

Didactic support with regards to the diversity of learning styles?

Potential analysis of three collaborative learning methods within e-business education

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



1

Background

Europe









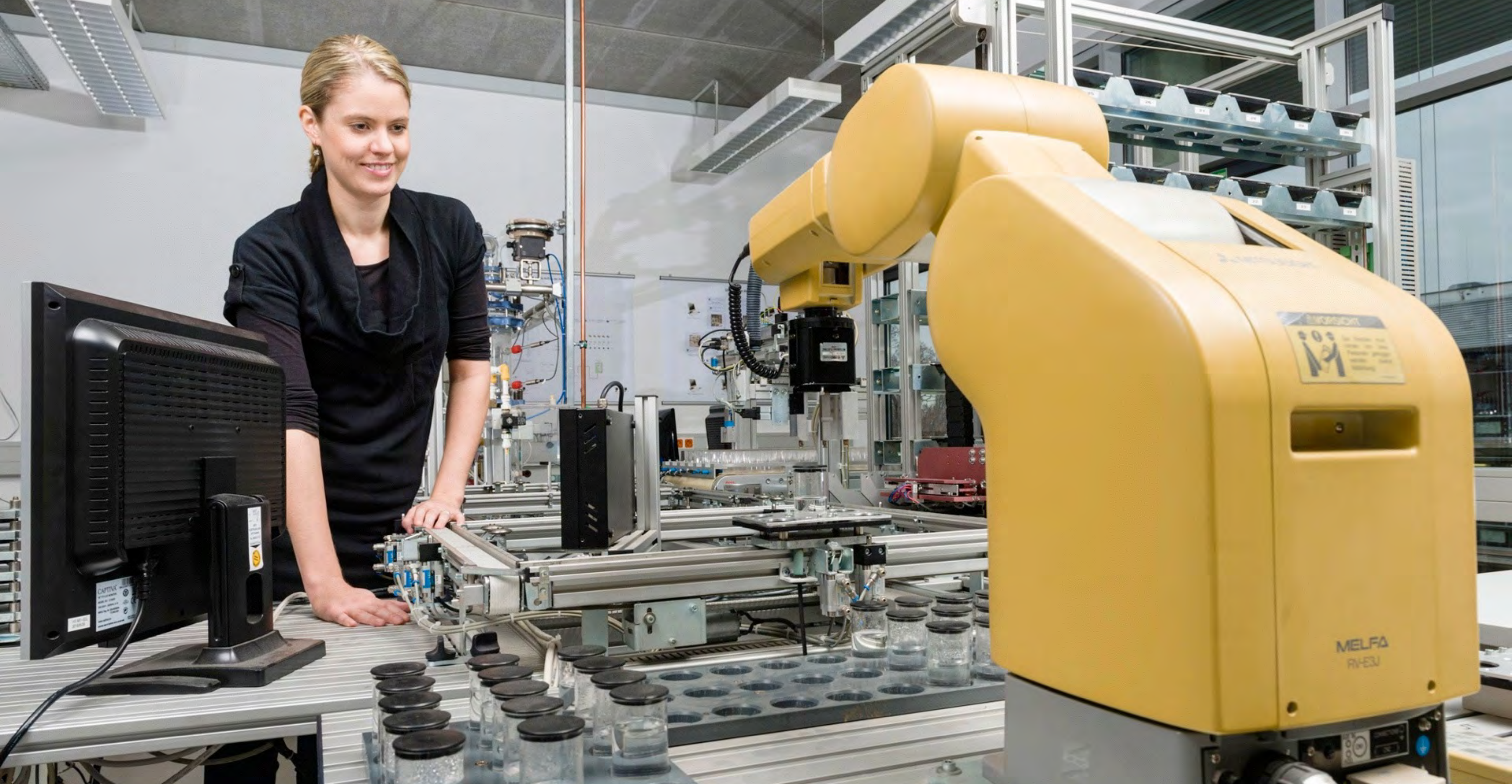












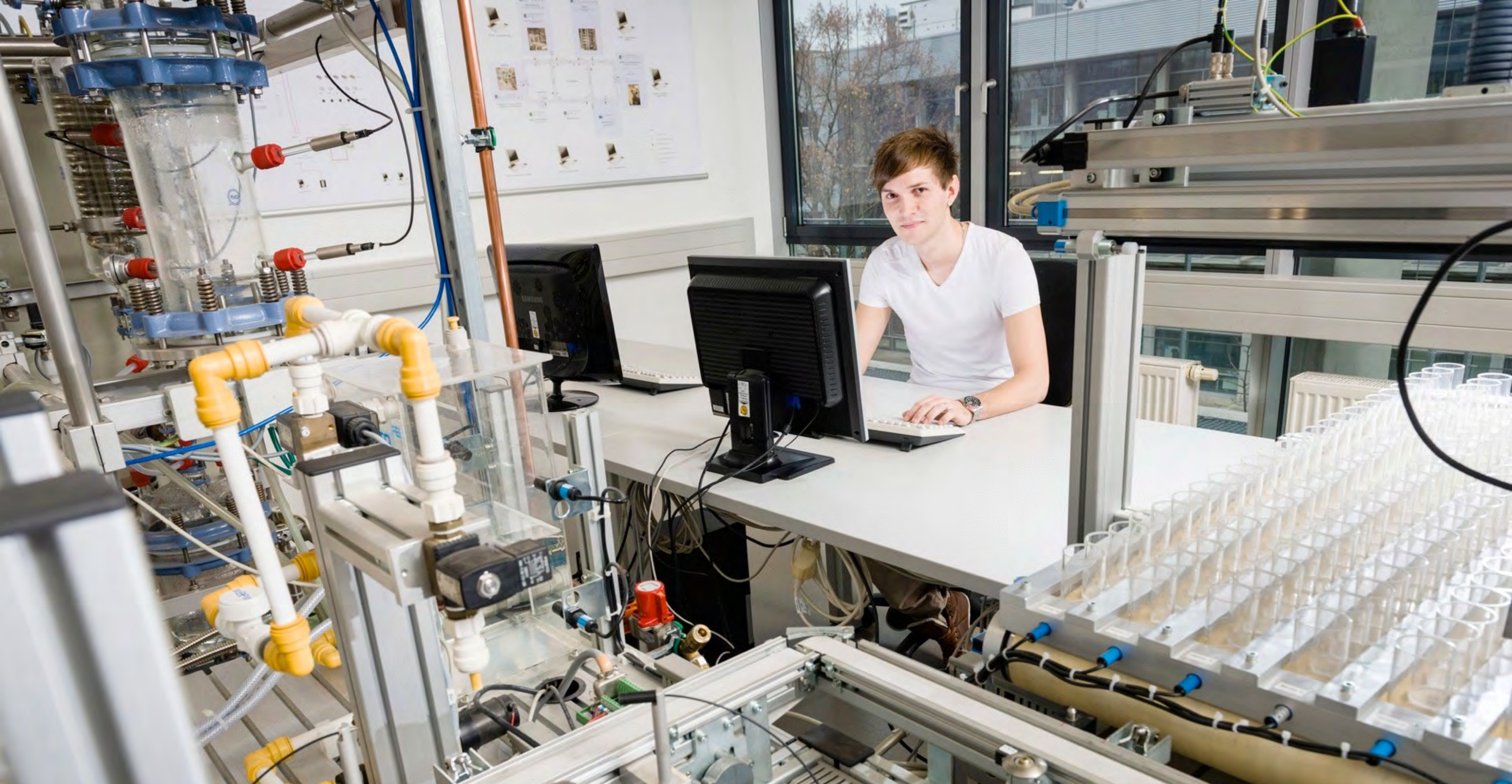














photo credits: Bastian Ehl, Matthias Piekacz, HS Magdeburg-Stendal



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Bundesministerium für Bildung und Forschung

gefördert durch:

ROSI-3D

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



Bundesministerium für Bildung und Forschung

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Forschung an Fachhochschulen mit Unternehmen



Research group
Science Projects in Radio and Information Technology

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)

