

# Embedding Interuniversity Peer Review in Virtual Learning Groups

## A Research-based Learning Scenario

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1. Background
2. Cross Teaching Scenario
3. Research Design and Process Model
4. Result Discussion

A still life photograph featuring several oranges of varying sizes and colors (green, yellow, and orange) on a light-colored surface. A glass of orange juice is visible in the upper right corner, with a glass of water next to it. The scene is softly lit, creating gentle shadows.

# 1

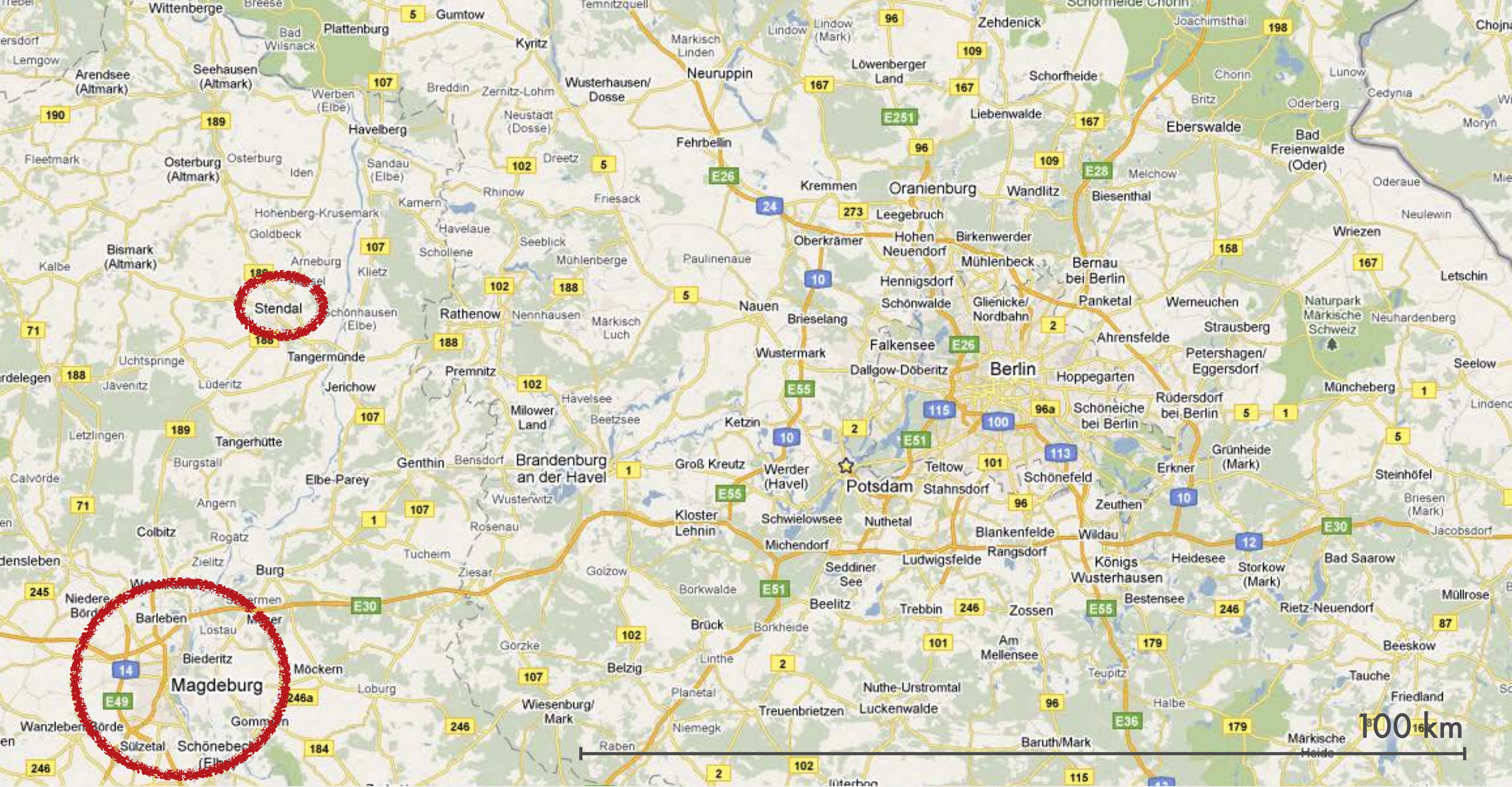
## Background

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# Europe









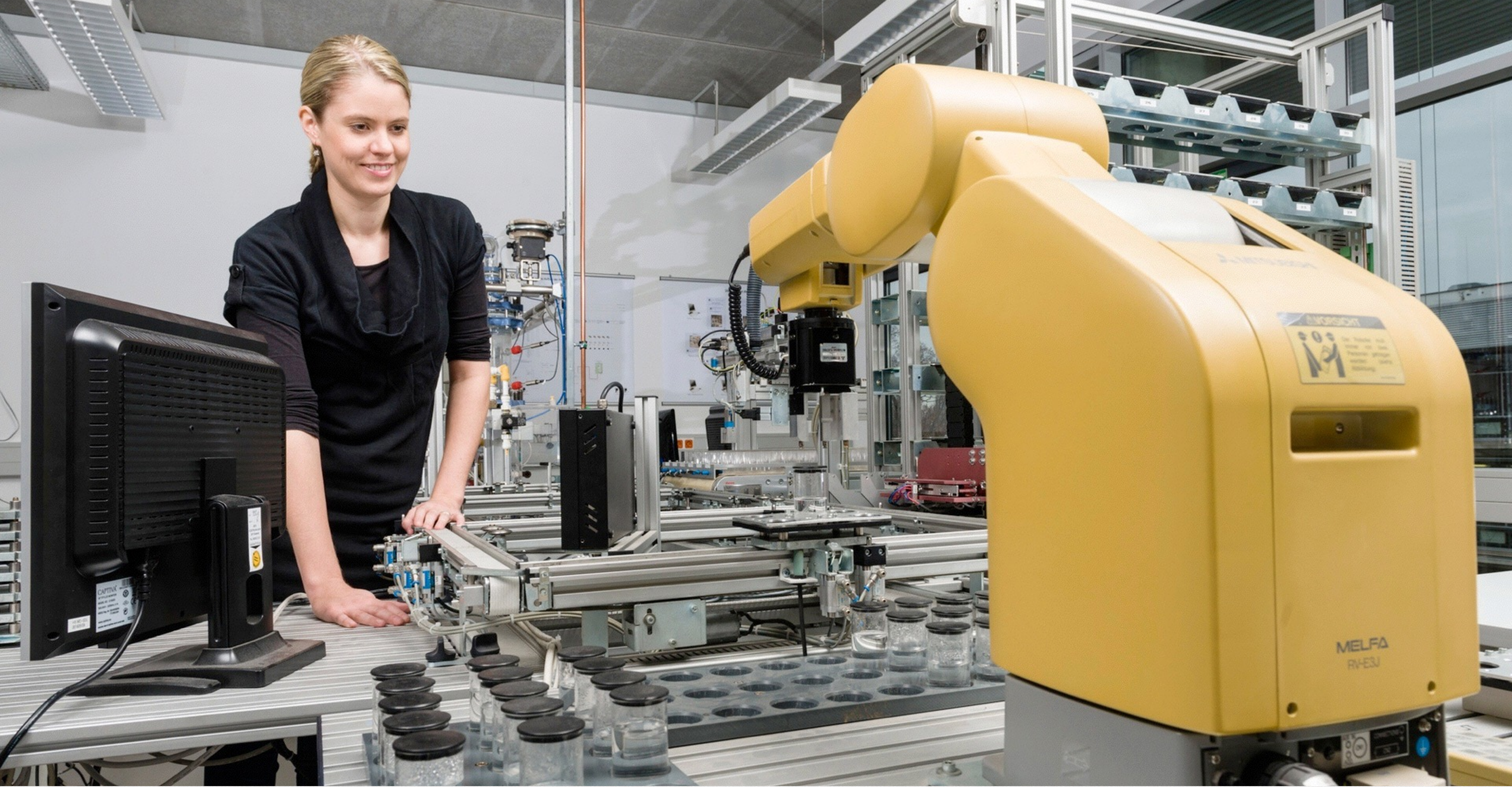































# karriereLEBEN

SocialMedia-Portal for Career- and Alumni-Development



 Bundesministerium für Bildung und Forschung

gefördert durch:




Research group  
Science Projects in Radio and Information Technology

# ROSI-3D

RFID locating in consideration of moving objects in a radio field with 3D-simulation



 Bundesministerium für Bildung und Forschung

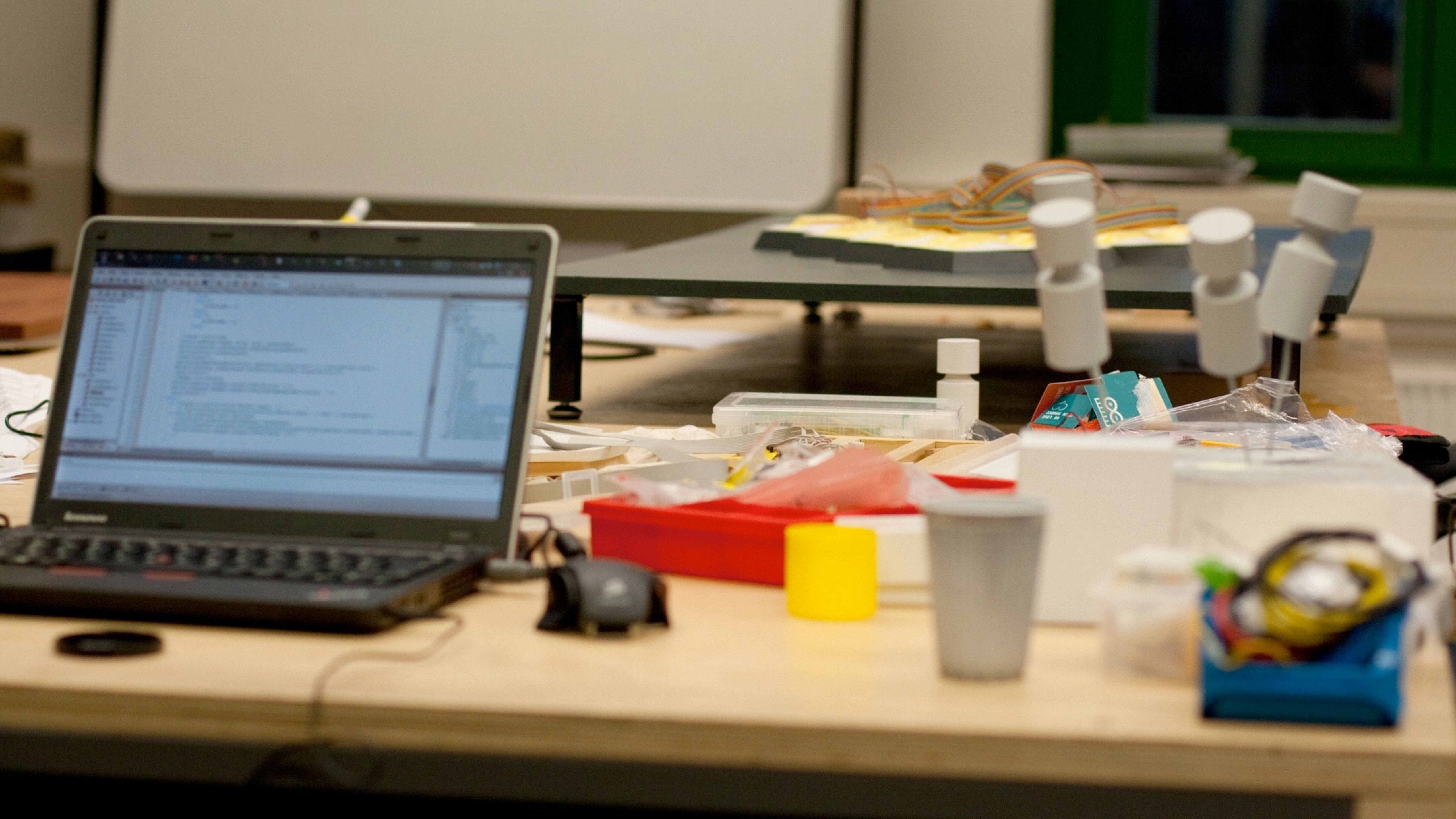
gefördert durch:

