



# Peer-review from learners' perspective

An interregional study on notification of e-business-qualification.

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1. Background
2. Cross Teaching Scenario
3. Research Method
4. Result Discussion





# 1

## Background

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# Europe

























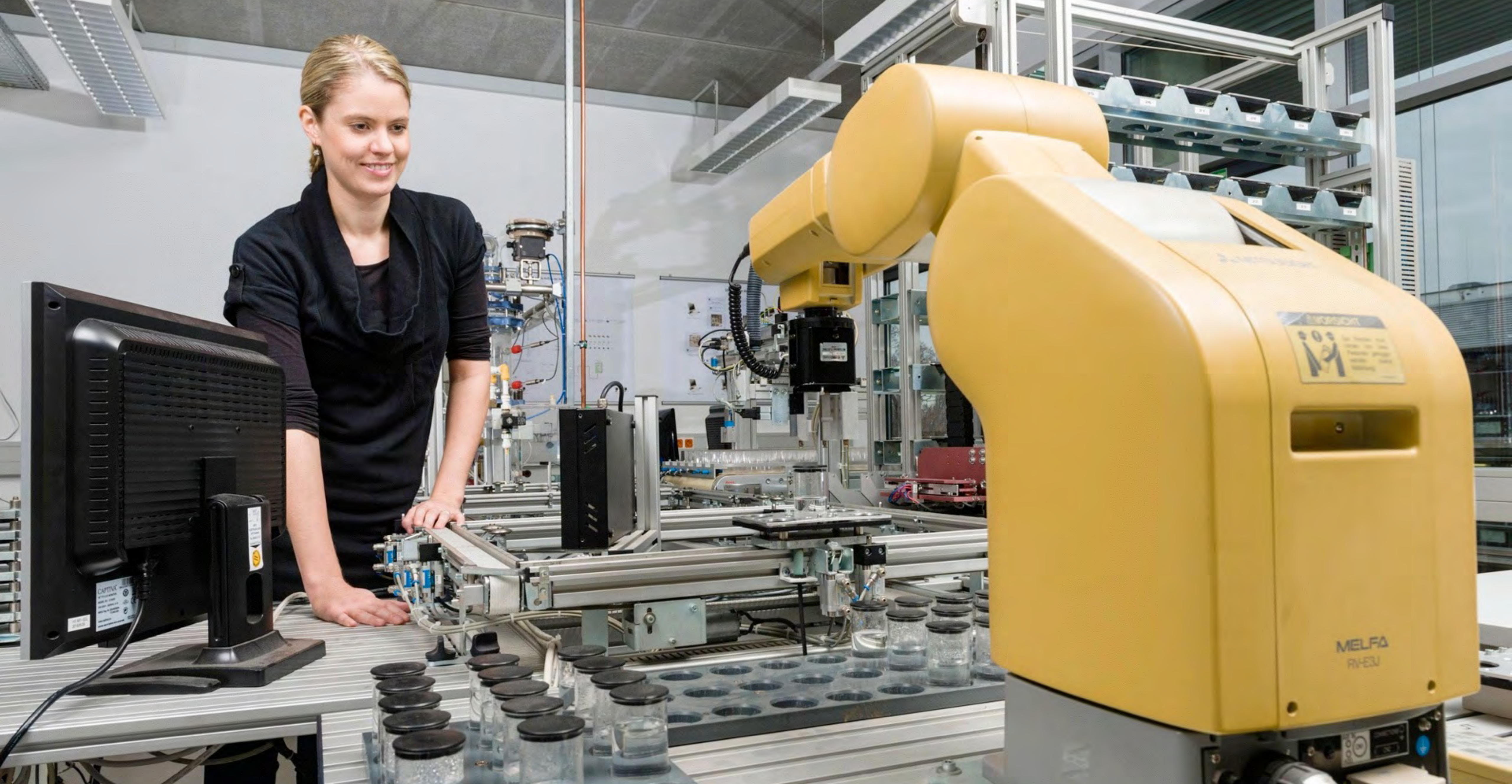








































# karriereLEBEN

SocialMedia-Portal for Career- and Alumni-Development



gefördert durch:

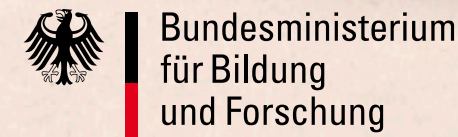


Research group  
Science Projects in Radio and Information Technology



# ROSI-3D

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



gefördert durch:





## The Economics of Communication Communication in Business Cycles



Web and Internet technologies initiated the fourth industrial revolution in less than 20 years since their entry into mainstream communication scenarios, significantly changing economics and society. **Digitization** and mobile technologies speed up **communication** and

The conference was held on November, 8th 2013. Location: Landesvertretung Sachsen-Anhalt in Berlin, close to Berlin Central Station.

▶ **Video statements of speakers and committee**

#### Our Partners

**Alcatel-Lucent Stiftung for Communications Research**, Joint Competence Center, Berlin  
**German Informatics Society (GI)**  
**Ministry of Economics and Sciences** of the State of Saxony-Anhalt

- ▶ Virtual models for a sustainable economy?  
Moderation: Prof. Dr. Michael A. Herzog
- ▶ Think virtually local – the ecology of new economic models  
Jesse Marsh (Innovation Policy Consulting USA | Italy)
- ▶ Sociality of Online Market Interactions – Challenges and Implications  
Prof. Dr. Matthias Trier (Copenhagen Business School | Denmark)
- ▶ Does the WEB have a past and a future?  
Moderation: Ontje Helmich (Hochschule Magdeburg-Stendal)
- ▶ Can the web be turned into a science?  
Prof. Mag. Johann Mittendorfer (Johannes Kepler Universität Linz | Austria)
- ▶ A Closer Look at Web Archives and Accessibility – Key Ingredients for Sustainable Digital Data Preservation. Dr. Martin Klein (Los Alamos National Laboratories | USA)
- ▶ ICT as a catalyzer for a sustainable development?  
Moderation: Dr. Erich Zielinski (Alcatel Lucent Stiftung)
- ▶ ICT as an instrument for more sustainability: Why it is not so easy.  
Prof. Dr. Drs. h.c. Arnold Picot (Ludwig-Maximilians-Universität München)
- ▶ Emerging ICT-Markets: Are they reliable? A story from Berlin.  
Prof. Dr. Volker Wiedemer (Magdeburg-Stendal University of Applied Sciences)
- ▶ ICT markets are going green. The other story from Silicon Valley.  
Florian Brody (Brody & Partner San Francisco | USA)
- ▶ Bridge: ICT for Connecting Knowledge and Knowing  
Dr. Viktor Dörfler (University of Strathclyde Business School Glasgow | UK)