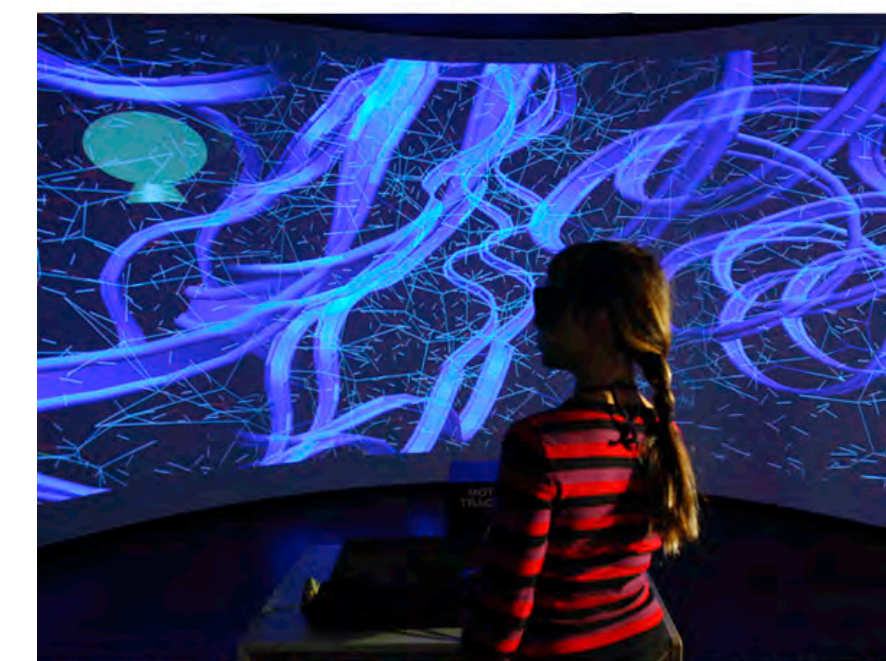
<http://eco-com.net>

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

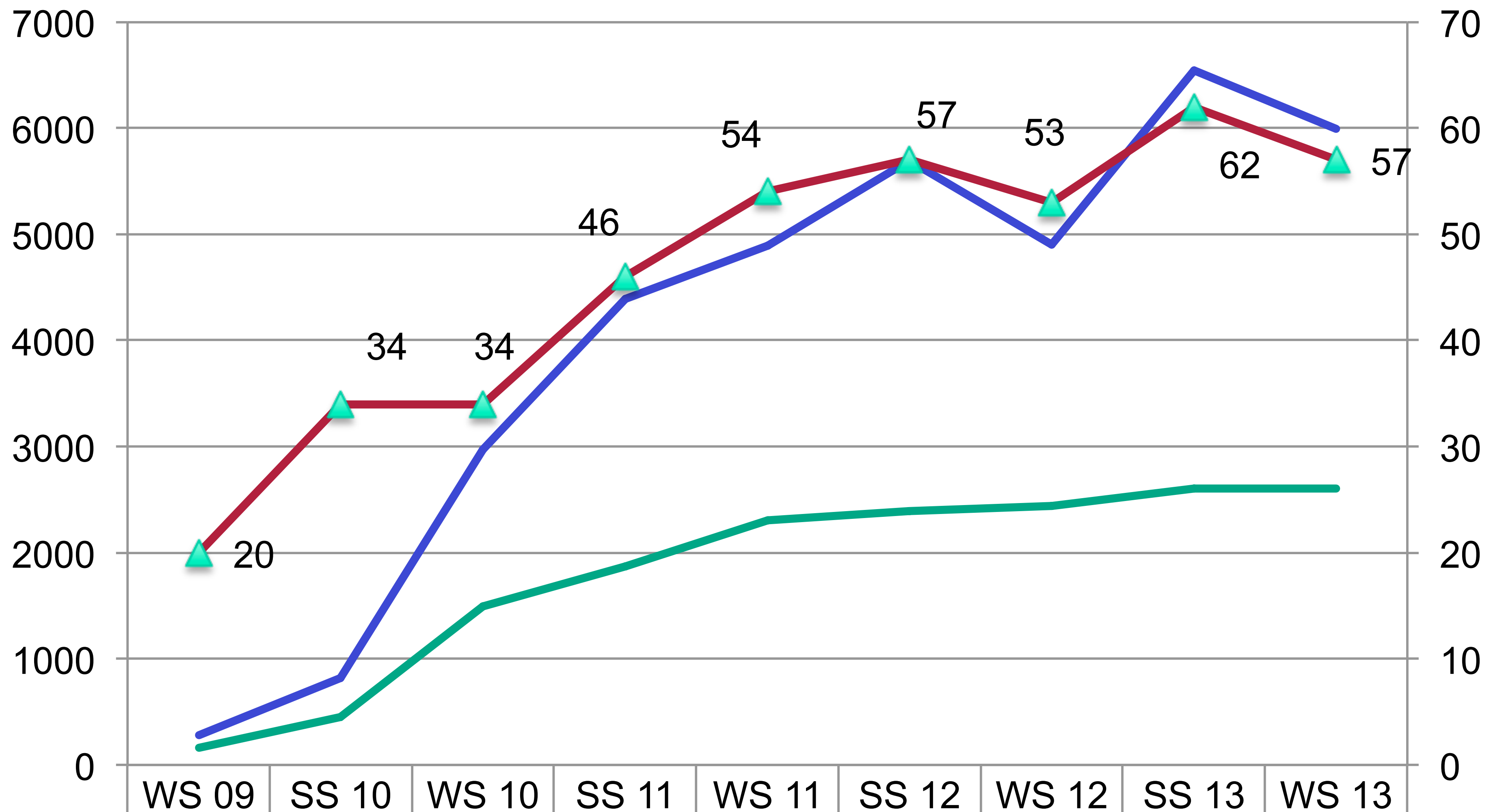




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• Multimedia