profUnt   
Forschung an Fachhochschulen mit Unternehmen

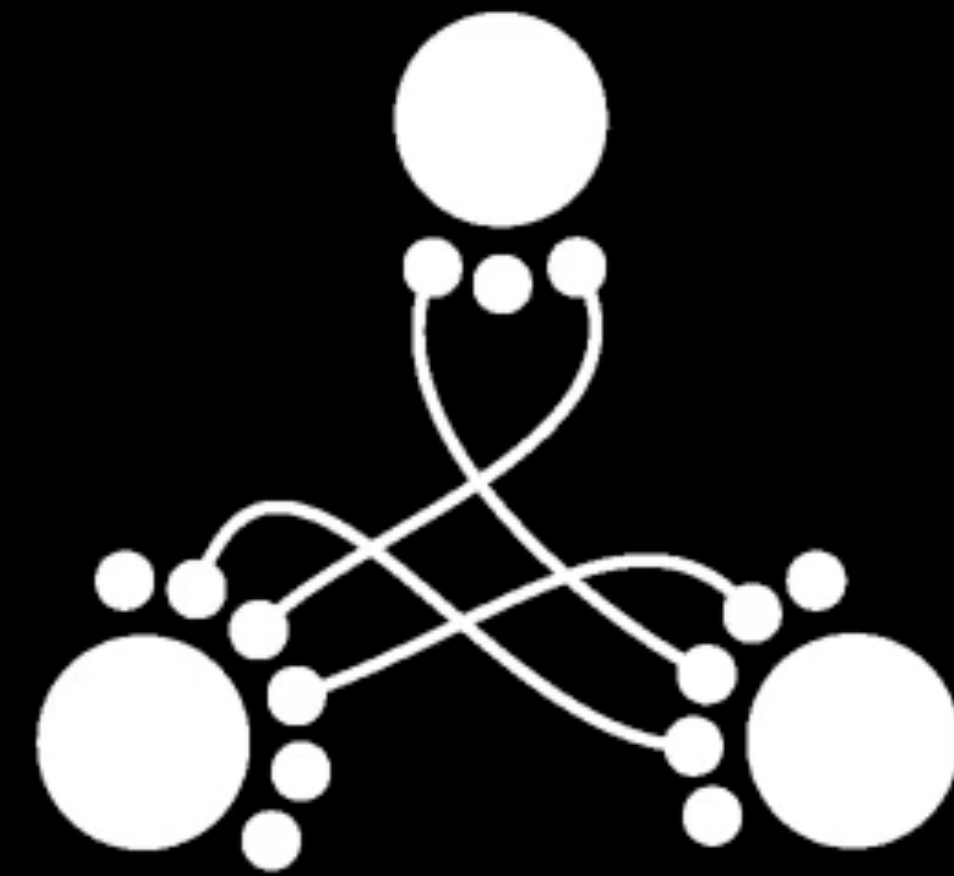












# connectibition

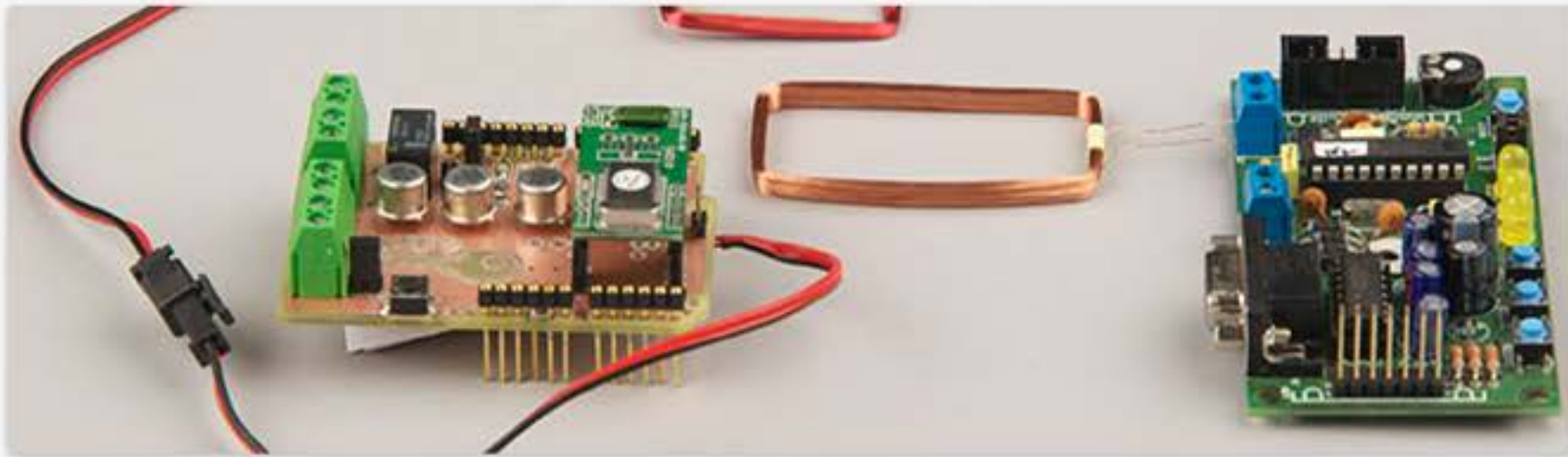
<https://medium.com/extended-exhibition>



Project **Extended Exhibition**, Jens Wunderling, Michael Herzog et. al. 2016

L.U.M.E.N Mareike Gabele, Robert Klank, Nicolas Pepping, Eric Schmieder

<https://medium.com/extended-exhibition>



Deutsch English



- Aktuelles
- Projekte
- Schaufenster
- Mitarbeiter**
- Ehemalige Mitarbeiter
- Leitbild
- Veranstaltungen
- Forschung
- Studium
- Kontakt

SPIRIT > Mitarbeiter

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[Zur persönlichen Webseite](#)

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Tweets

Folgen

**SPIRIT** @spirit\_group 3 Jul  
Forgot to post: First photo part at #h2bc Website #barcamp #stendal @hs\_magdeburg h2bc.de/impressionen/ ...coming more soon  
Öffnen

**SPIRIT** @spirit\_group 3 Jul  
More #h2bc photos by our great artist @mattse.  
[flic.kr/s/aHsjYFh5Jn](https://www.flickr.com/photos/spirit_group/1511111111/) #barcamp #stendal @hs\_magdeburg  
Kurzfassung zeigen

**Michael A. Herzog** 29 Jun @maherzog  
Thank you @flobro for your lunch lecture »E-Business Financing« last week @hs-magdeburg! [flic.kr/s/aHsjZfJuLc](https://www.flickr.com/photos/spirit_group/1511111111/)  
Retweetet von SPIRIT  
Kurzfassung zeigen

**Michael A. Herzog** 23 Jun @maherzog  
Ich frag mich: Wieviel #IBeacon ist frech geklaut bei #OpenBeacon? MT @faz\_net Apples blaues Rätsel ist gelöst [faz.net/aktuell/techni...](https://www.faz.net/aktuell/techni...)

Partner



<http://spirit.hs-magdeburg.de>

# Johannes Kepler University Linz

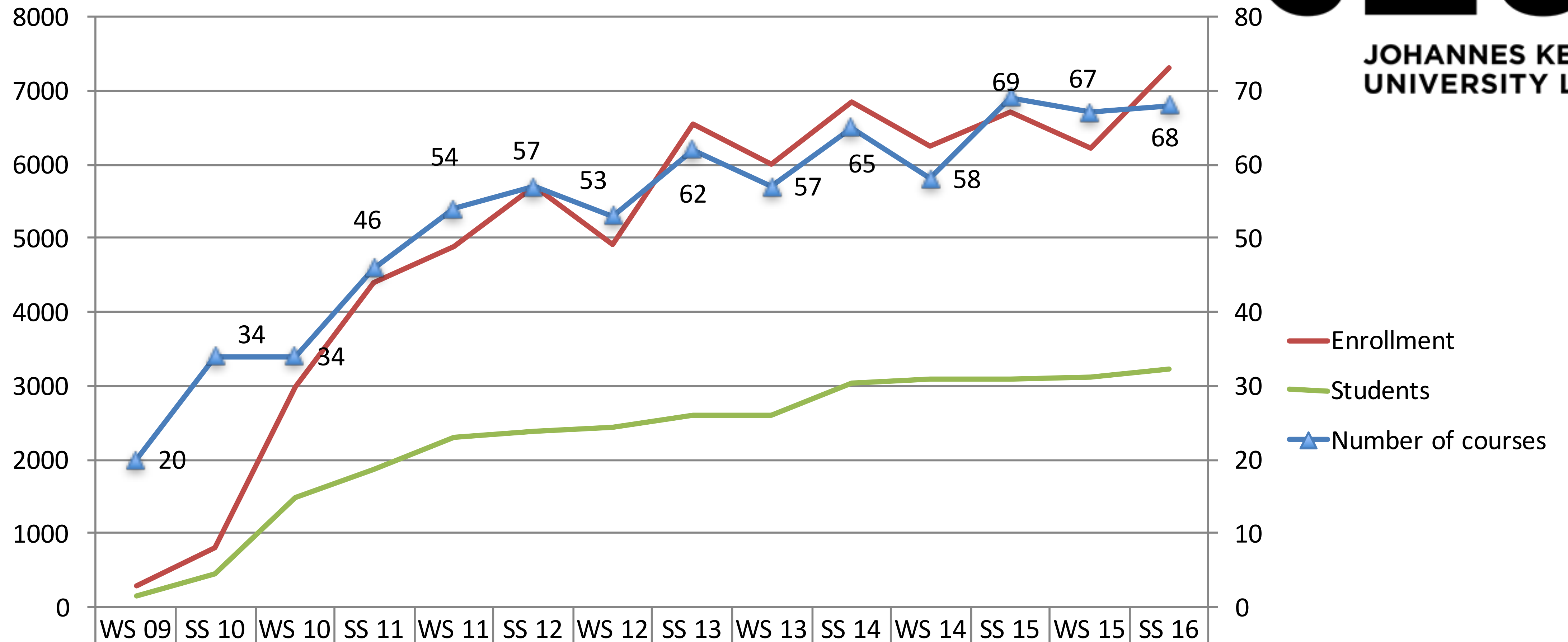


- ▶ 20.000~ students; 2.500~ employees
- ▶ 62 BA-, MA-, PhD- study programs at 118 institutes
  - Faculty of Social sciences, Business and Economics
  - Faculty of Engineering and Natural Sciences
  - Faculty of Law
  - Faculty of Medicine (since 2014)
- ▶ Dept. of Data Processing in Social Sciences, Economics and Business
  - Information Systems
  - Digital Business Management
  - Interactive Media
  - E-Learning





• Multimedia Study Services for Social and Economic sciences



	WS 09	SS 10	WS 10	SS 11	WS 11	SS 12	WS 12	SS 13	WS 13	SS 14	WS 14	SS 15	WS 15	SS 16
Enrollment	280	815	2971	4395	4895	5697	4902	6543	5998	6841	6248	6696	6223	7313
Students	160	451	1497	1872	2307	2394	2436	2605	2608	3030	3102	3100	3127	3239
Number of courses	20	34	34	46	54	57	53	62	57	65	58	69	67	68