<http://eco-com.net>

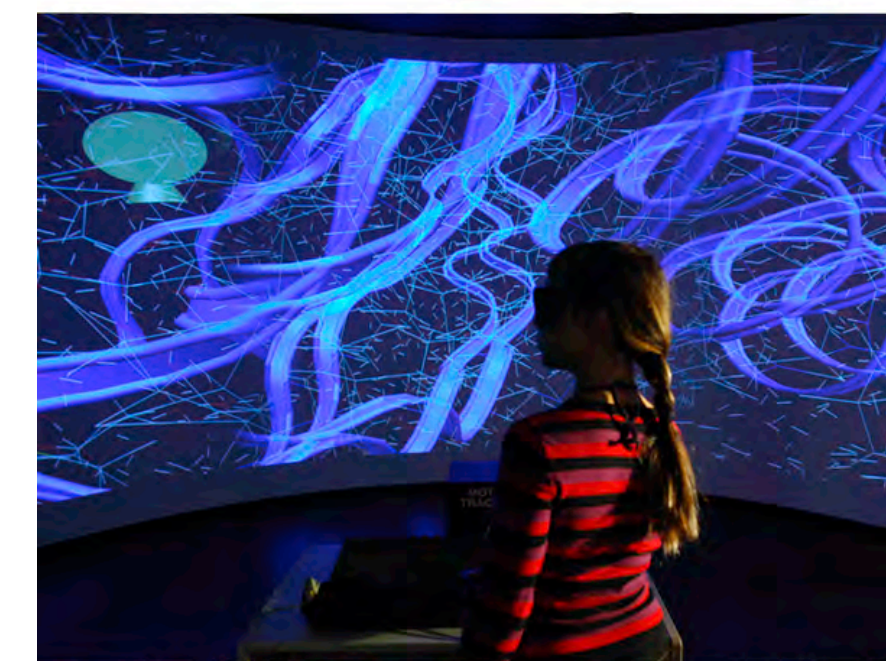


# Johannes Kepler Universität Linz



**JKU**  
JOHANNES KEPLER  
UNIVERSITÄT LINZ

- ▶ 18.000~ students; 2.500~ employees
- ▶ 59 BA-, MA-, PhD- study programs at 118 instituts
  - Faculty of Social sciences, Business and Economics
  - Faculty of Engineering and Natural Sciences
  - Faculty of Law
- ▶ Dept. of Data Processing in Social Sciences, Economics and Business
  - Information Systems
  - Business and Internet (E-Business)
  - Interactive Media
  - E-Learning





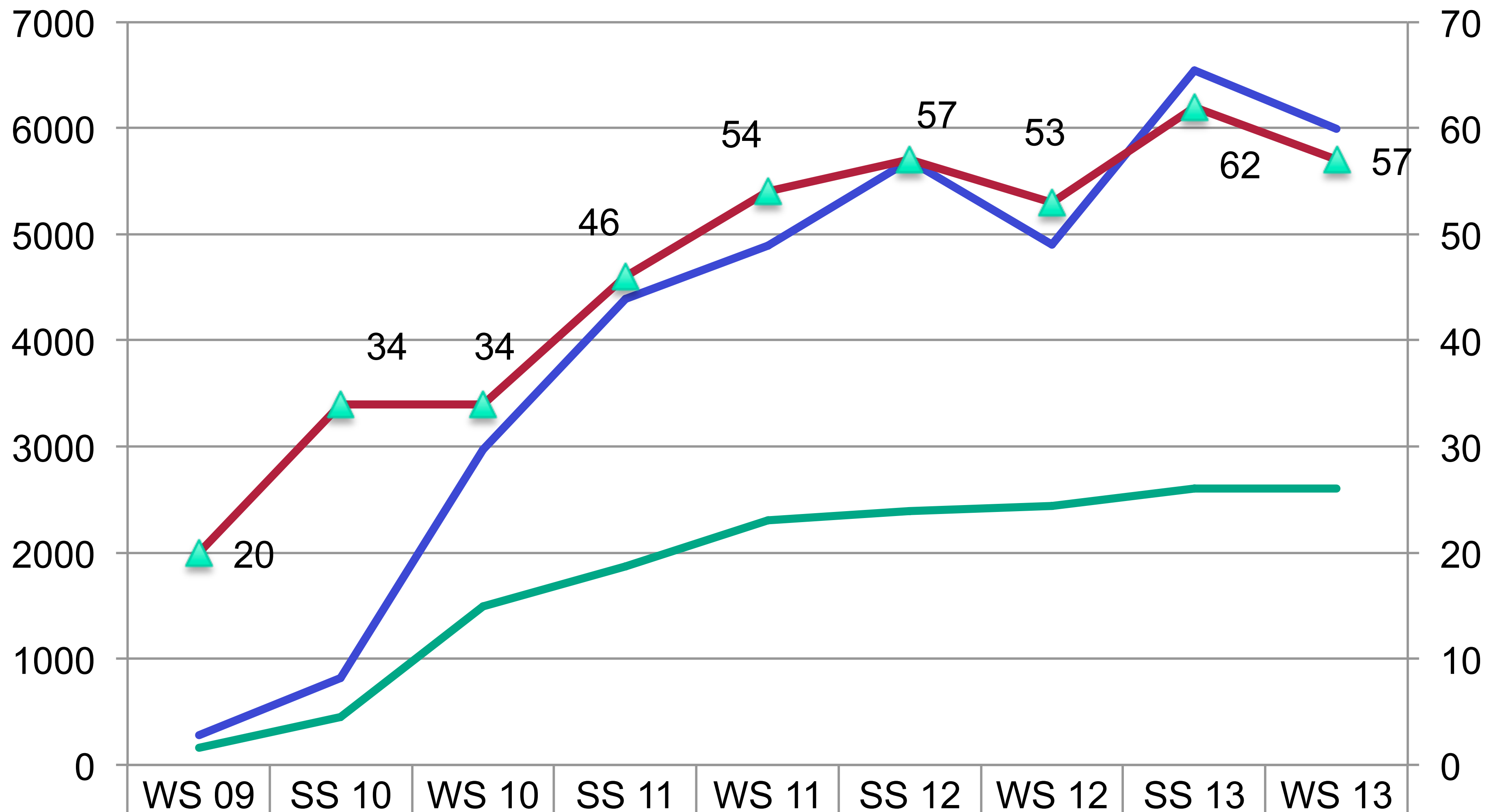


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• Multimedia Study Services for Social and Economic sciences





- Belegung
- Studierende
- ▲ Anzahl LVs

	WS 09	SS 10	WS 10	SS 11	WS 11	SS 12	WS 12	SS 13	WS 13
Belegung	280	815	2971	4395	4895	5697	4902	6543	5998
Studierende	160	451	1497	1872	2307	2394	2436	2605	2608
Anzahl LVs	20	34	34	46	54	57	53	62	57







# 2

## Cross Teaching Scenario

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- ▶ Motivation
- ▶ Scenario
- ▶ Learning Setting