Study Services for Social Sciences and Economics



- 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

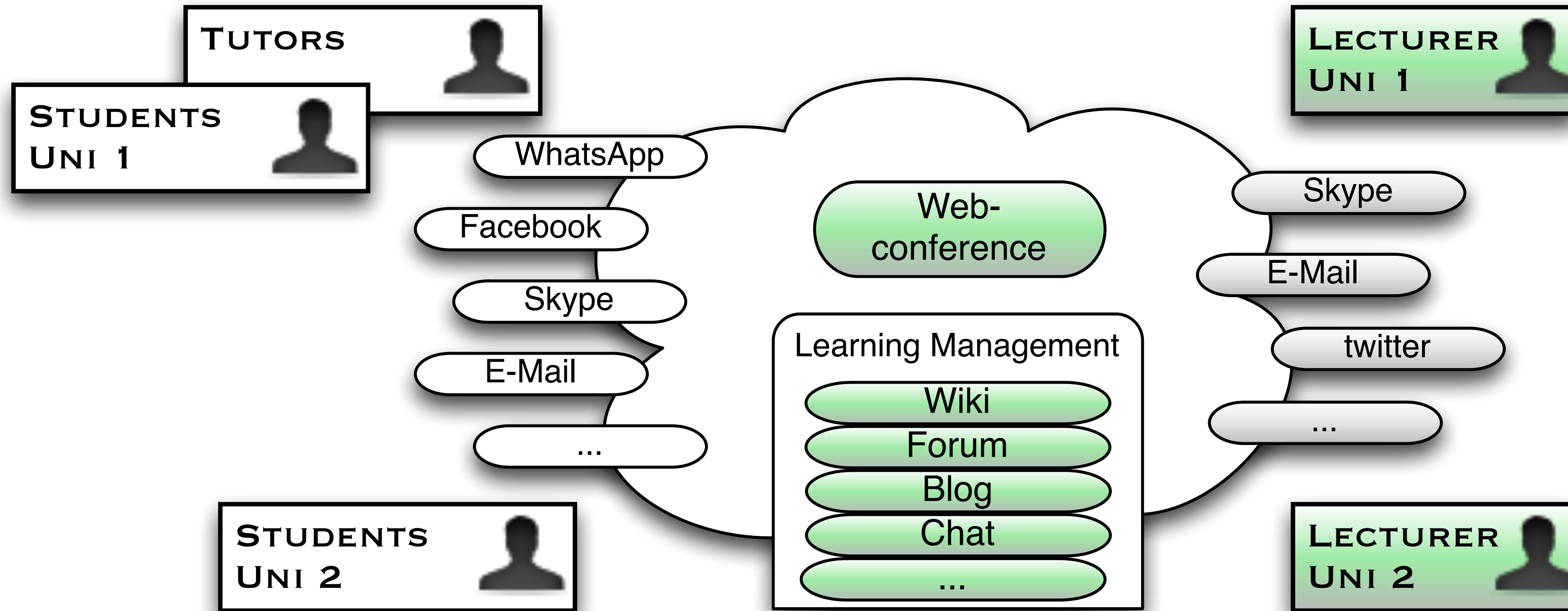
- ▶ Motivation
- ▶ Scenario
- ▶ Learning Setting