# 2

## Cross Teaching

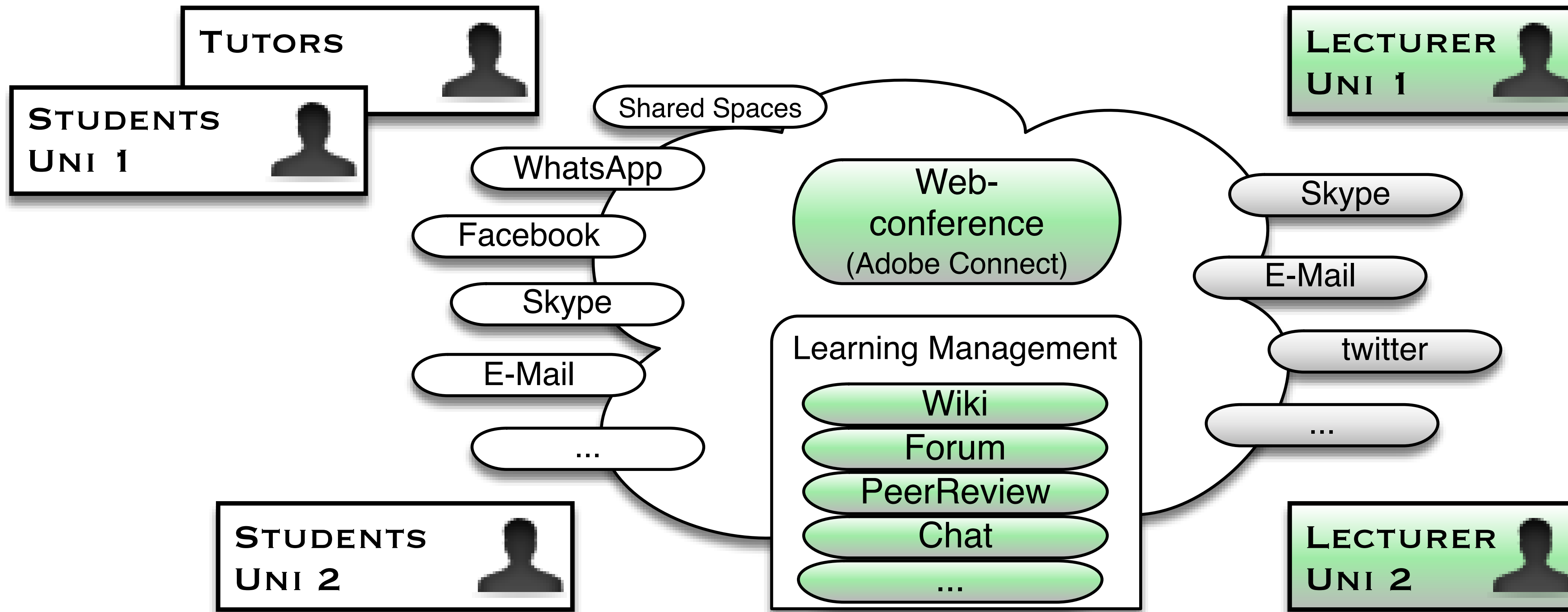
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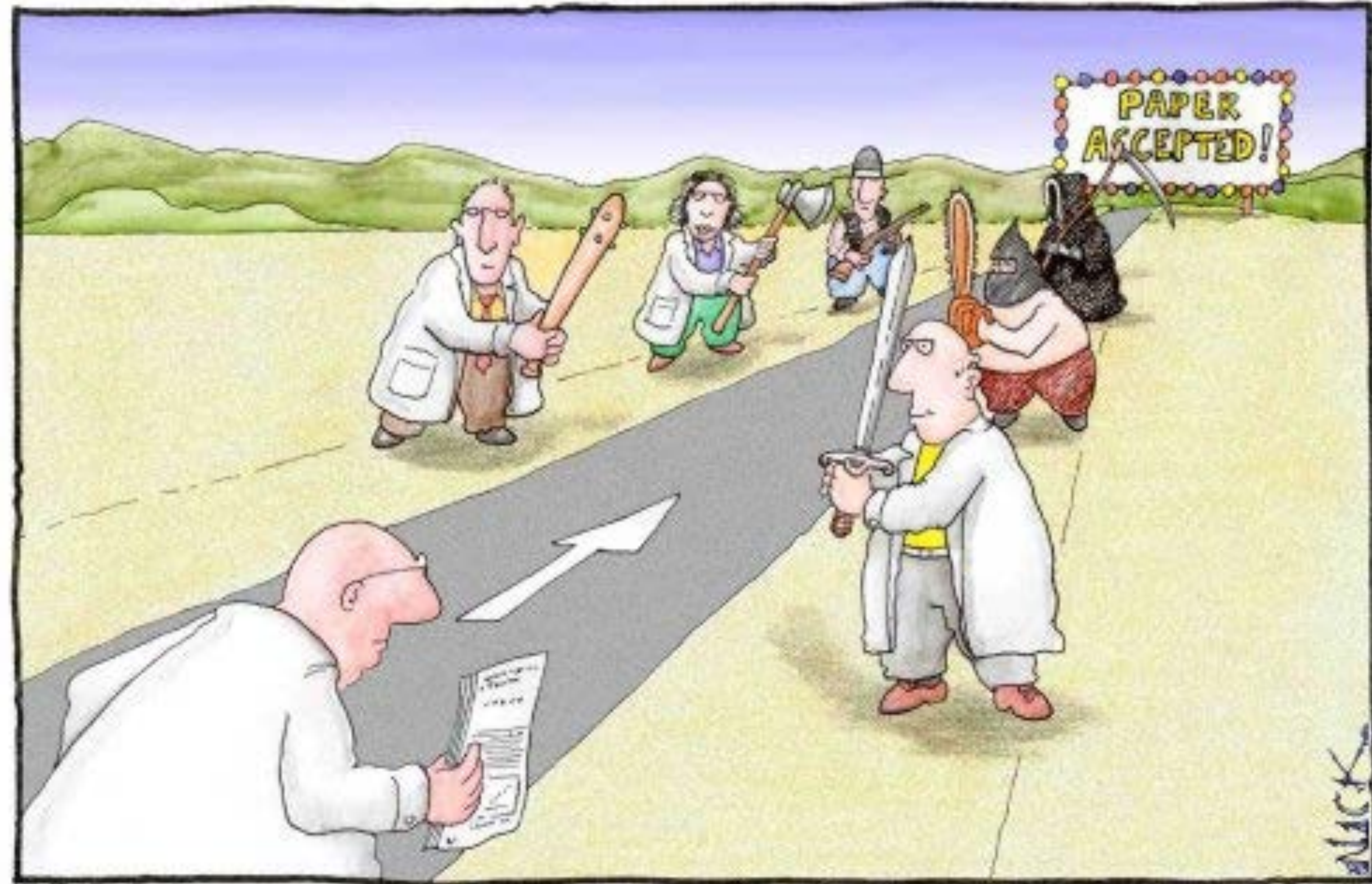
- ▶ Motivation
- ▶ Peer Review as a Learning Method
- ▶ Learning Setting