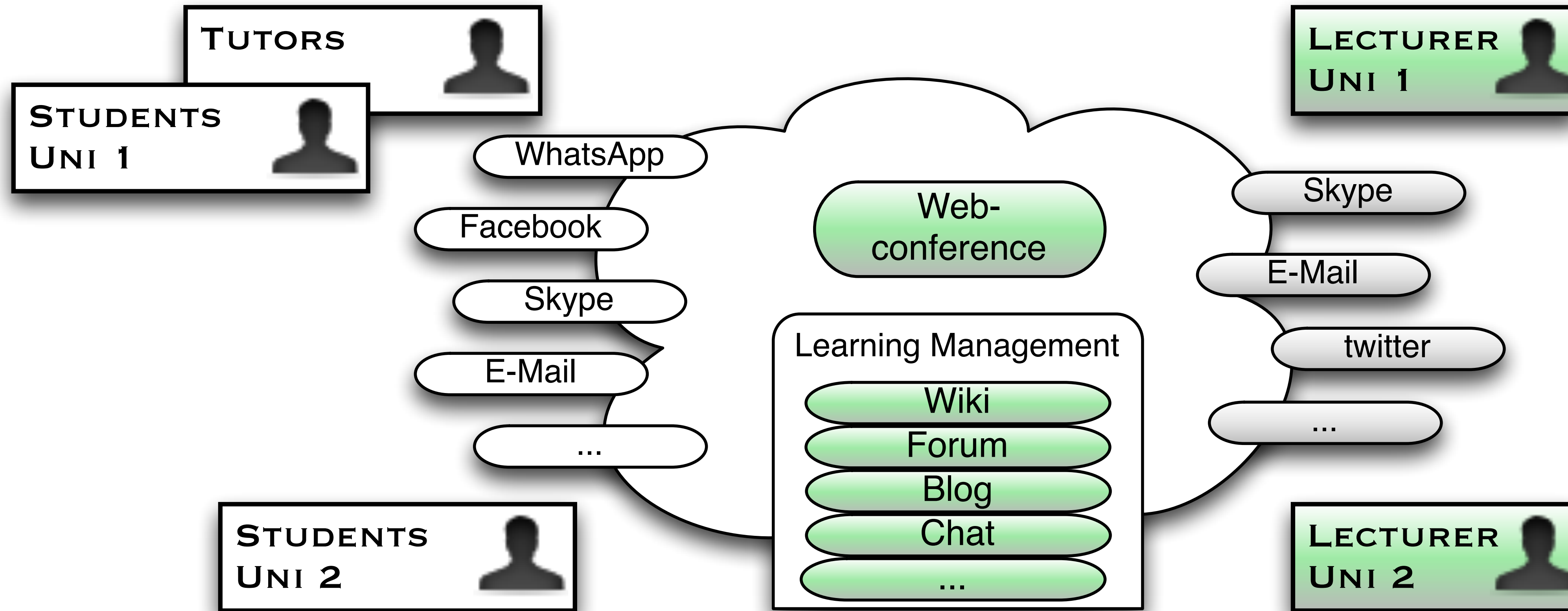




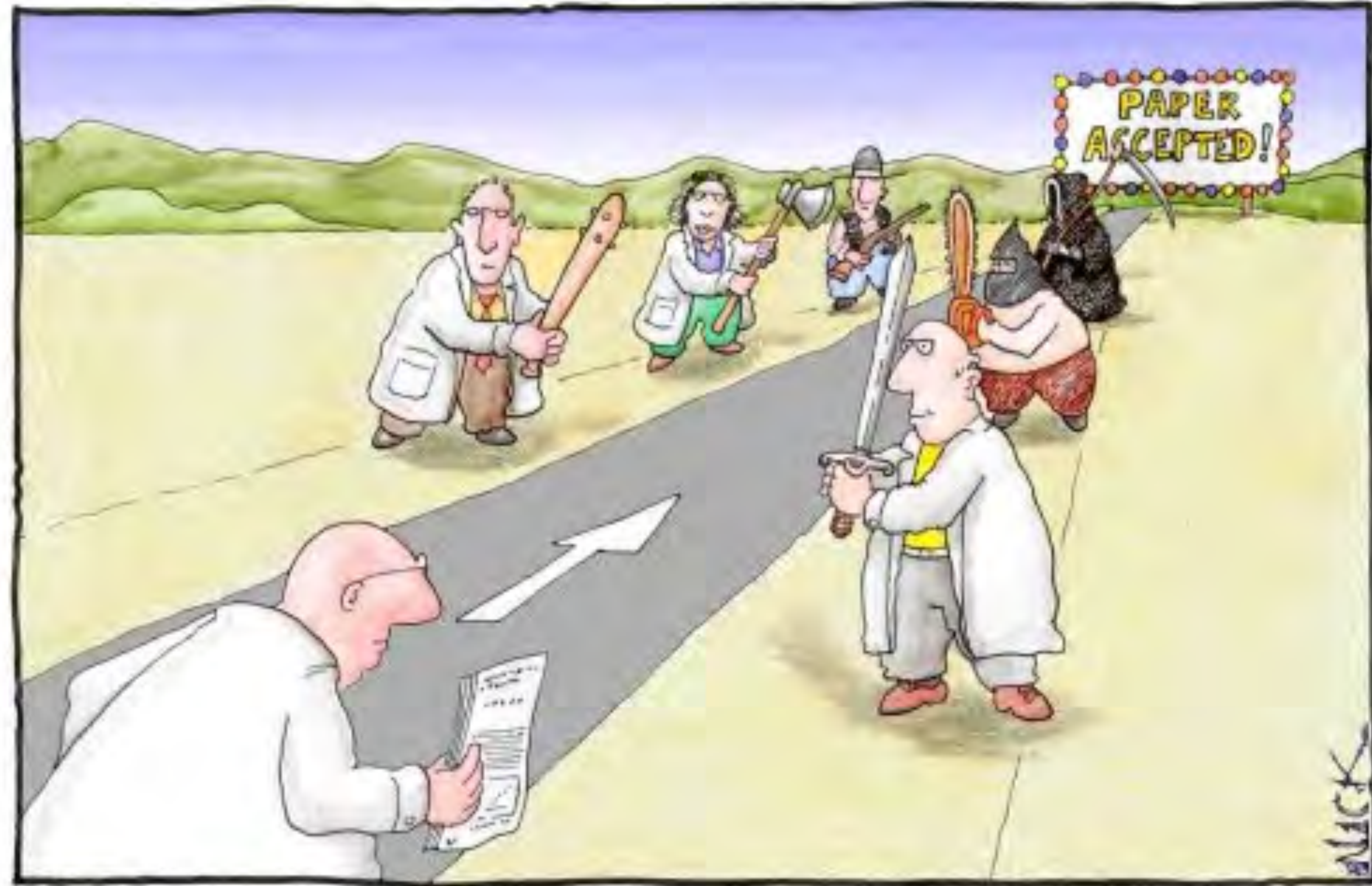
# Cross-Teaching-Szenario



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



# Workshop activity in Moodle

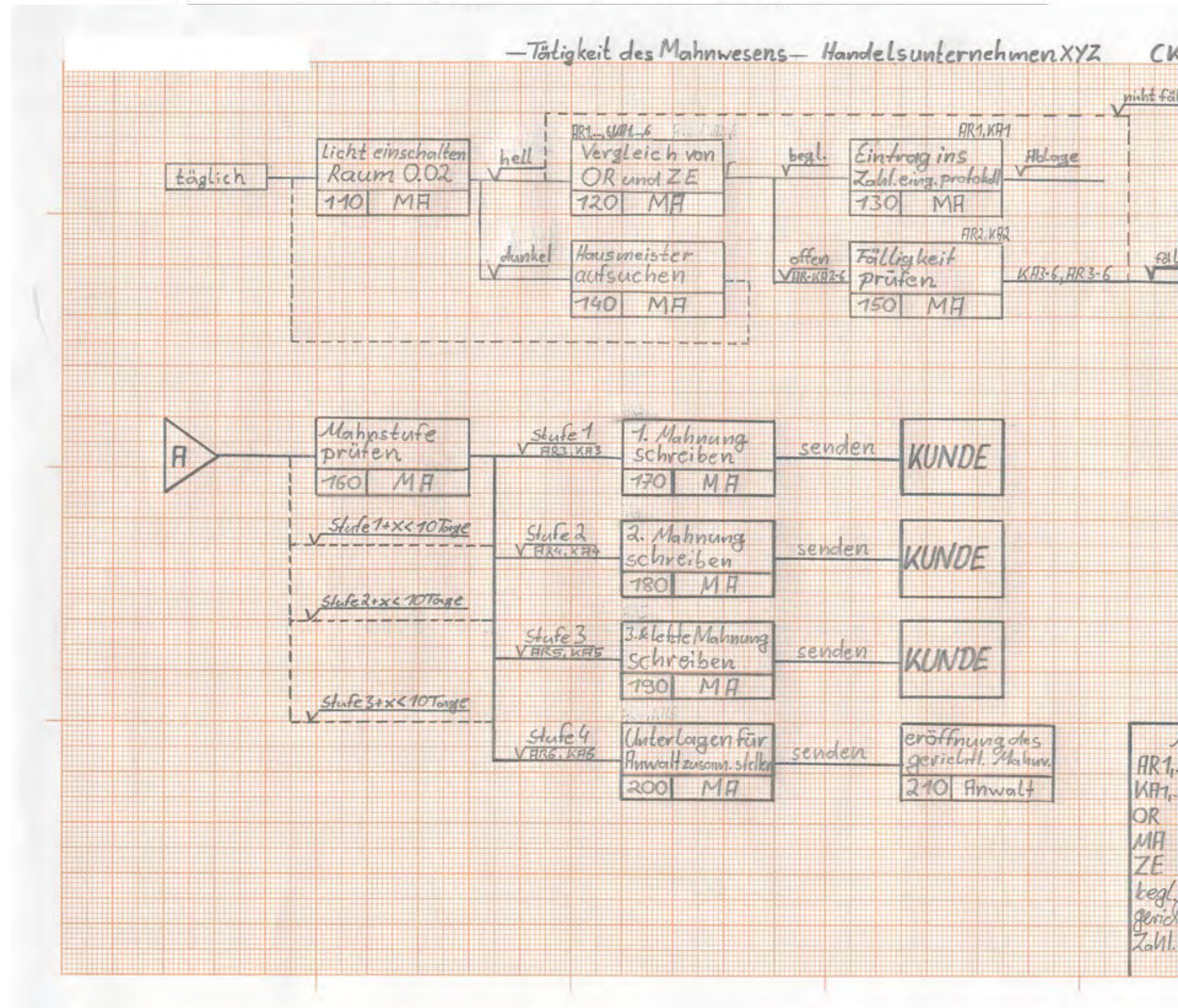
Setup phase 	Submission phase 	Assessment phase 	Grading evaluation phase 	Closed
<ul style="list-style-type: none"> <li>✓ Set the workshop description</li> <li>✓ Provide instructions for submission</li> <li>✓ Edit assessment form</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide instructions for assessment</li> <li>✓ Allocate submissions expected: 24 submitted: 24 to allocate: 0</li> <li>ⓘ Open for submissions from Wednesday.</li> </ul>	<ul style="list-style-type: none"> <li>ⓘ Open for assessment from Monday, 28 October 2013, 5:20 PM (170 days ago)</li> <li>ⓘ Assessment deadline: Thursday, 28 November 2013, 5:20 PM (139 days ago)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Calculate submission grades expected: 24 calculated: 24</li> <li>✓ Calculate assessment grades expected: 24 calculated: 24</li> <li>✗ Provide a conclusion of the activity</li> </ul>	



# Assignments for Peer-review

Students in different courses, studies and campuses

- ▶ Case E-Procurement
- ▶ Case IT-Ethics
- ▶ Lindner Model
- ▶ Business Process Modeling with Bonapart® (Group-work)





# 3

## Research Method

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- ▶ Method itself
- ▶ Cohorts, Criteria
- ▶ Online survey implementation
- ▶ Underlying data



## • Online survey

- ▶ More than 550 students overall participated (2010-2013)
  - 367 at Magdeburg and Stendal
  - 184 at Linz
  - 45 E-Tutors from Linz
- ▶ 273 questionnaires evaluated in peer-review part of this study

## • Add on:

- ▶ Field reports from E-Tutors
- ▶ Field reports from involved students (Linz)

### 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?

Auswahl...

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)