Cross-Teaching-Szenario

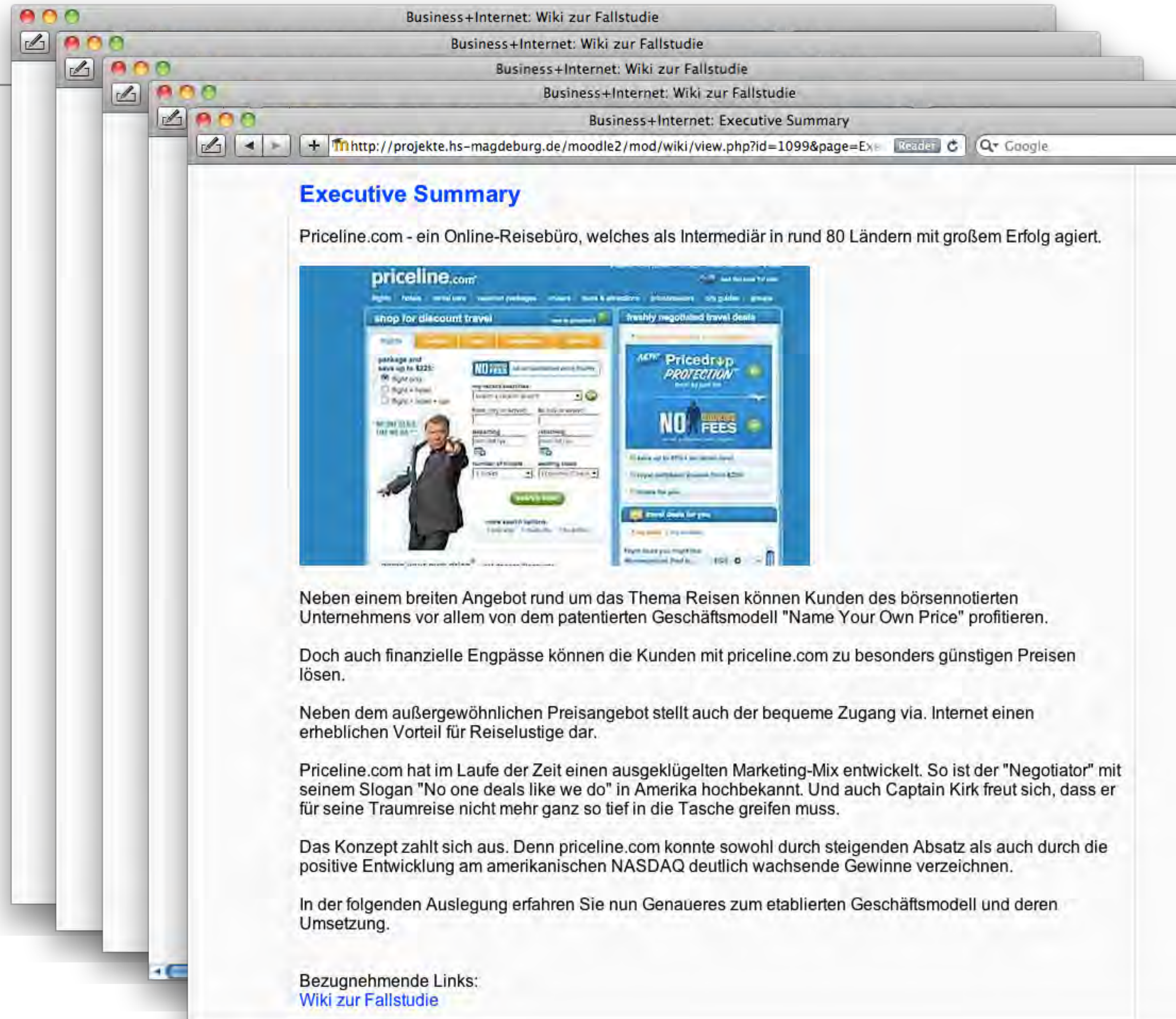


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Scope of work

- ▶ Elaboration of an E-Business case study:
 - Predetermined, e.g. Harvard Business Manager
 - Self investigated, e.g. business case
- ▶ Learning outcome
 - Wiki documentation
 - Presentation at home campus



Business+Internet: Wiki zur Fallstudie

Business+Internet: Wiki zur Fallstudie

Business+Internet: Wiki zur Fallstudie


Business+Internet: Wiki zur Fallstudie

Business+Internet: Executive Summary

http://projekte.hs-magdeburg.de/moodle2/mod/wiki/view.php?id=1099&page=Exe Reader Google

Executive Summary

Priceline.com - ein Online-Reisebüro, welches als Intermediär in rund 80 Ländern mit großem Erfolg agiert.



Neben einem breiten Angebot rund um das Thema Reisen können Kunden des börsennotierten Unternehmens vor allem von dem patentierten Geschäftsmodell "Name Your Own Price" profitieren.

Doch auch finanzielle Engpässe können die Kunden mit priceline.com zu besonders günstigen Preisen lösen.

Neben dem außergewöhnlichen Preisangebot stellt auch der bequeme Zugang via Internet einen erheblichen Vorteil für Reiselustige dar.

Priceline.com hat im Laufe der Zeit einen ausgeklügelten Marketing-Mix entwickelt. So ist der "Negotiator" mit seinem Slogan "No one deals like we do" in Amerika hochbekannt. Und auch Captain Kirk freut sich, dass er für seine Traumreise nicht mehr ganz so tief in die Tasche greifen muss.