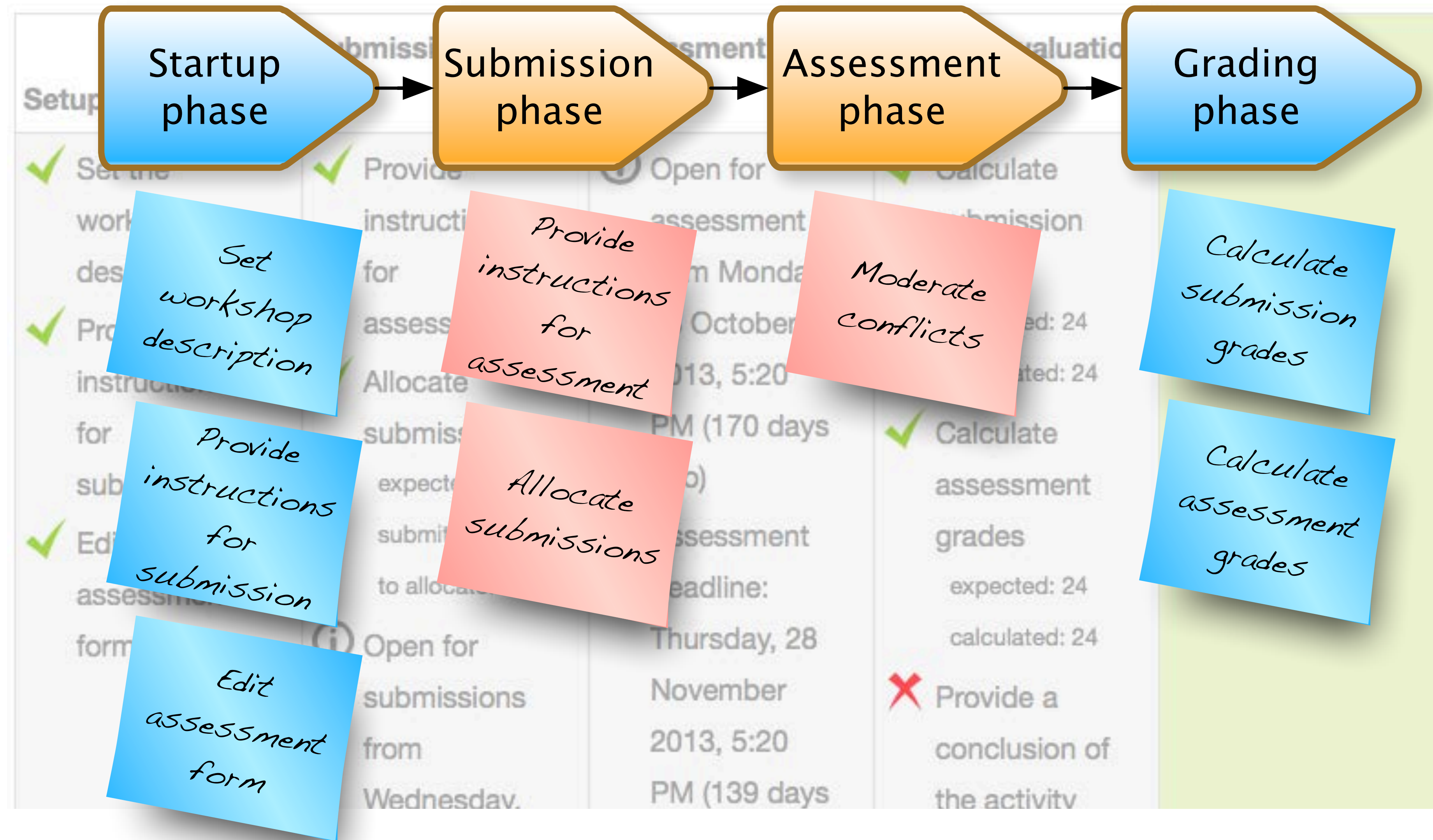
# Cross-Teaching-Scenario





Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

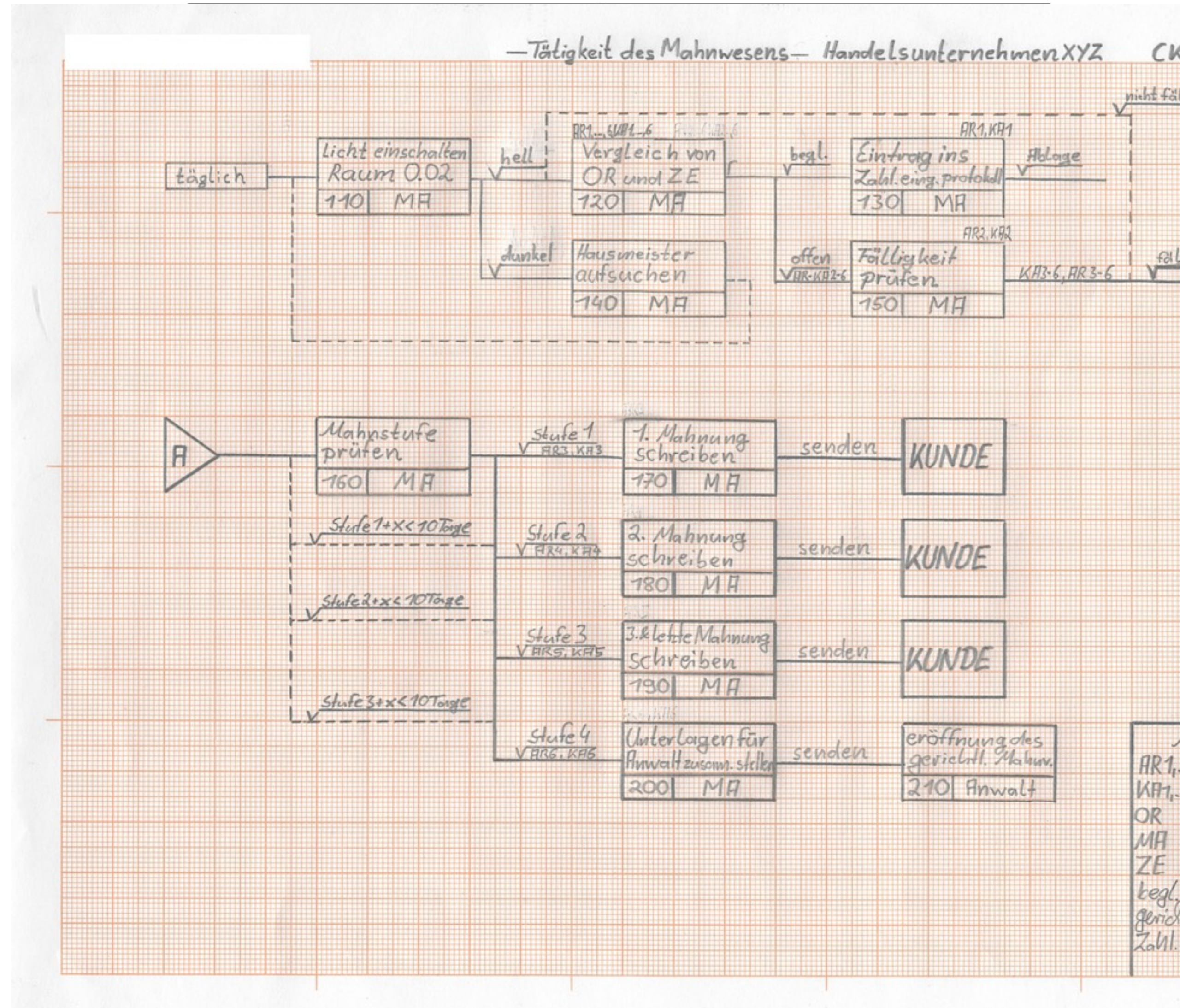
# Workshop activity in Moodle



# Assignments for Peer Review

Students in different courses, studies and campuses

- ▶ Case study work (IT-Ethics, Business Informatics)
- ▶ Exercise editing (E-Procurement)
- ▶ Business Process Modeling
  - ▶ Empirical data from above
- ▶ Abstract Writing
- ▶ Scientific article writing



# Current Learning Setting

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- ▶ Master Digital Business Management (JKU Linz & FH Upper Austria), Master Cross Media (Magdeburg-Stendal University)
- ▶ Designed for professionals, high technical affinity, media competency
- ▶ 3 courses interlocked
- ▶ 12 interuniversity learning groups
- ▶ Special incentive:  
Participation and presentation at CrossMedia Conference #TCCM, publication in conference proceedings
- ▶ ERASMUS+

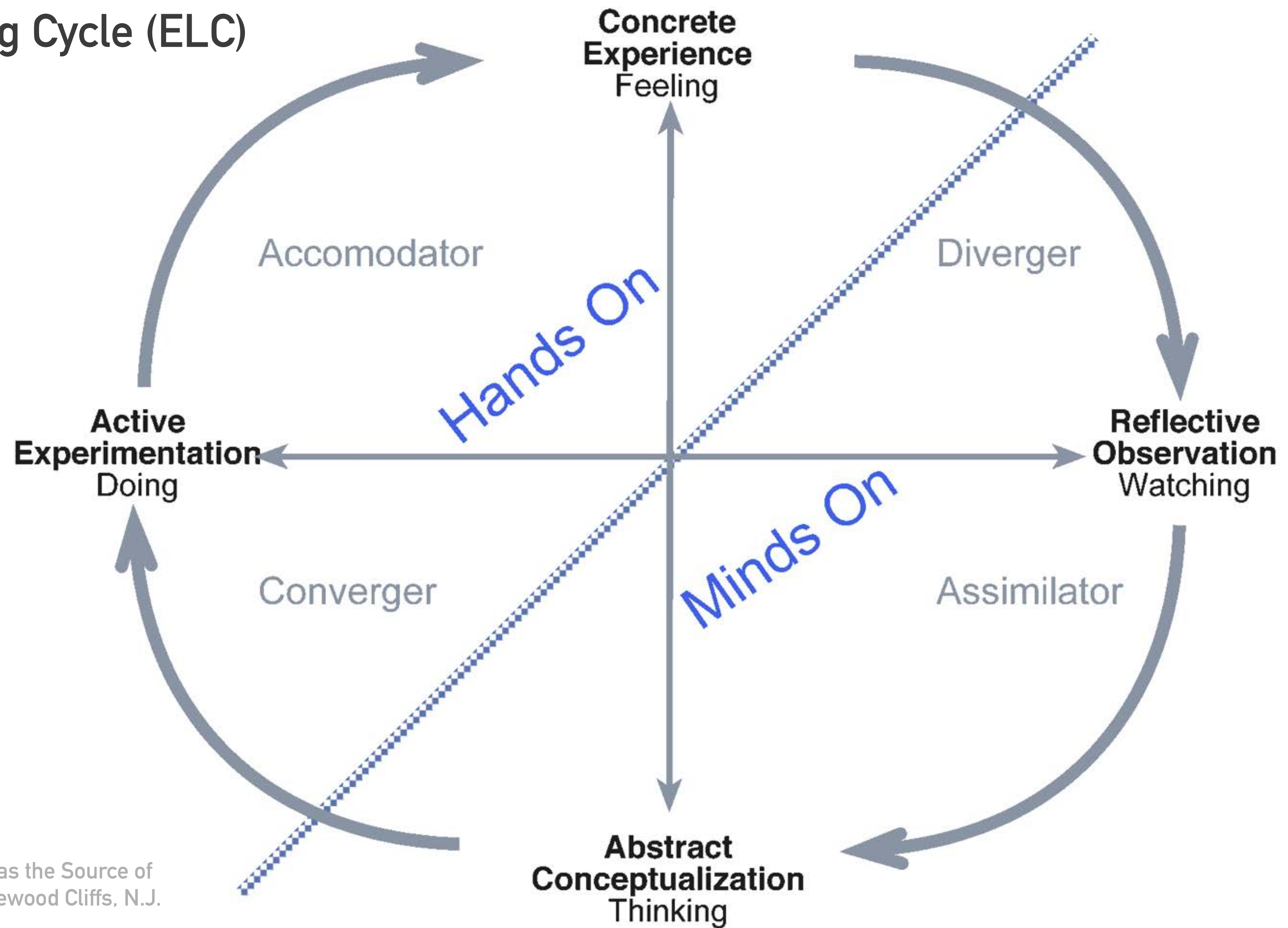
# 3

## Research Design and Process Model

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- ▶ Learning Model
- ▶ Evolution of the Process Model
- ▶ Empirical Accompanying Study

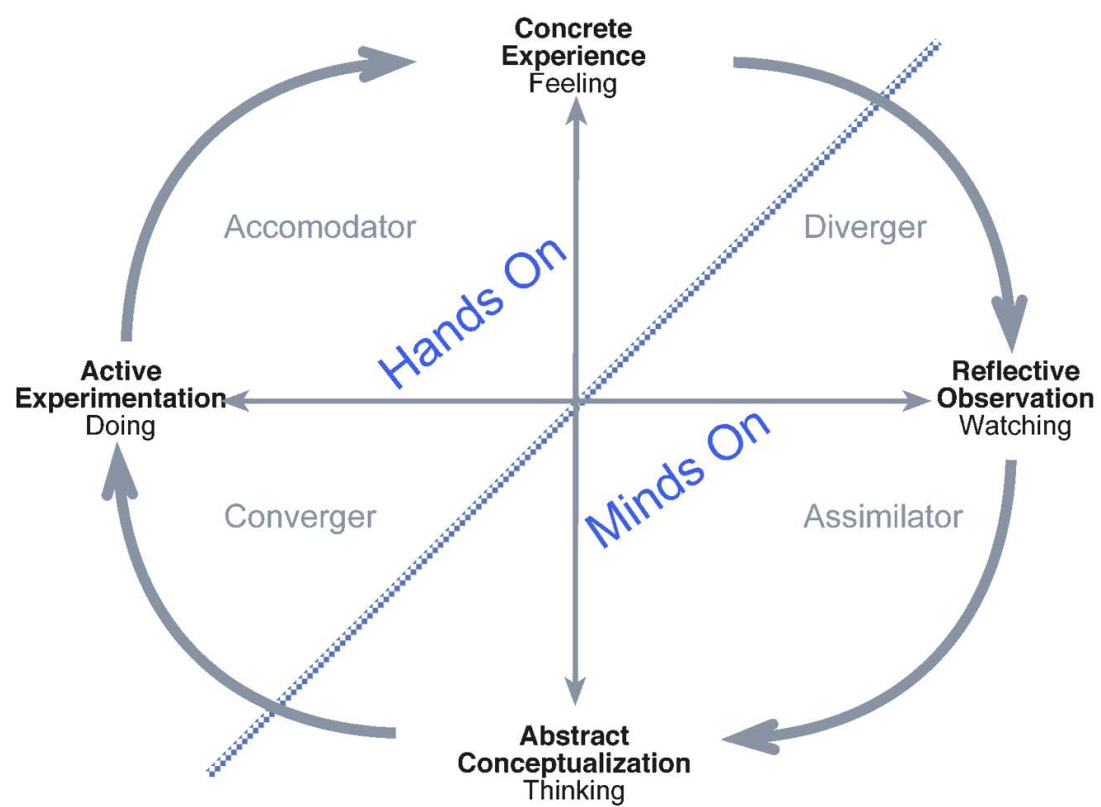
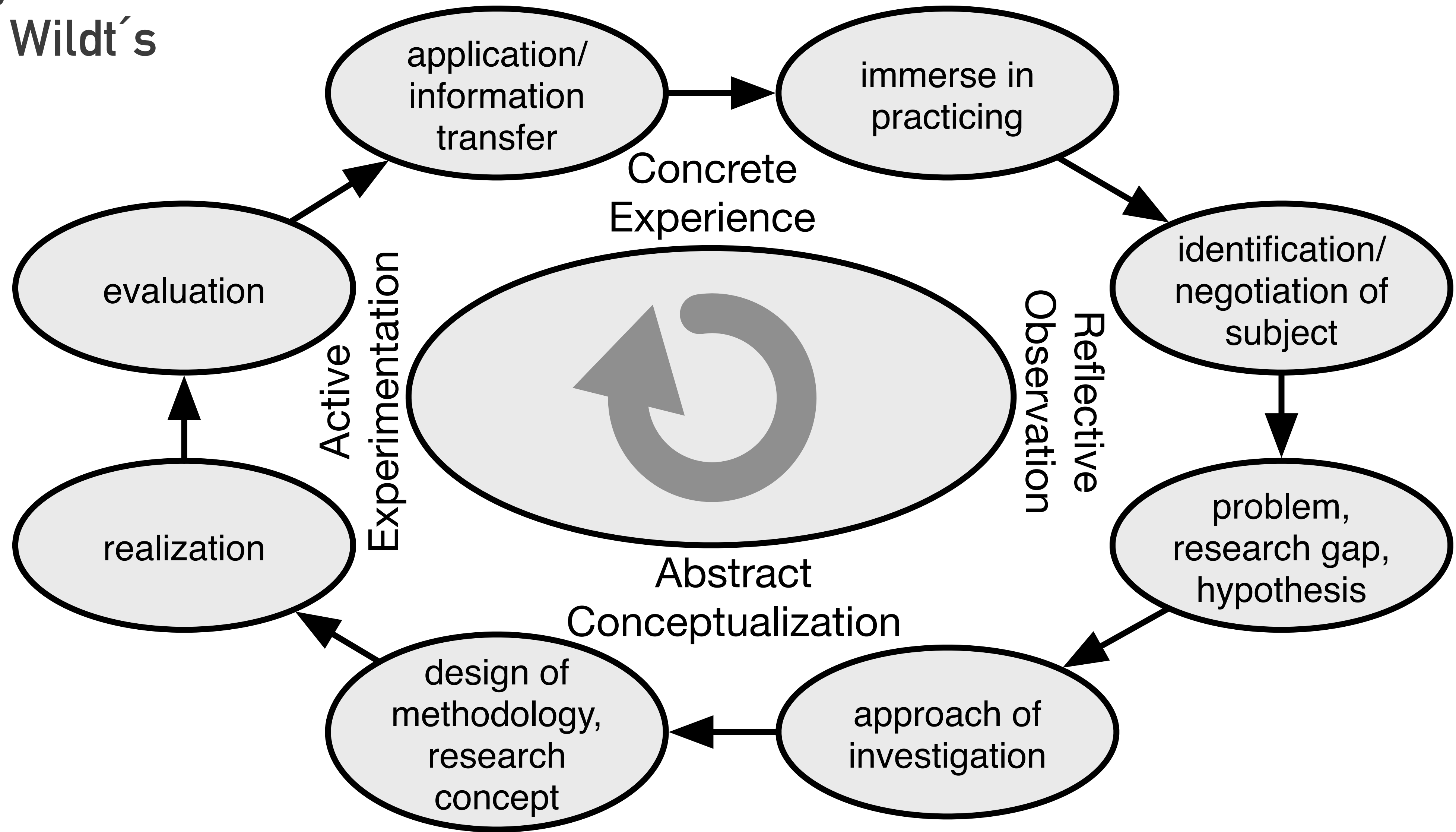
# Kolbs Experiential Learning Cycle (ELC)



Kolb, D. A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*, Prentice-Hall, Inc., Englewood Cliffs, N.J.