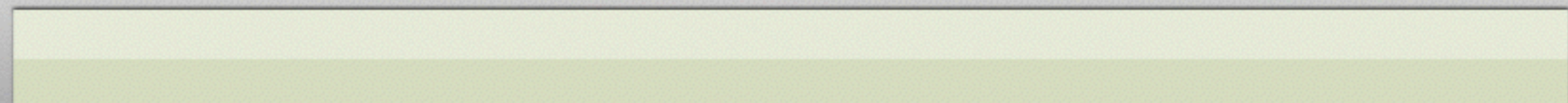
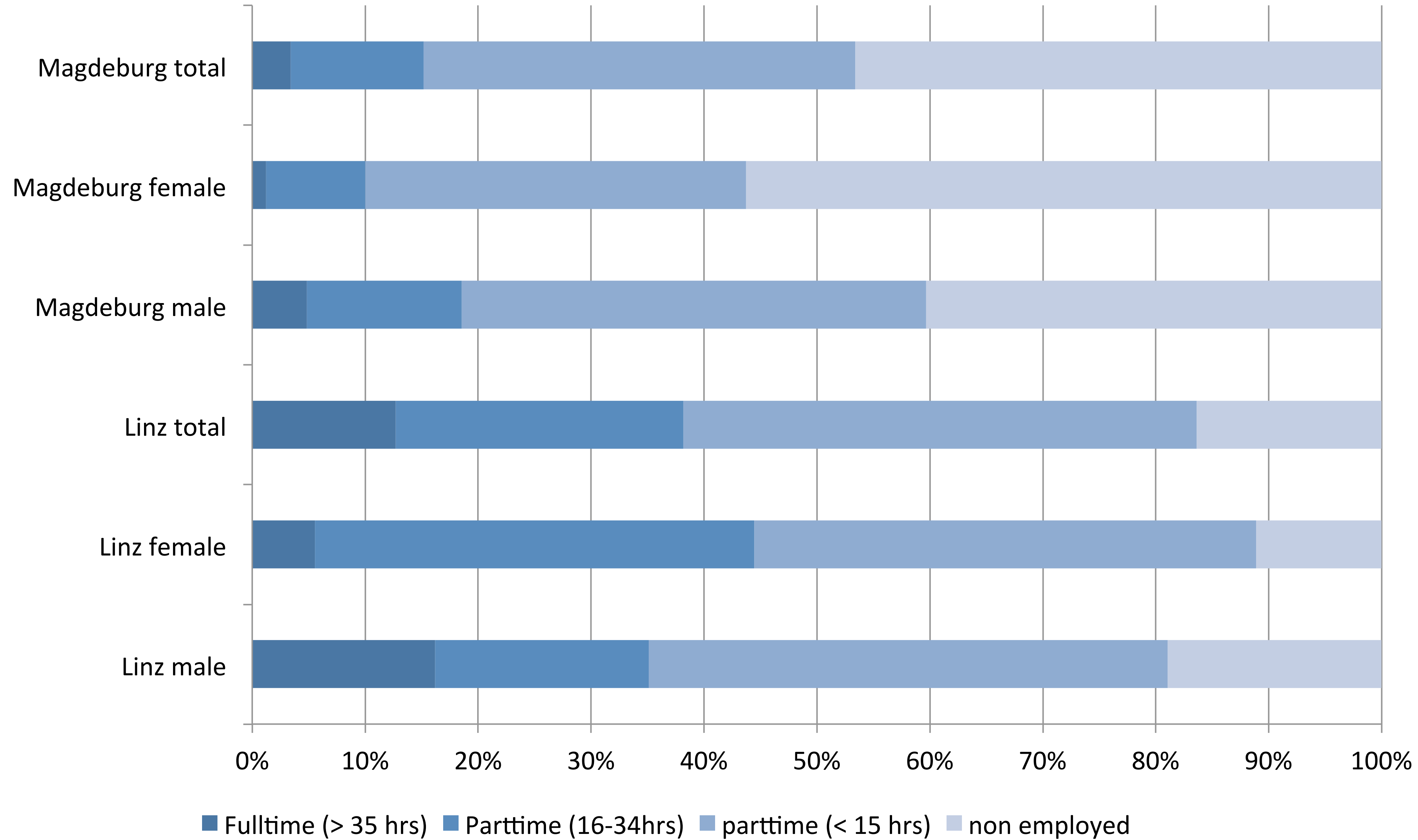


# Demography of peer-review study part

	male		female		total	
	number	age	number	age	number	age
Linz	83	27,4	40	26,2	123	27,0
Magdeburg/ Stendal	72	25,0	78	22,9	150	23,9
Total	155	26,3	118	24,0	273	25,3

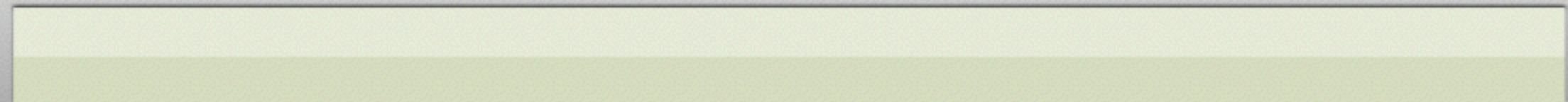
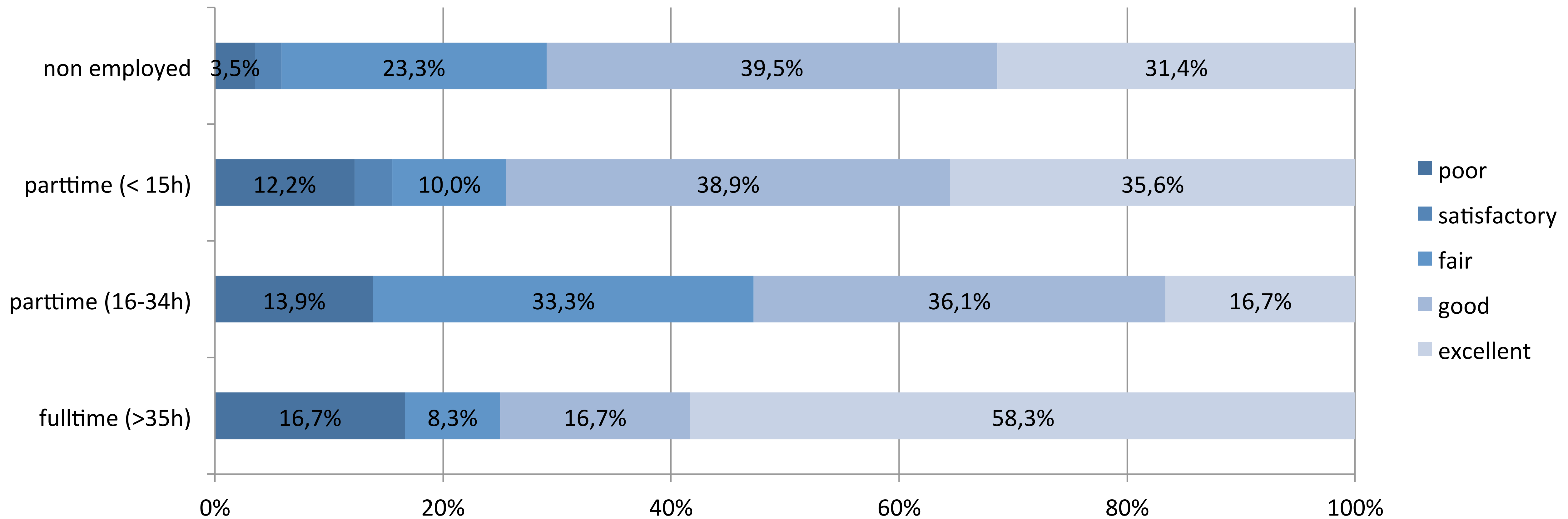