Das Konzept zahlt sich aus. Denn priceline.com konnte sowohl durch steigenden Absatz als auch durch die positive Entwicklung am amerikanischen NASDAQ deutlich wachsende Gewinne verzeichnen.

In der folgenden Auslegung erfahren Sie nun Genaueres zum etablierten Geschäftsmodell und deren Umsetzung.

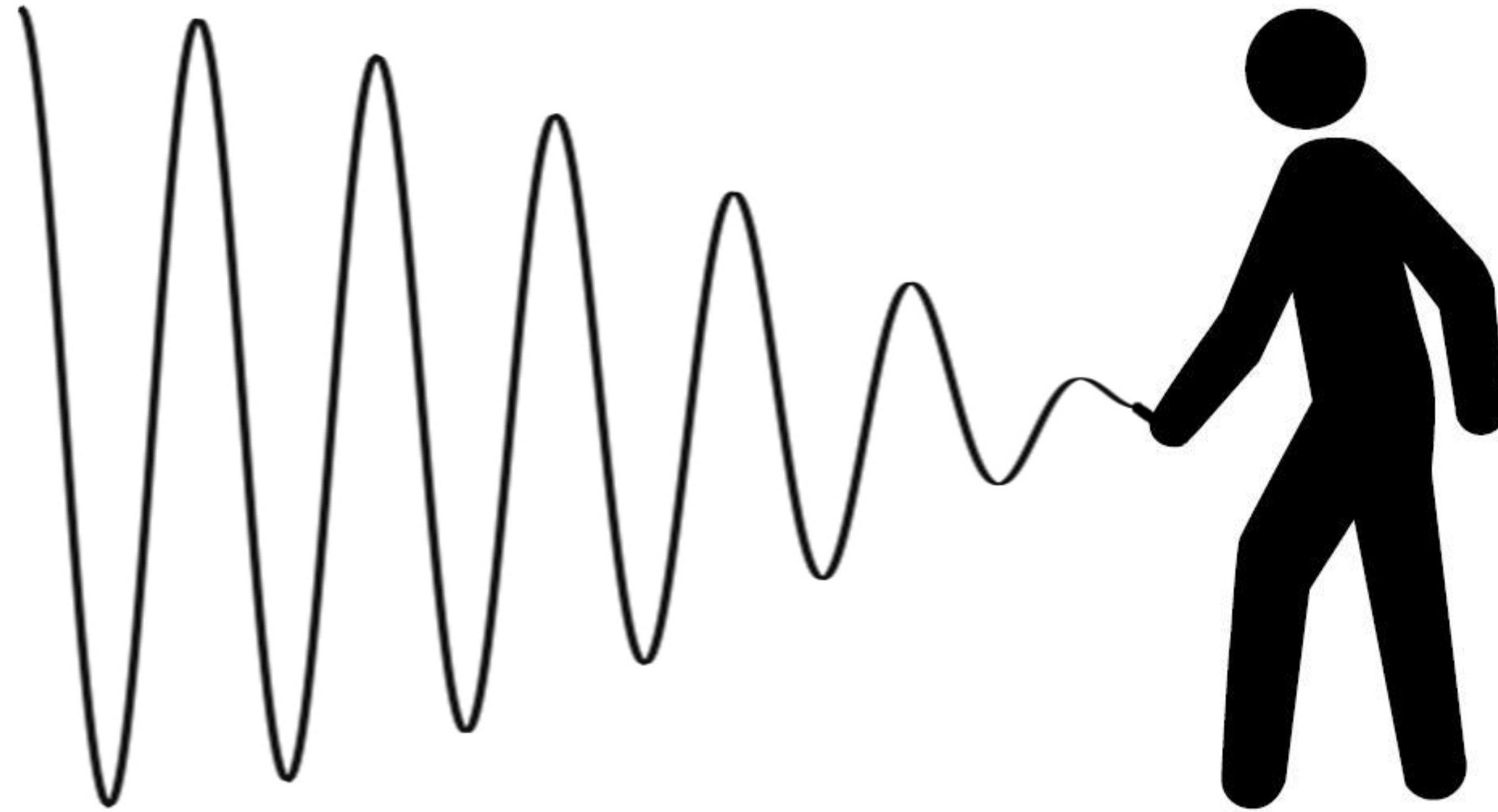
Bezugnehmende Links:
[Wiki zur Fallstudie](#)