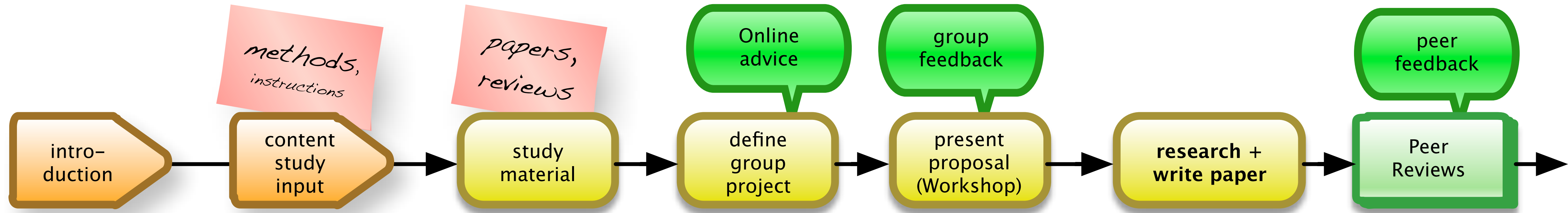
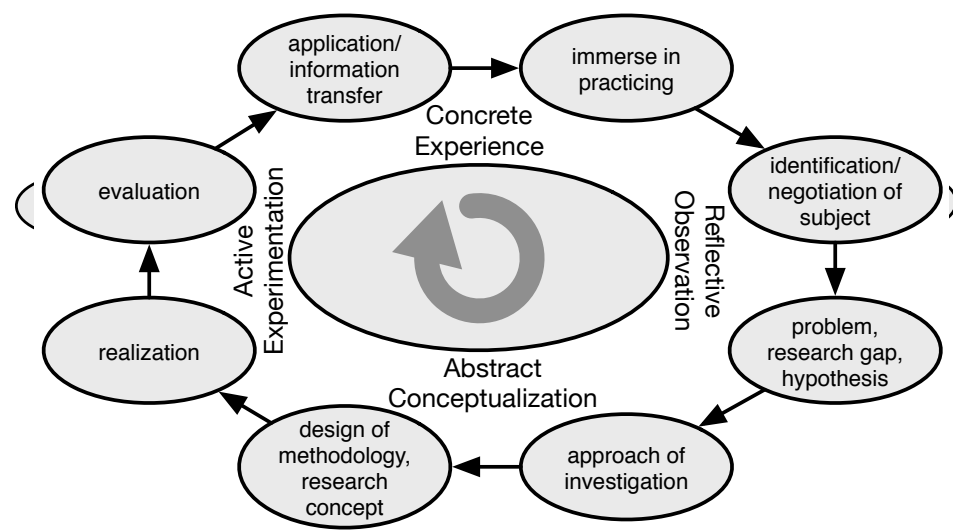


# Kolb's Learning Cycle synchronised with Wildt's Research Cycle



Wildt, J.: Forschendes Lernen: Lernen im „Format“ der Forschung.  
journal hochschul-didaktik, 20(2), 2009, S 4-7

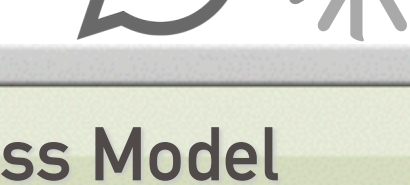
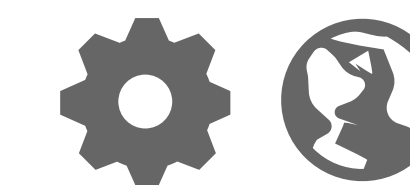
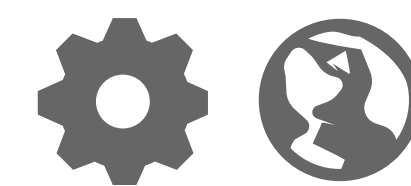
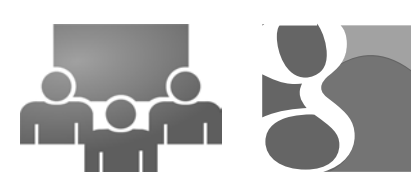
# Research process in first section of the Learning Cycle



G-Docs



Web





CYBERMOBBING

Gefahr des Nutzungsmissbrauchs durch neue Kommunikationsformen

F1. Wer sind die möglichen Opfer von Cybermobbing und durch welche Kanäle werden Opfer belästigt?

F2. Wie können sich Opfer gegen Cybermobbing wehren?

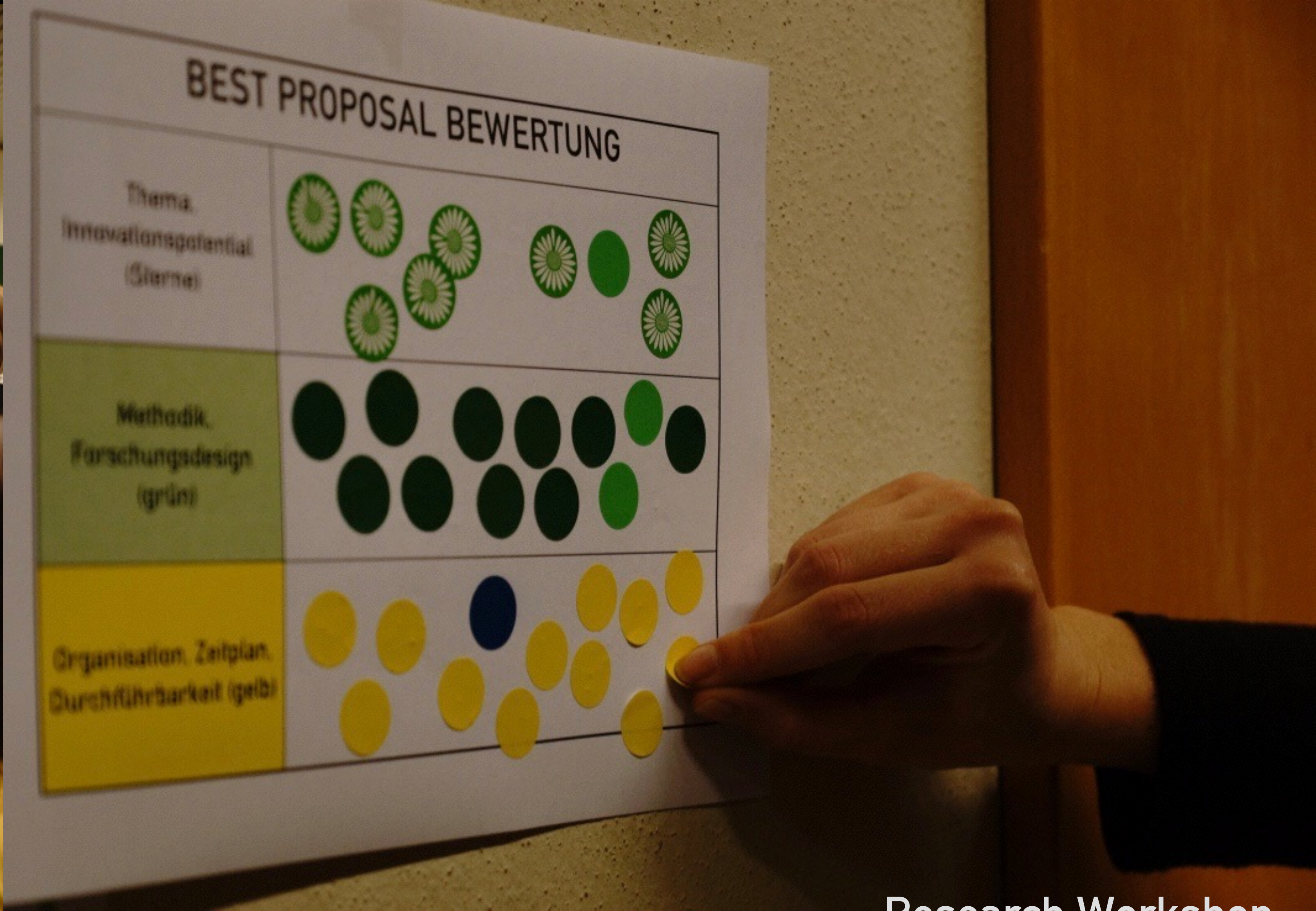
→ konkreter

Methodik: Online Befragung  
2 Schulen aus Linz  
private & öffentl. Schule

Ziel: Gibt es unterschiedl. Erfahrungen mit Cybermobbing aus Sicht der Schüler der 2o Schulen?