• Employment of students





# Learning outcome and employment of students (n=224)





# 4

## Result Discussion

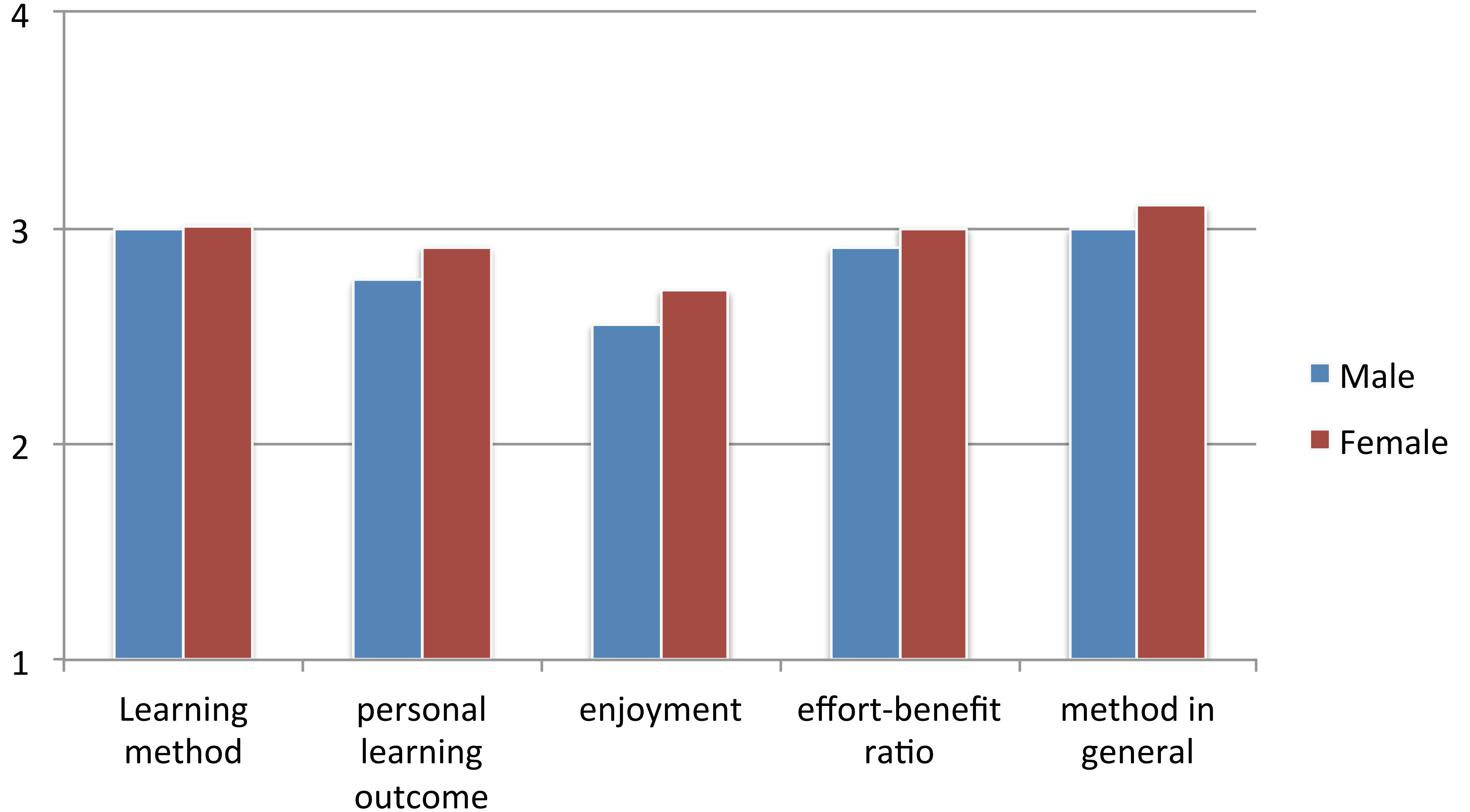
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- ▶ Learning method
- ▶ Students feedback
- ▶ Learning outcome



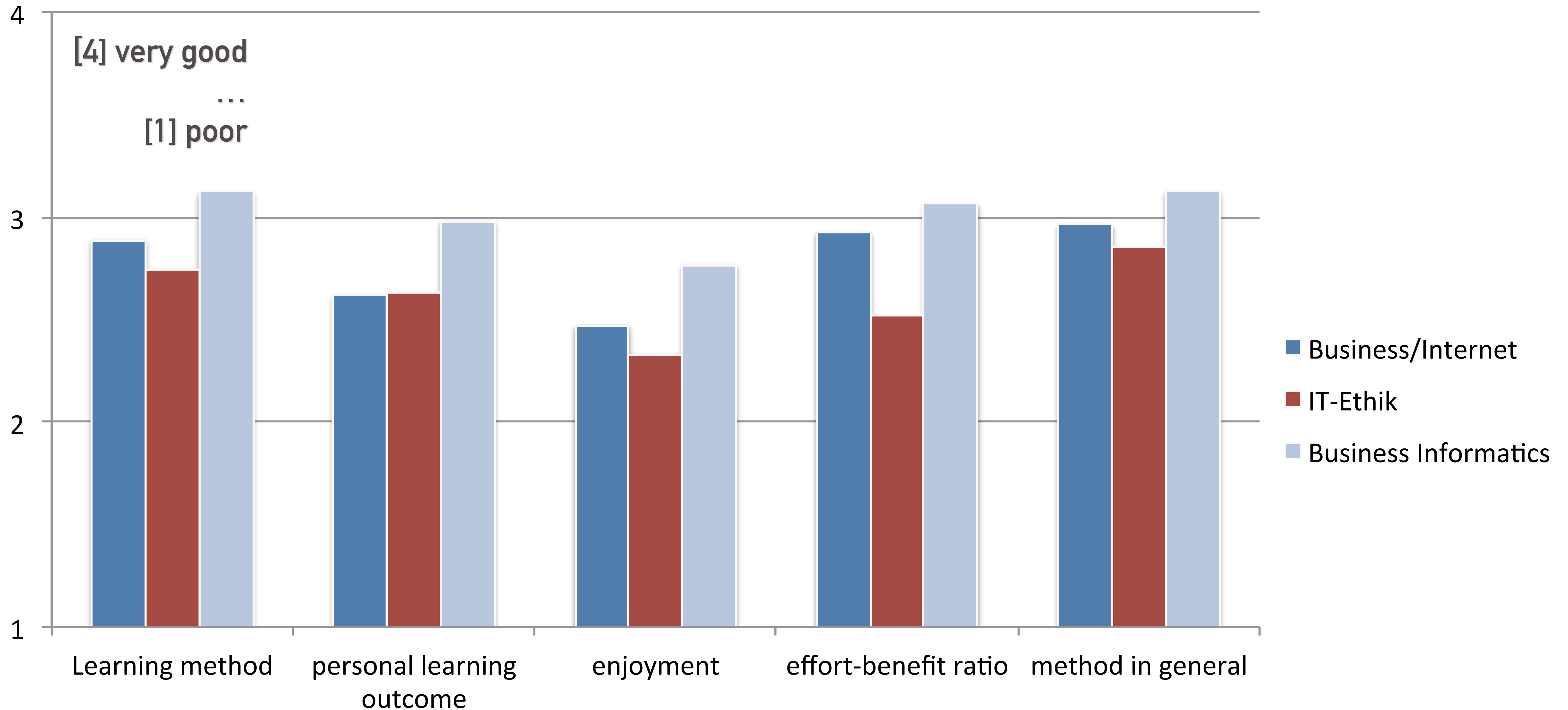
# Peer-review as learning method (assessment by students)