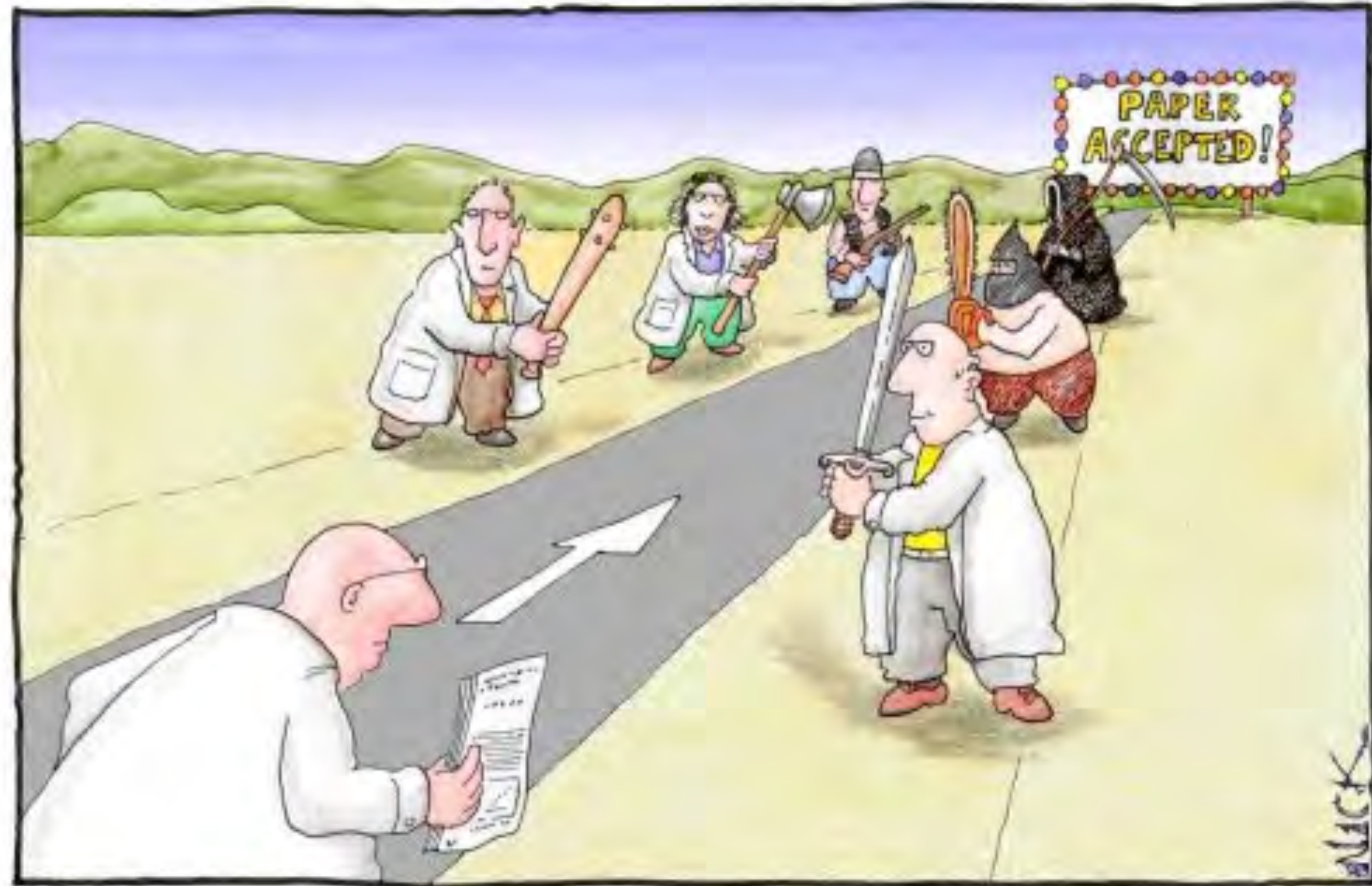
Beer Distribution Game

- ▶ Online simulation game about Supply Chain Management (SCM)
- ▶ Developed as a board game by Sloan System Dynamic Group at MIT in the 60th
- ▶ Played by 1.000nds of students in management education

Beer Distribution Game

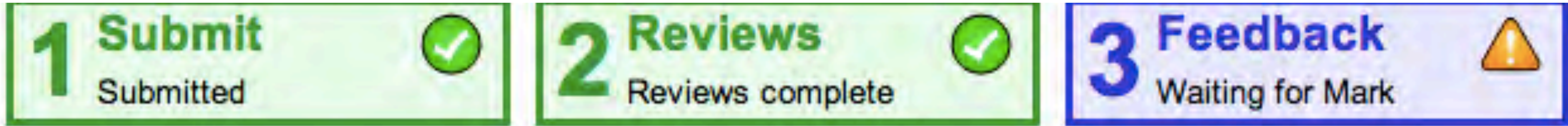
- ▶ Bullwhip-effect





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

3

Research Method

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

• Online survey

- ▶ More than 550 students overall participated (2010-2013)
 - 367 at Magdeburg and Stendal
 - 184 at Linz
 - 45 E-Tutors from Linz

• 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?

