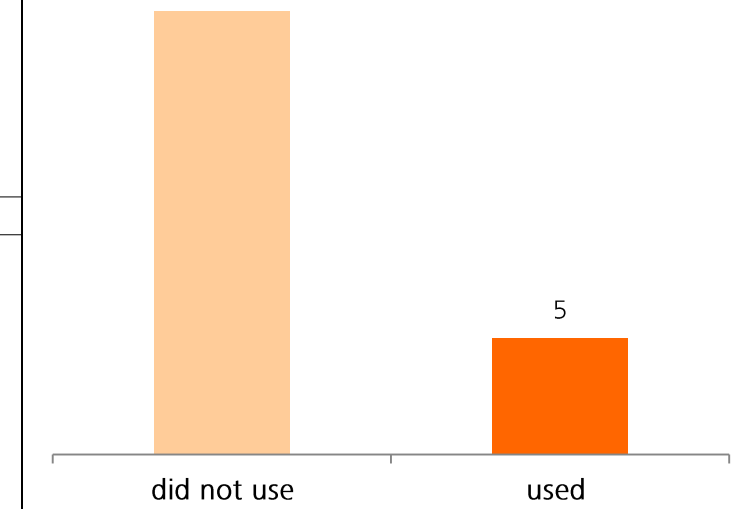
Why did you decide not to use the Moodle-forum / the Moodle-forums?

(n = 19, multiple answers possible)

- No need (n = 8)
- No time (n = 8)
- Other tasks have more priority
- I logged in, but there was no discussion going on. I didn't know what to write. I wanted to know what others write.
- I don't know.
- Break of media, time consuming
- I don't know what that is.
- It did not catch my attention.
- Unclear additional benefit
- Time consuming/ complex

How many participants used the Moodle-forums?

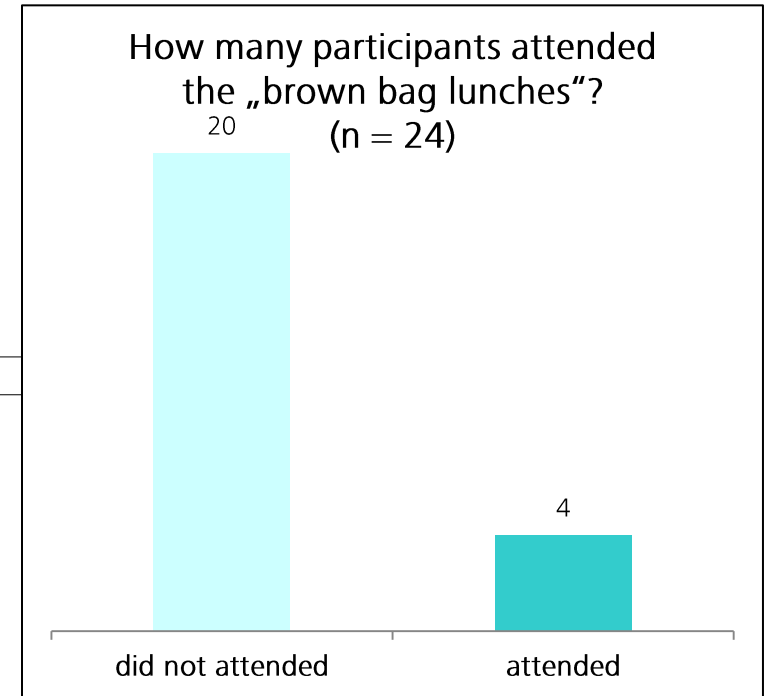
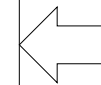
(n = 24)



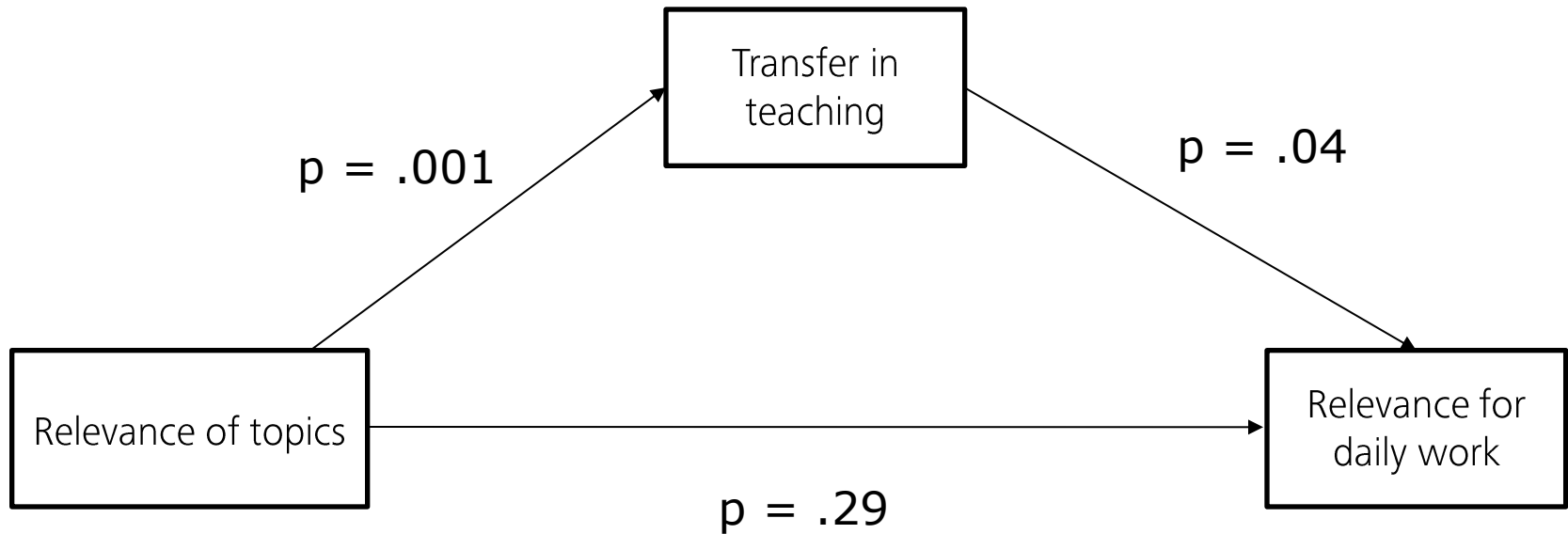
## Results 1st evaluation: „Brow bag lunches“ („HdM“)