[4] very good  
...  
[1] poor



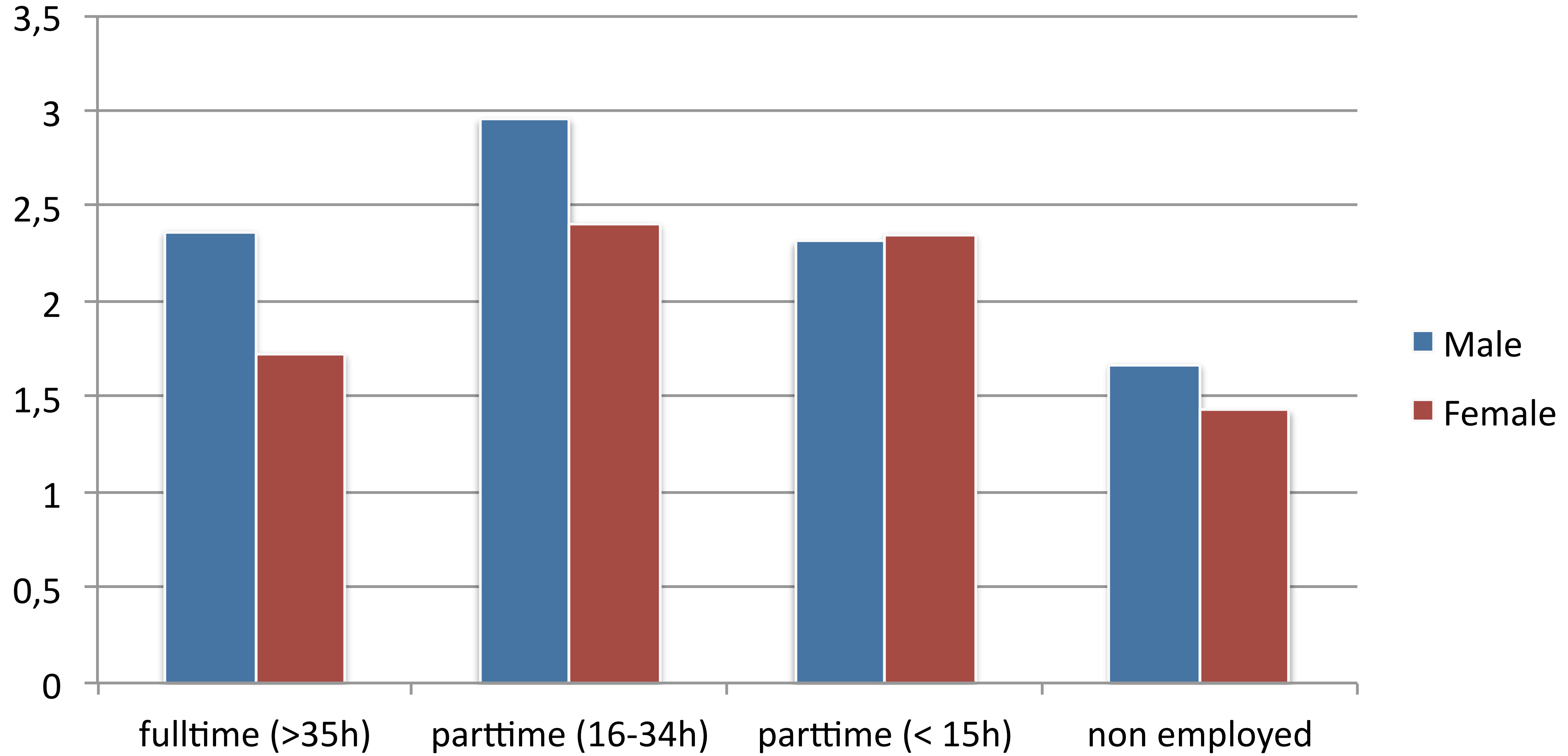


# Peer-review as learning method (assessment by students)





## Time needed for Peer Review (Average in hours)





# Anonymity

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- ▶ Lack of anonymity in courses with few participants

*“There is no real anonymity in small classes – all the students know each other and you don’t want to hurt these people and so you often don’t evaluate them critically enough.”*



# Assessing peers

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- ▶ Assessing is a difficult part

*“It is difficult to assess a colleague fairly, as you don’t want to ‘spoil somebody else’s chances’.”*

*„Students tend to assess fellow students more critically than professors would do. However, this could be prevented if students were relieved from the weight of expectation concerning the task given.“*

*“I realized that it is difficult to mark objectively.”*

*“I found it really hard to mark my colleagues’ work.”*



<b>Bewertung:</b>	Ausgezeichnet <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Sehr schlecht
<b>Rückmeldung:</b>	
<b>Allgemeiner Kommentar:</b>	Der kritische und etwas provokante Schreibstil gefällt mir sehr. Das hebt die Arbeit im Gegensatz zu anderen hervor. Wiederum werden "fachfremde Leser" nicht abgeholt.
<b>Bewertung für Teilnehmer-Assessments</b>	
<b>Trainerkommentar:</b>	Konstruktive, aber nicht sehr detaillierte Kritik! Da könnte man etwas konkreter werden! Die Begründung zur Bewertung der ersten beiden Kriterien fehlt. warum methodische Kritik?
<b>Bewertung:</b>	27

### Bewerte Assessment

<b>Trainerkommentar:</b>	Konstruktive, aber nicht sehr detaillierte Kritik! Da könnte man etwas konkreter werden! Die Begründung zur Bewertung der ersten beiden Kriterien fehlt. warum keine methodische Kritik?
<b>Bewertung für Teilnehmer-Assessments</b>	90 %

Meine Bewertung speichern

Weiter



# Defending the paper

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- ▶ Students want to defend and correct their paper

***“There is no possibility to defend your paper. This means that you are forced even more to float with the current.”***