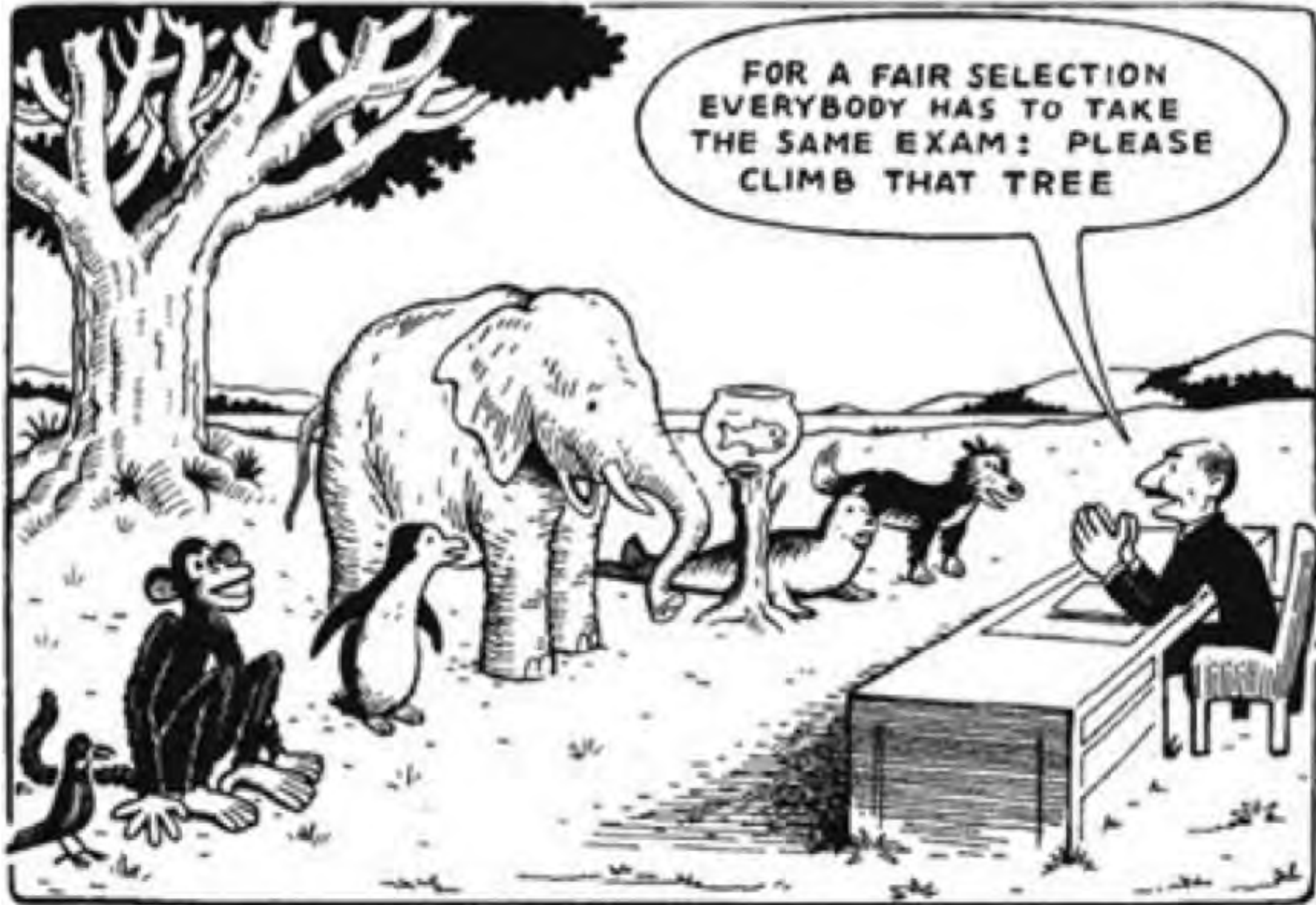
- Ja
- Nein

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)



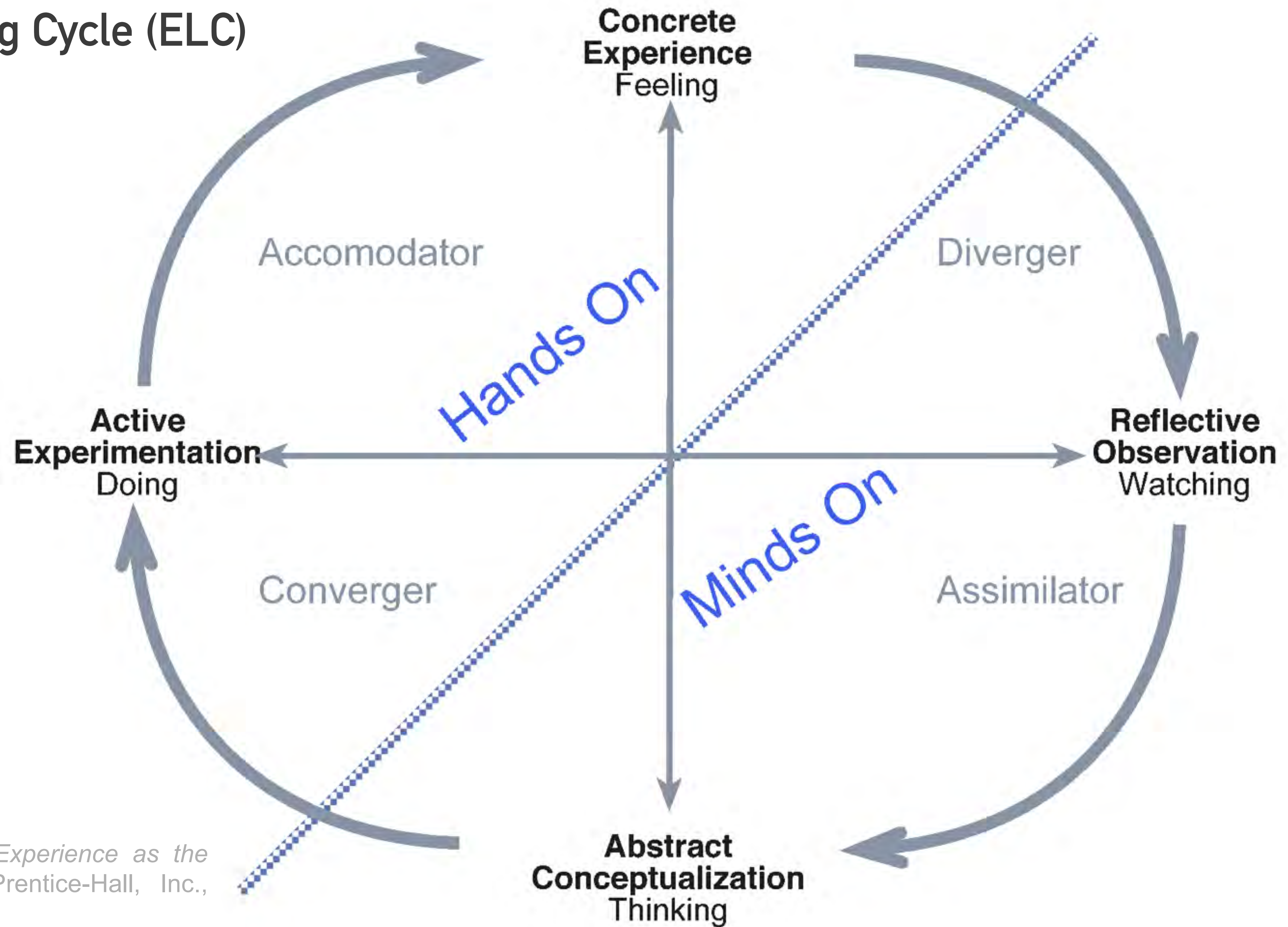
Plurality in reception of knowledge!