Why did you decide not to attend the „brown bag lunches“? (n = 20, multiple answers possible)

- No time (n = 10)
- Time conflict (n = 5)
- Didn't know / overlooked announcement (n = 3)
- Unfavorable location (Wolframstraße) (n = 2)
- I have so much to do – my teaching is fine. If you will pardon my saying: There's no point in „over-dicaticizing everything“
- I need lunch time to consult other colleagues.
- I am not convinced of this format.
- The newsletter is poorly edited, so I decided not to come. Somebody who isn't able to design a HTML-newsletter and sends a PDF, is not working professional.

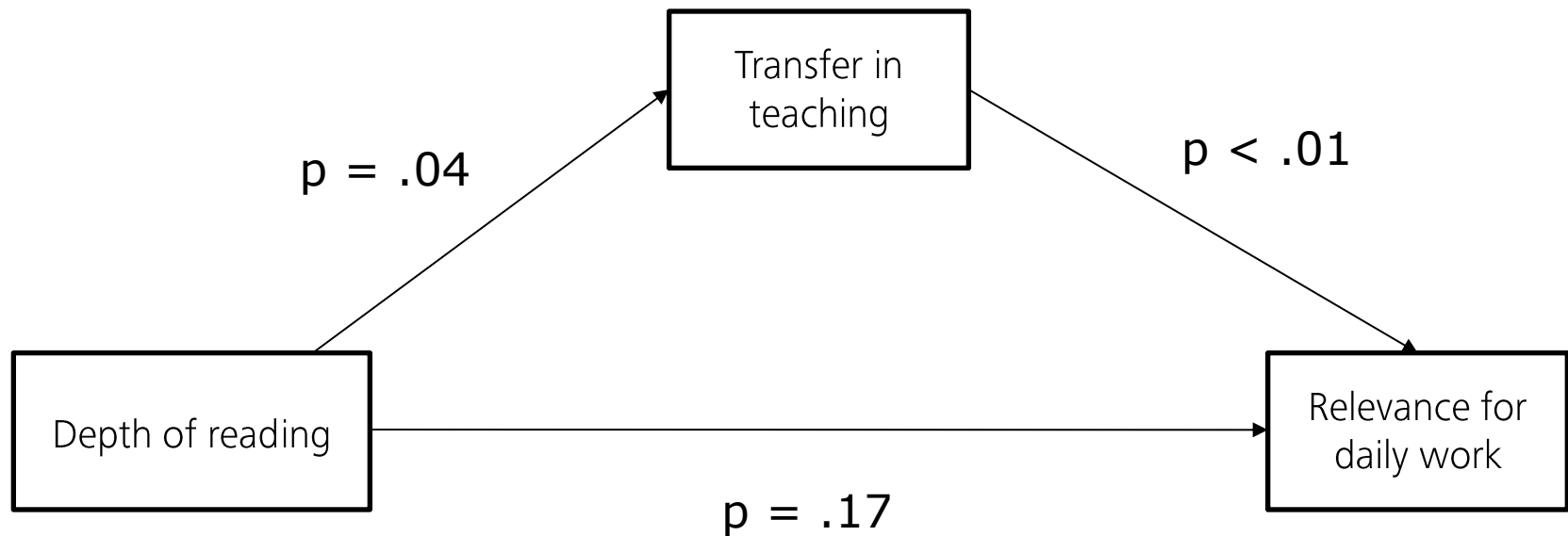


## Results 1st evaluation: Newsletter



significance  $p < .05$

## Results 1st evaluation: Newsletter



significance  $p < .05$

## Interpretations

- Blended learning scenarios in Higher Education should provide transfer in teaching
  - Newsletter: successful; positive feedback
  - Moodle-forums & „Brown bag lunches“: low attendance
- Other tools for communication and collaboration necessary



## Discussion

- How can communication and collaboration in blended learning scenarios be supported?
- What are your experiences with blended learning scenarios?

# Literature

Schulmeister, Rolf (2004): Didaktisches Design aus hochschuldidaktischer Sicht. - Ein Plädoyer für offene Lernsituationen. In: Ulrike Rinn und Dorothee Meister (Hg.): Didaktik und neue Medien. Konzepte und Anwendungen in der Hochschule. Münster, New York: Waxmann (Bd. 21), S. 19–49.

# Thank you for your attention!

contact:

Andrea Hempel, M.A.  
Dept. Of Higher Education Didactics  
Stuttgart Media University  
Nobelstraße 10  
70569 Stuttgart

[hempel@hdm-stuttgart.de](mailto:hempel@hdm-stuttgart.de)  
[www.hdm-stuttgart.de/didaktikzentrum](http://www.hdm-stuttgart.de/didaktikzentrum)