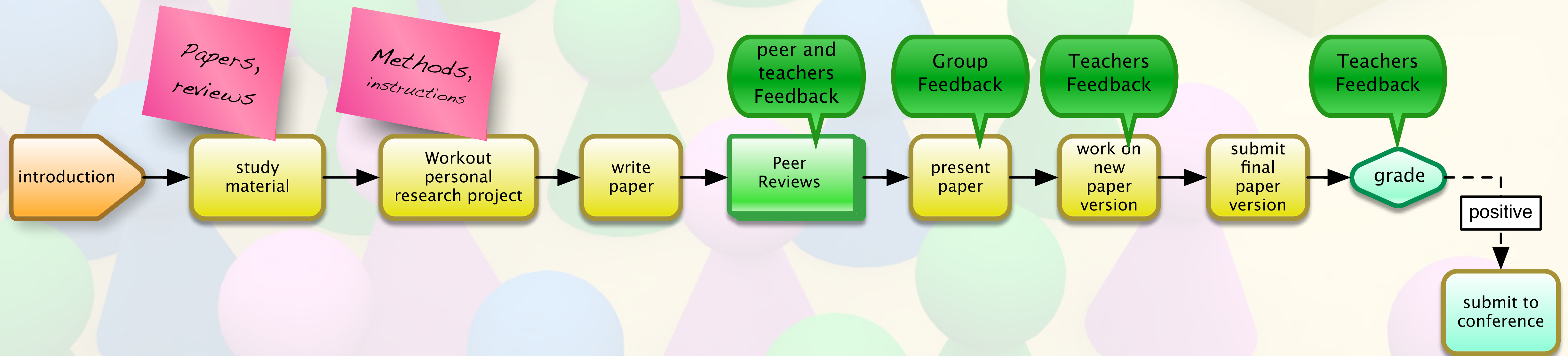
***“There is no possibility to criticize the results of the assessment! To get a bad mark just because someone else didn't do the peer-review carefully should not affect my result but the result of the person, who didn't do his job right.”***



# It's all about Feedback!

## Research based learning scenario with Peer-review

(Master course on research methods in economics and media design)





# Reviewer's competency

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- ▶ Lack of knowledge by the reviewer

***“As this method presupposes that all participants carefully deal with the task, which was not the case, I’m not convinced 100%. This led to unqualified results.”***



# Assessment criteria

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- ▶ Example submission and clear assessment criteria in the beginning

*“It would be helpful if we had examples of good works towards which we could turn in fulfilling our tasks. Otherwise everyone has his own opinion about the task and thinks the opinion of the other one is wrong, although both opinions could be right with the right reasoning.”*

*“The topic or the task you get for the peer-review could be discussed in some more detail in advance in order to get more information and suggestions how the task should be completed.”*



## Positive feedback

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*“The peer-review is good in order to get feedback on the projects you worked on. You get information on what you did well and what could be improved.”*

*“I think the peer-review is good, as you could see how others completed the task given and you could see where and how you could improve your own work or where you did better than the others. Nevertheless I think that some didn't really make an effort in regards of the assessment of others.”*

*“A really interesting way of learning. May definitely be applied more often.”*

*“Interesting experience.”*

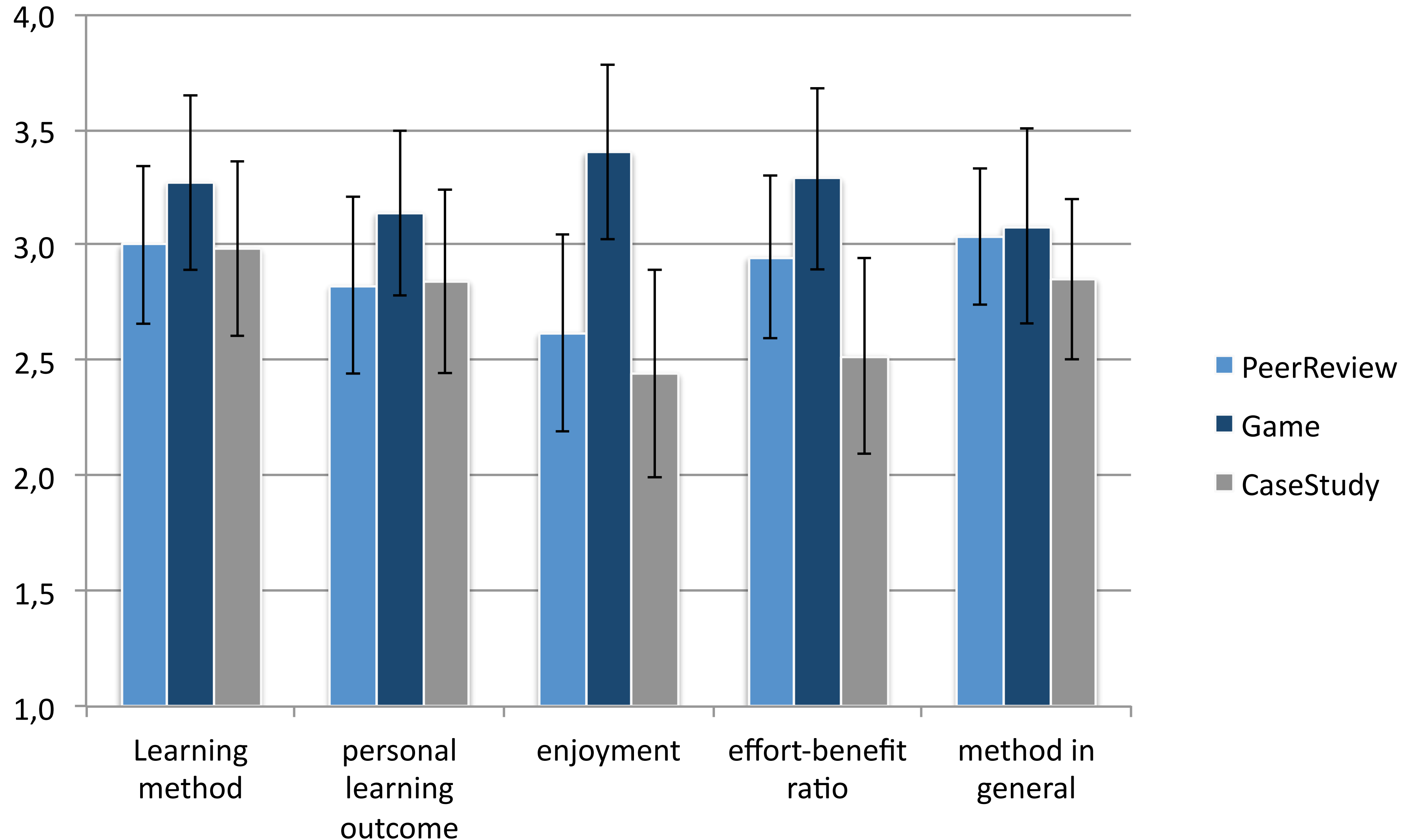
*“It was fun to try this method and to gain new experiences through this approach.”*

*“Good exercise, very practical.”*



# Ranking of different learning methods method (n=273)

[4] very good  
...  
[1] poor





# Take home messages

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- ▶ Give clear students instructions
- ▶ Set of criteria is a key success factor for the learning process
- ▶ Reviewers need enough time to evaluate
- ▶ Allow students to revise their work
- ▶ For teachers it is time consuming







**Thank you for your interest!**

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