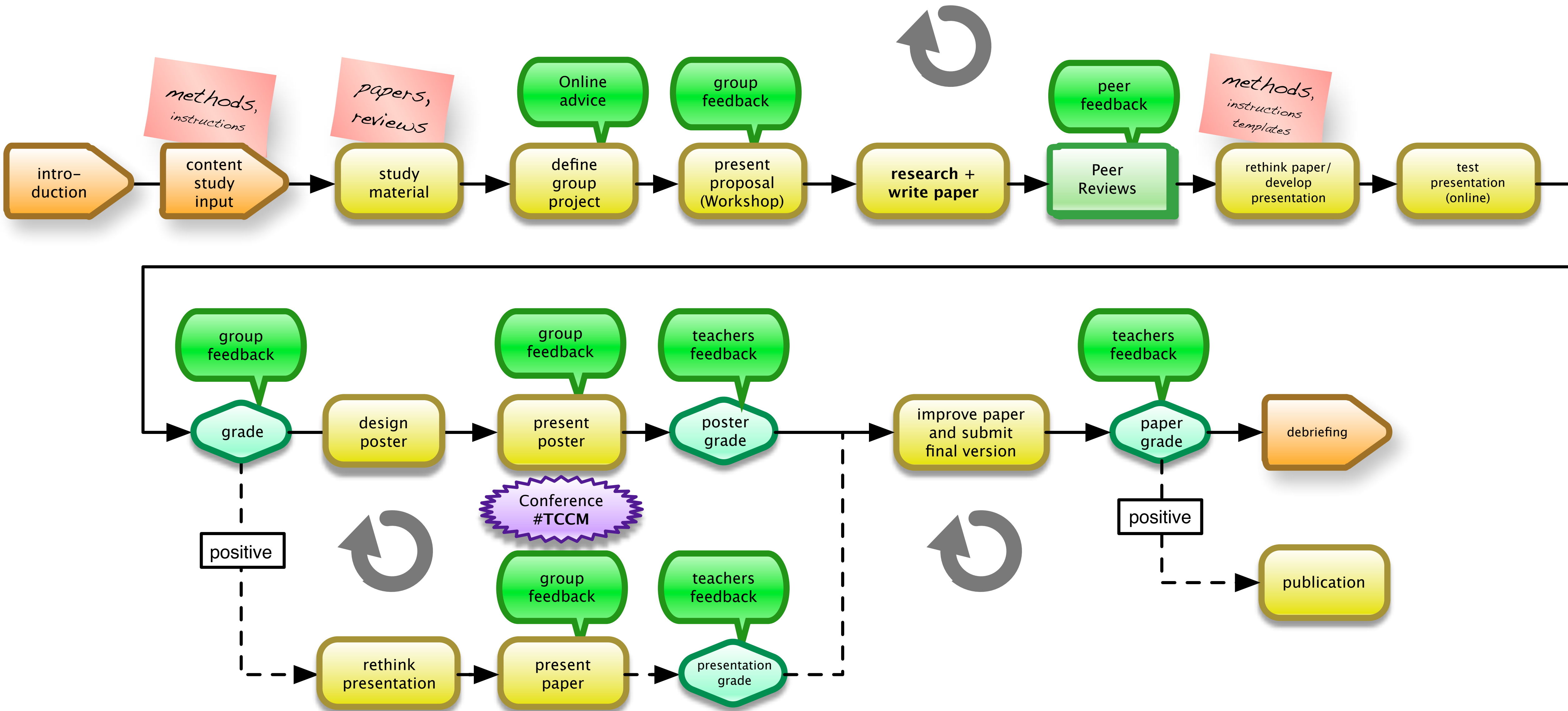
Ursus

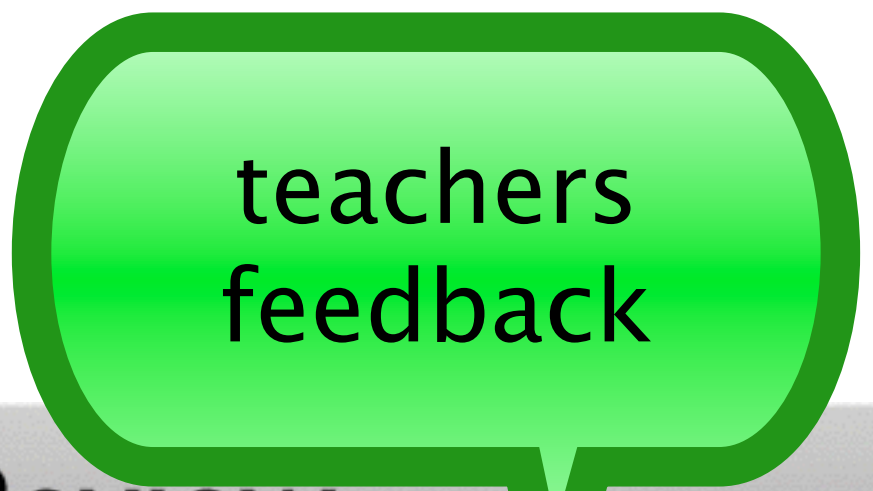
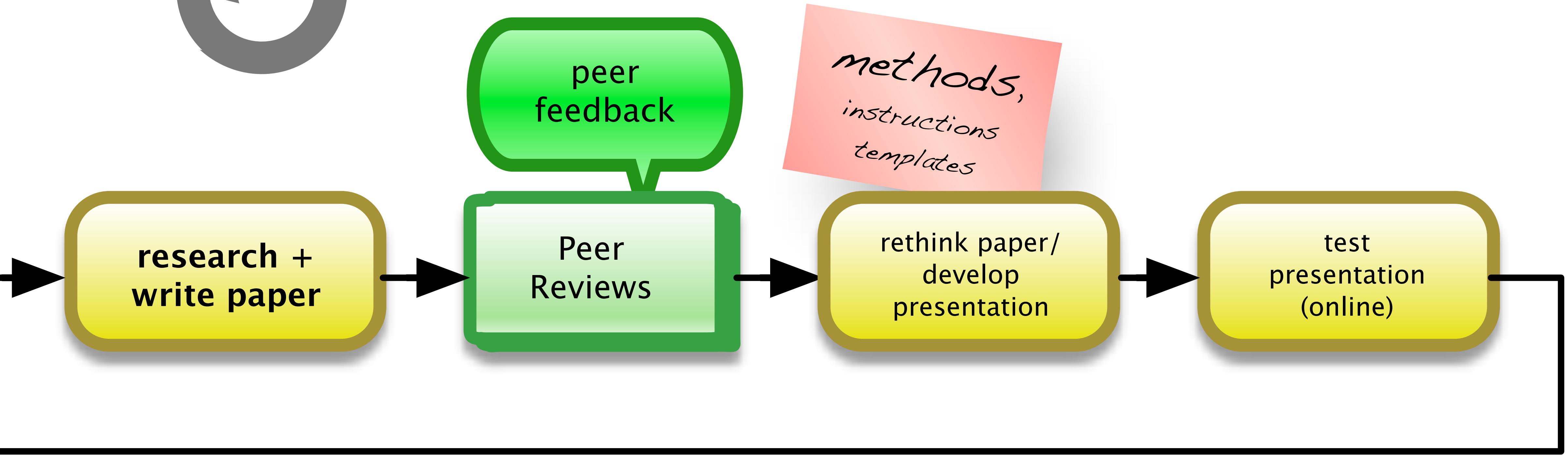
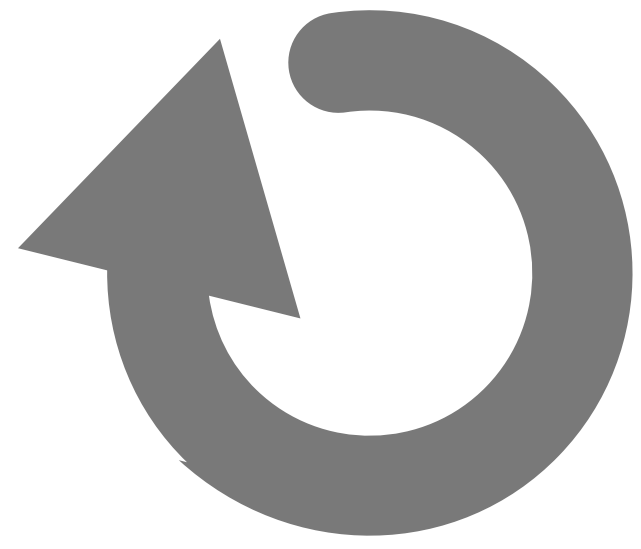
Research Workshop  
JKU Linz, Nov. 2015

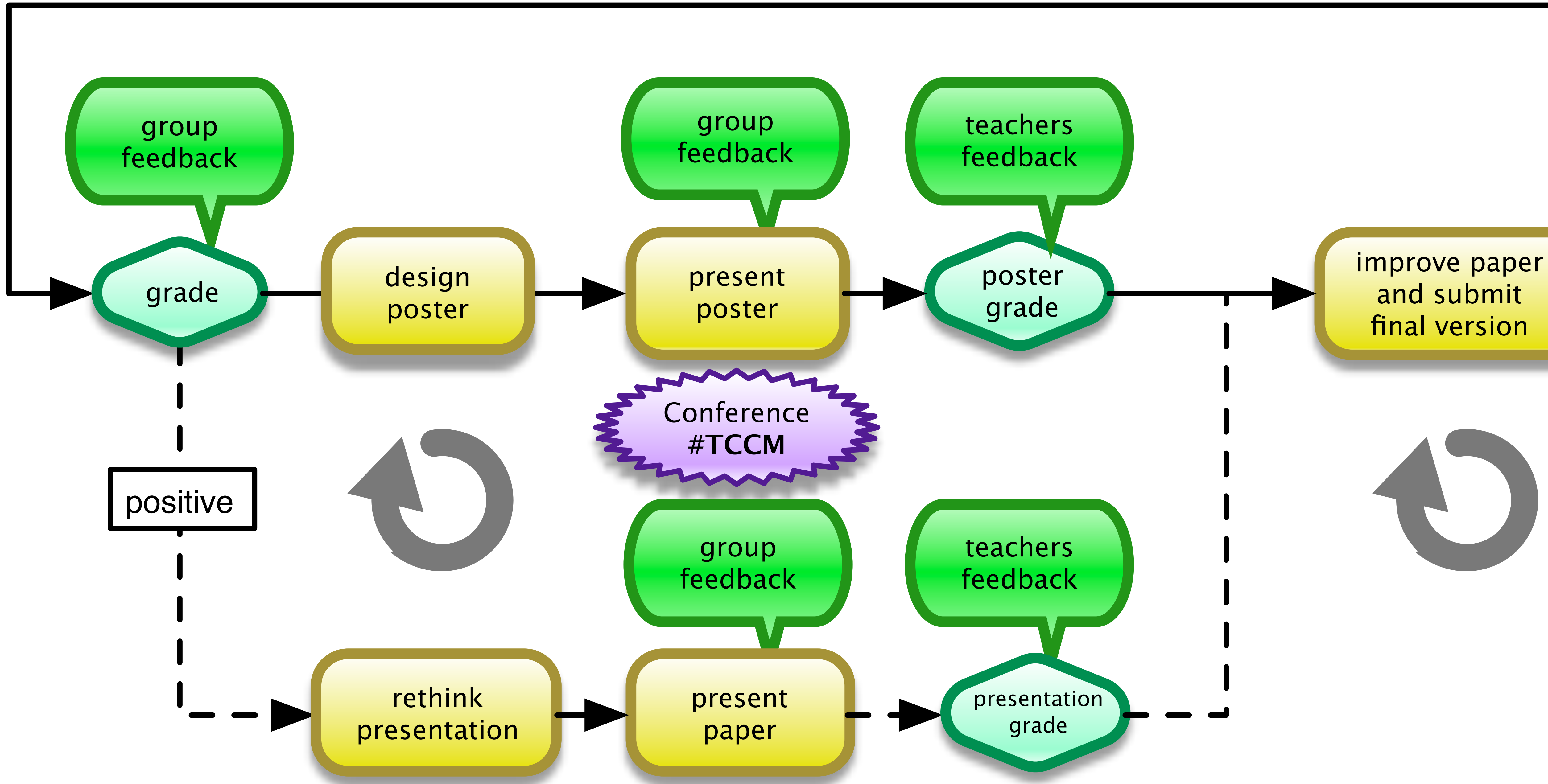


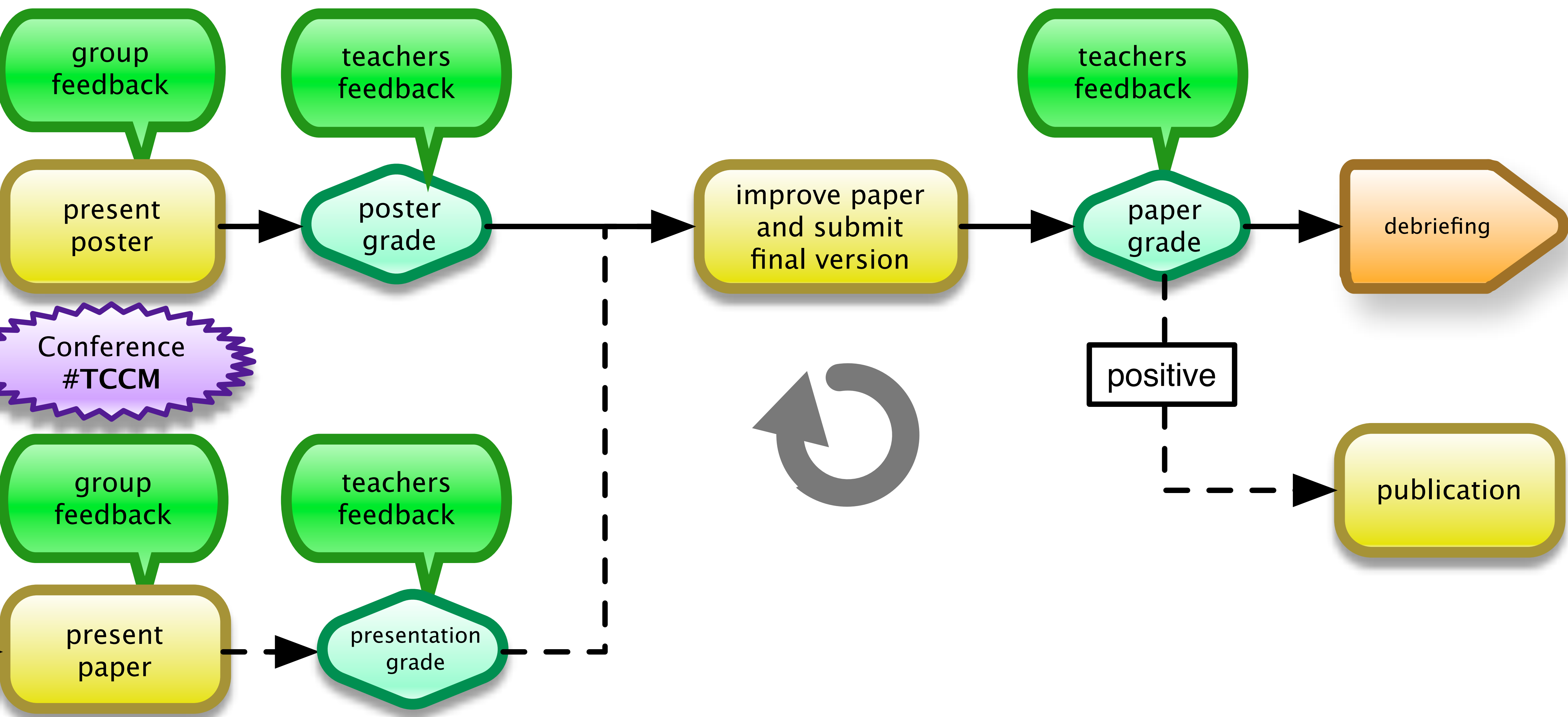
Research Workshop  
JKU Linz, Nov. 2015

# Research Process

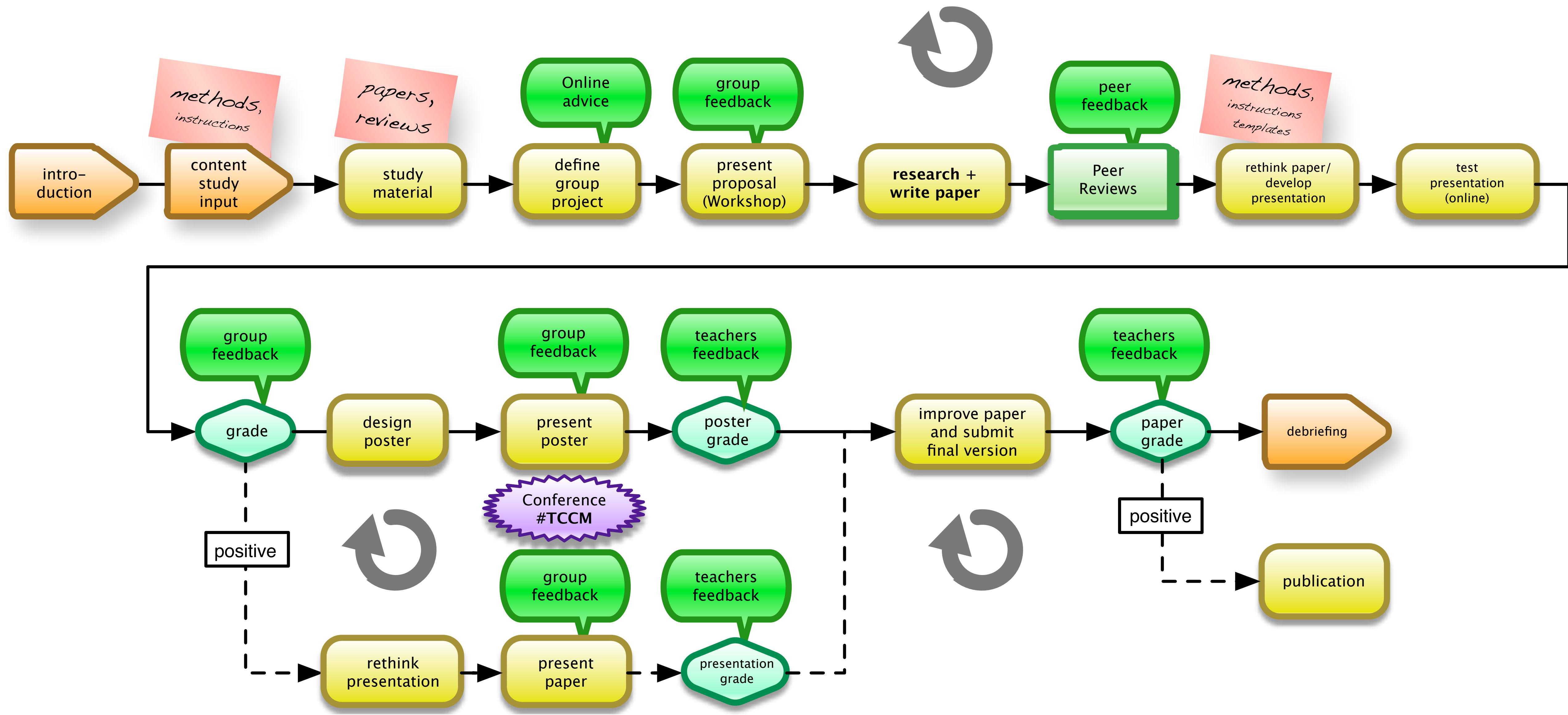


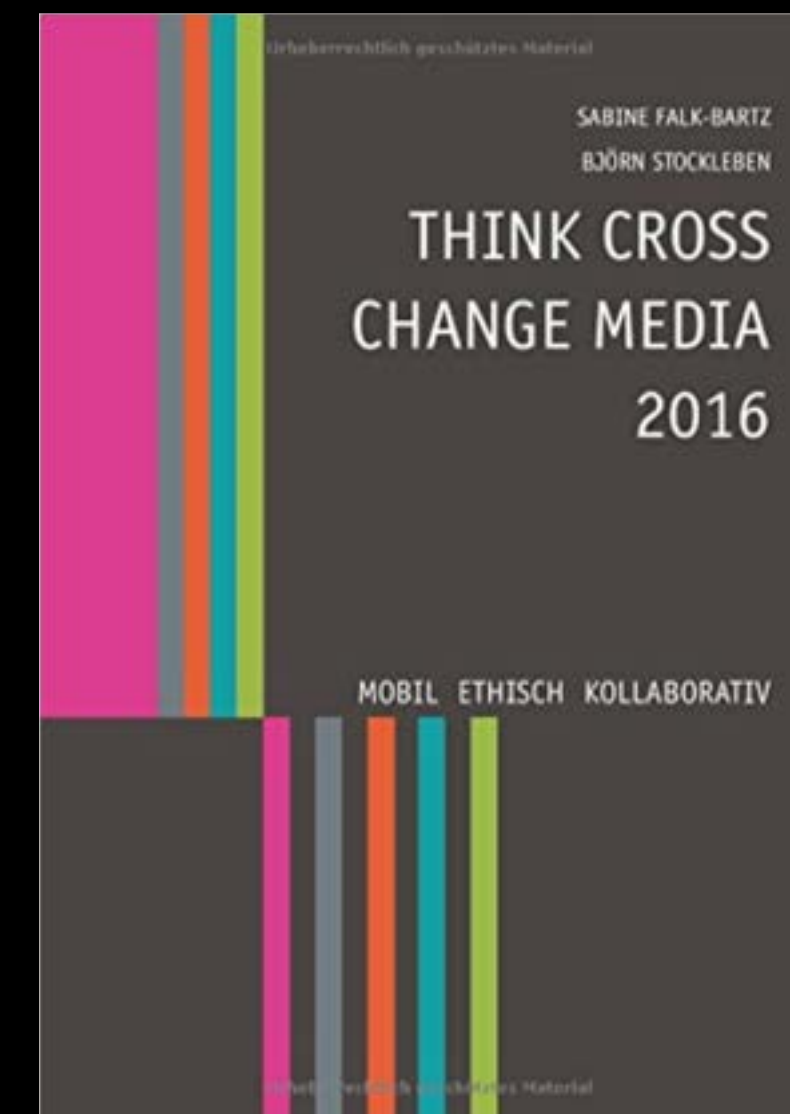












#TCCM Conference,  
Magdeburg, Feb. 2016

© Kassra Adloo

27/10  
2016

Interuniversity Peer Review

Research Design • Process Model • Conference

50

# CrossTeaching Project

## • Online survey

- ▶ More than 770 students overall participated (2010-2016)

- Linz, Steyr, Magdeburg, Stendal

- ▶ 325 qualified questionnaires evaluated in Peer Review part of this study

## • Here we focus:

- ▶ Field reports from involved students
- ▶ 12 group reports from WS2015/16 cohort

### Liebe Teilnehmerinnen und liebe Teilnehmer!

Wir freuen uns, dass Sie sich bereit erklärt haben, an der Befragung zur Fallstudie teilzunehmen. Ihre Bewertung trägt erheblich zum Erfolg dieser Befragung bei.

Nehmen Sie sich bitte ca. 15 Minuten Zeit und beantworten Sie nach Möglichkeit alle Fragen. Es gibt keine falschen Antworten. Es interessiert uns vor allem Ihre Meinung.

Die Befragung wird anonymisiert ausgewertet. Das heißt, Ihre Angaben werden vertraulich behandelt.

\*1 Ihr Geschlecht:

- männlich  
 weiblich

\*2 Alter (in Jahren):

\*3 An welchem Standort studieren Sie?

\*4 Hatten Sie TeilnehmerInnen des anderen Standortes in Ihrer Gruppe?

- Ja  
 Nein

\*5 Sind Sie derzeit neben Ihrem Studium berufstätig?

- Vollzeit (35 Std./Woche oder mehr)  
 Teilzeit (16-34 Std./Woche)  
 Geringfügig beschäftigt (gleich oder weniger als 15 Std./Woche)  
 Nicht berufstätig

6 Computernutzung: Welche der im folgenden genannten Anwendungen benutzen Sie?

- Textverarbeitung (z. B. Word)  
 Bildverarbeitung (z. B. Photoshop)  
 Tabellenkalkulation (z. B. Excel)  
 Datenbanken (z. B. Access)  
 Statistikprogramme (z. B. SPSS)

# 4

## Result Discussion

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- ▶ Peer Review as Learning Method
- ▶ Tools
- ▶ Qualitative Results (students' feedback)

# Choice of Tools and Technologies

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- ▶ **Compulsory: Moodle and Adobe Connect**
- ▶ **11 groups: Skype**
- ▶ **10 groups: E-Mail**
- ▶ **7 groups: Google Docs, 2 groups: MS OneDrive**
- ▶ **5 groups: Facebook Messenger, 3 groups: WhatsApp**
  
- ▶ **Total numbers: Between 2 and 6 different tools**



» *The Peer Review process was a very special experience, because the **feedback** of our colleagues was extremely **honest, comprehensive and inspiring.**«*

» *Drafting a Peer Review and the associated **intensive work with another groups' paper** was very interesting and rewarding.*«

» *Various approaches and educational background of group members were absolutely beneficial. That way, we had a great mix of ideas, methods and strengths, that we could coordinate and distribute the diverse tasks accordingly.*«

» *Just like in professional life, you can't always choose with whom you want to work together and you might come across **difficult characters** or people you can't get along very well.*«

## Learning Method

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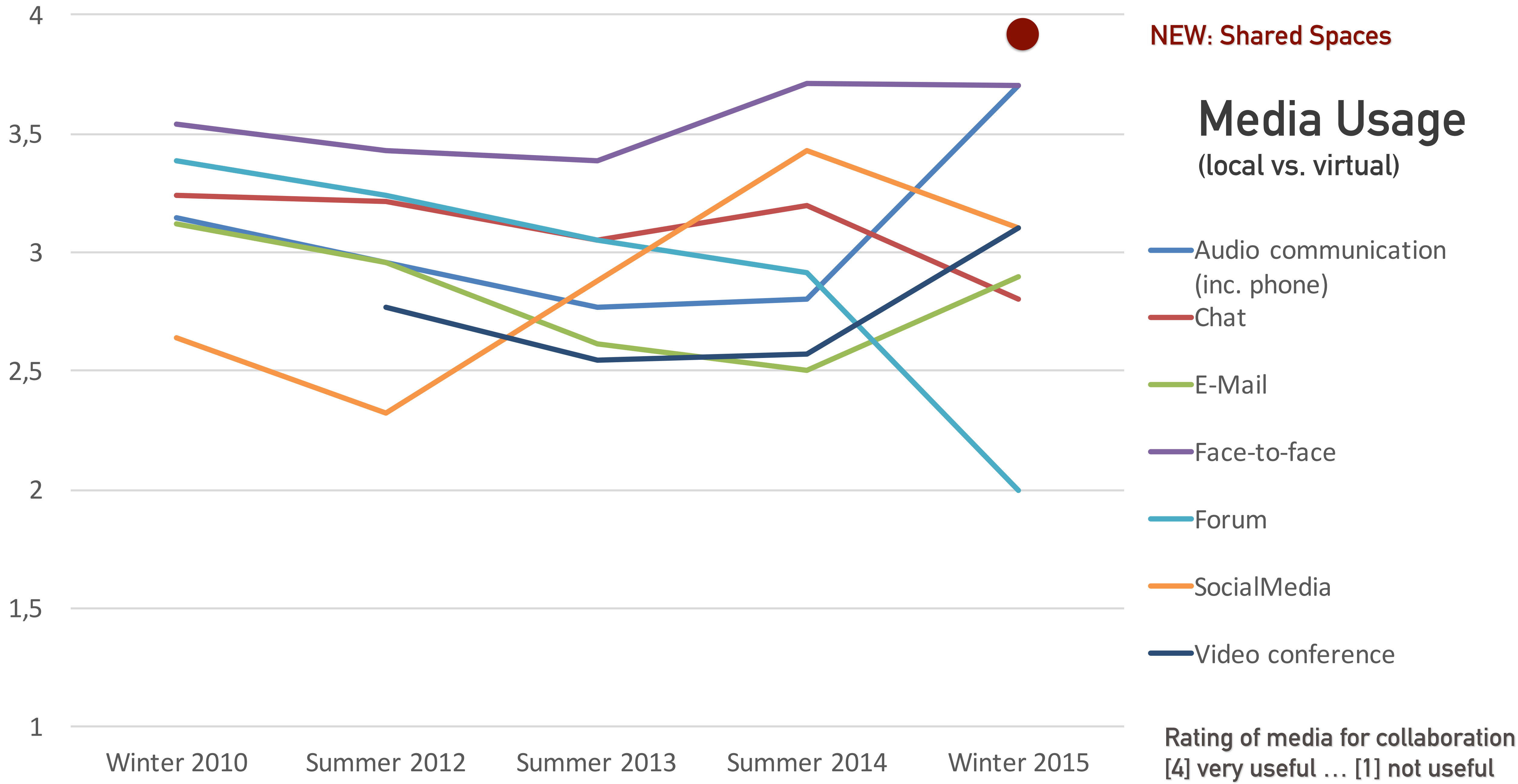
»Even though the development of this paper was **more demanding** than any other during my studies, I would recommend the cooperation with the university in Magdeburg for the coming years.

Not only have we gained another experience, it was very interesting to see that in some cases students of another university have **completely different approaches**.

The chance to present our paper at the **Cross Media Conference** was great and will not repeat itself too quickly.

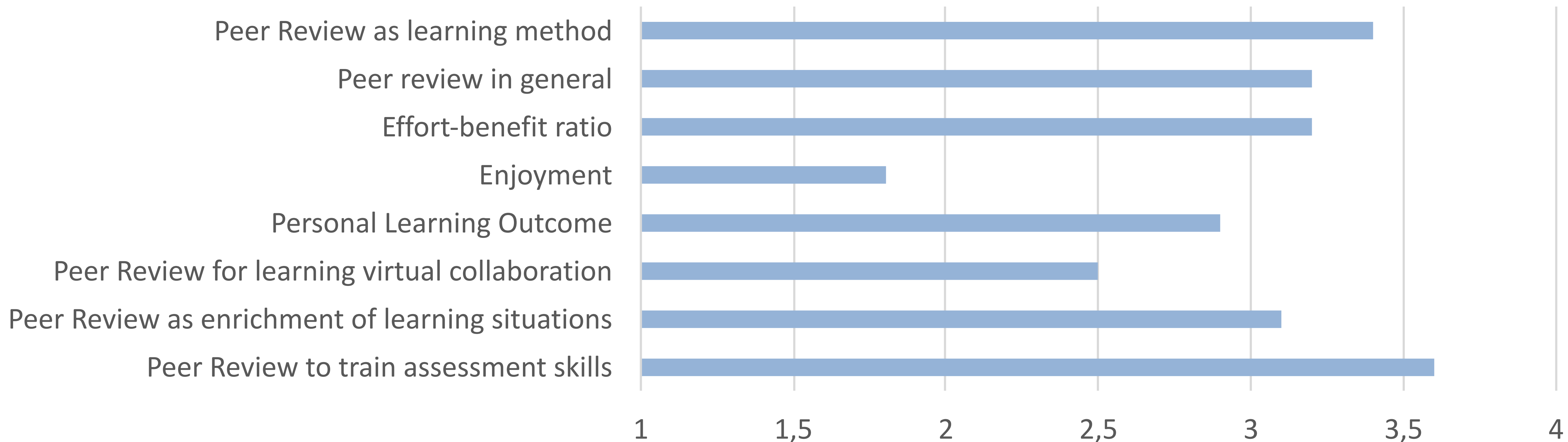
The **work in virtual teams** was rewarding, even though not always simple, and might turn out helpful in modern professional environments.«





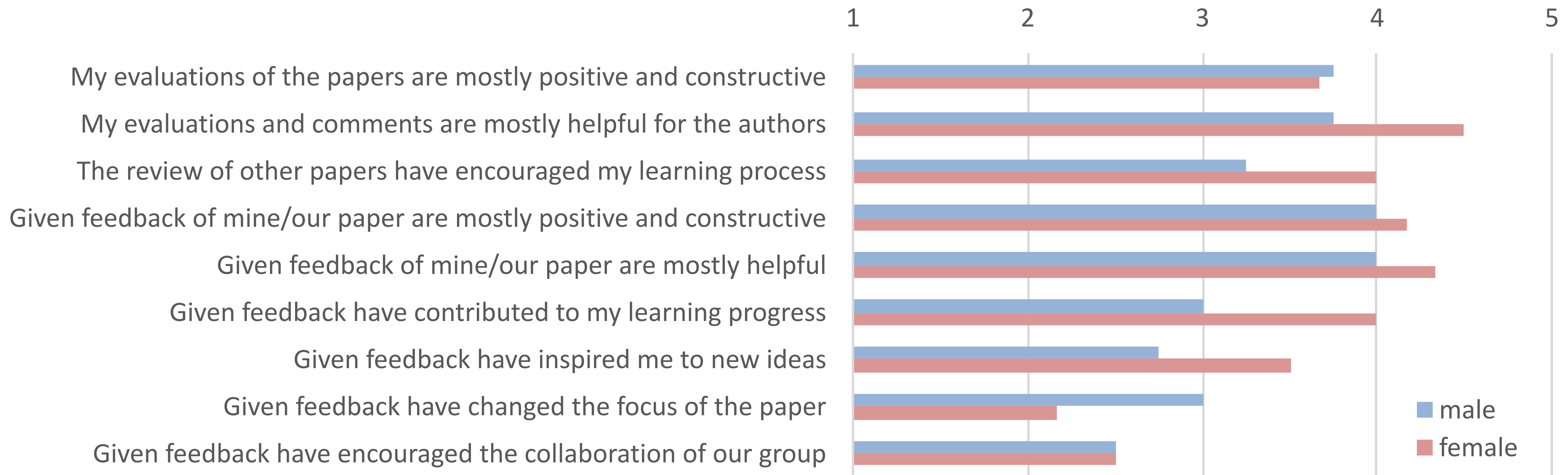
# Students' rating of Peer Review as a learning method

[1] poor, [4] excellent



# Students' rating of Peer Review feedback

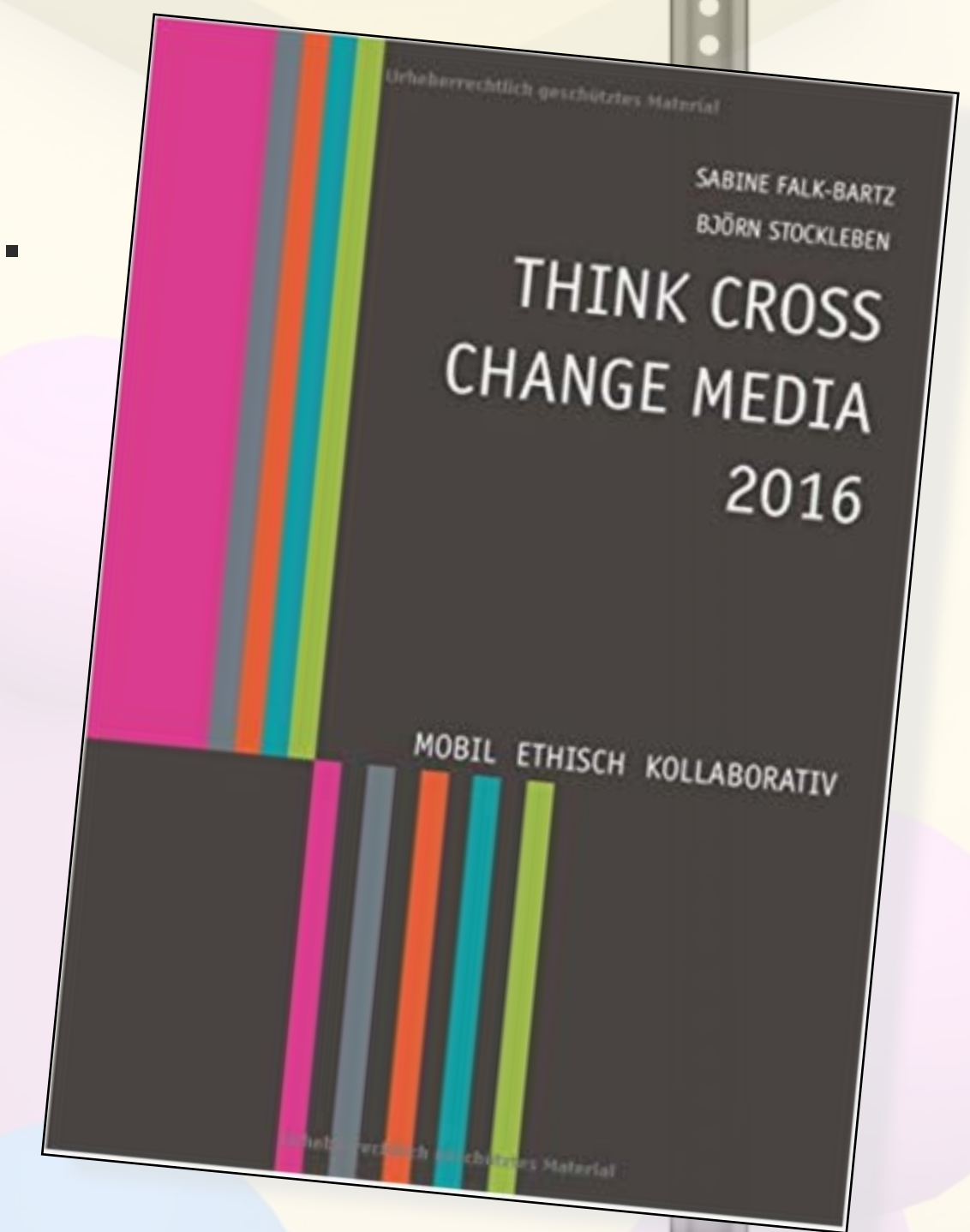
[1] poor, [5] excellent



# Take home messages

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1. Set of criteria is a key success factor for the learning process.
2. The presented learning scenario is demanding in time and resources, but provides the best learning outcomes.
3. Allow students to revise their work. PeerReview is a chance to learn more from feedback.
4. Complement virtual collaboration by face-to-face meetings.
5. Provide a motivational incentive.  
Thereby, challenges with higher workloads are accepted.





**Thank you for your interest!**

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<http://www.idv.edu>