- ▶ How we can better deal with diversity of students in learning?
- ▶ Could media based learning scenarios be adopted to the way of learning?
or
Are there approved learning scenarios especially suitable for certain learning styles?

Typification of Learning

- ▶ Visual, kinesthetic, auditive, intellectual (Vester 1975)
- ▶ Experiment, observation, experience, conceptualization (Kolb 1984)
- ▶ Activist, reflector, theorist, pragmatist (Honey und Mumford 1992)
- ▶ »Active and reflective learners«, »sensing and intuitive learners«, »visual and verbal learners«, »sequential and global learners« (Felder and Siverman 2002)
- ▶ Acting, acoustic, reading, visual Learning, HALB (Stangl 2003)

Kolbs Experiential Learning Cycle (ELC)

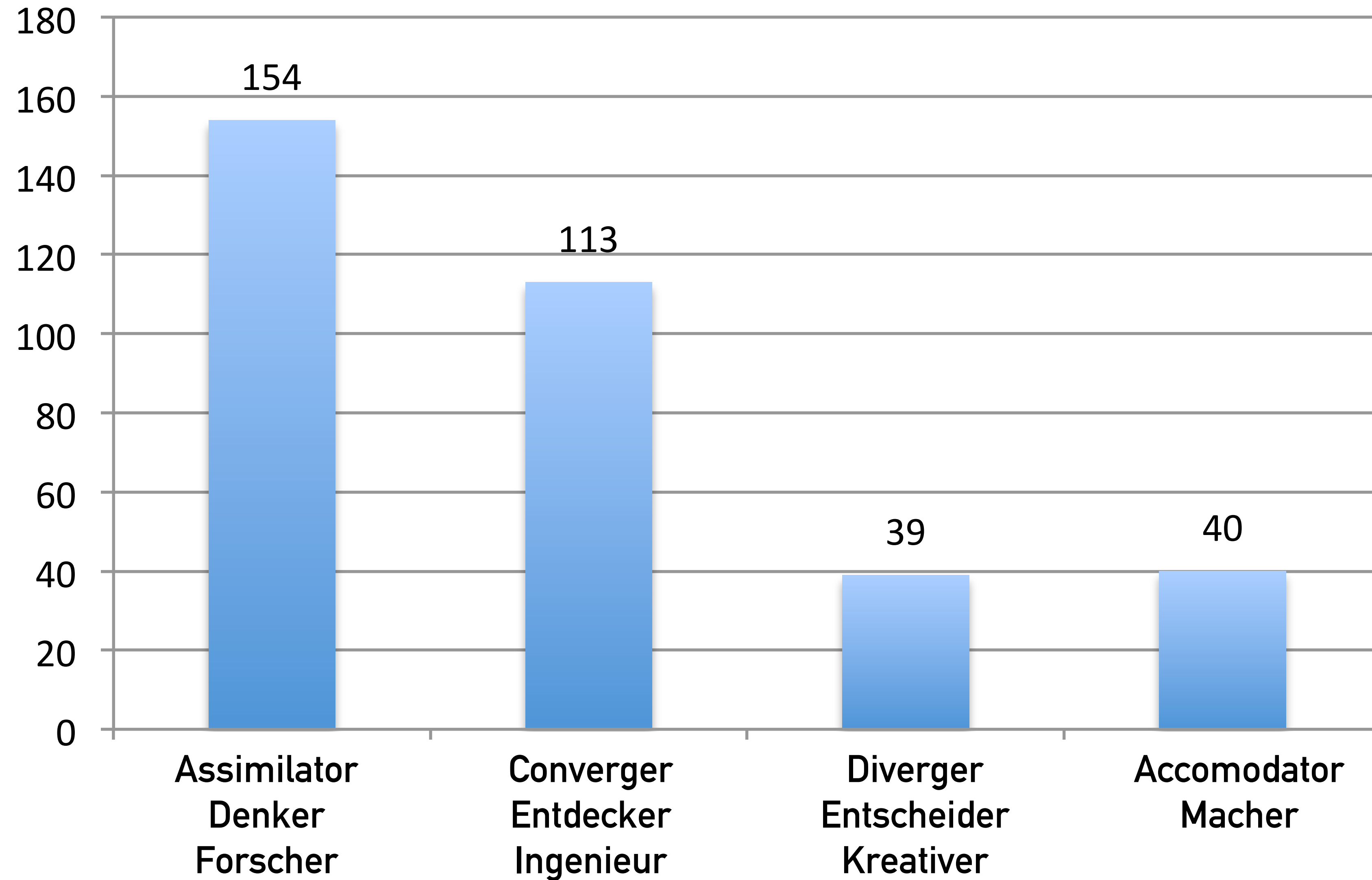


Kolb, D. A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*, Prentice-Hall, Inc., Englewood Cliffs, N.J.

Demography of the study

	Number of men	Number of women	Total number
Linz (AUS)	117	67	184
Magdeburg (GER)	204	163	367
Total	321	230	551

Allocation of Learning styles (n=346)

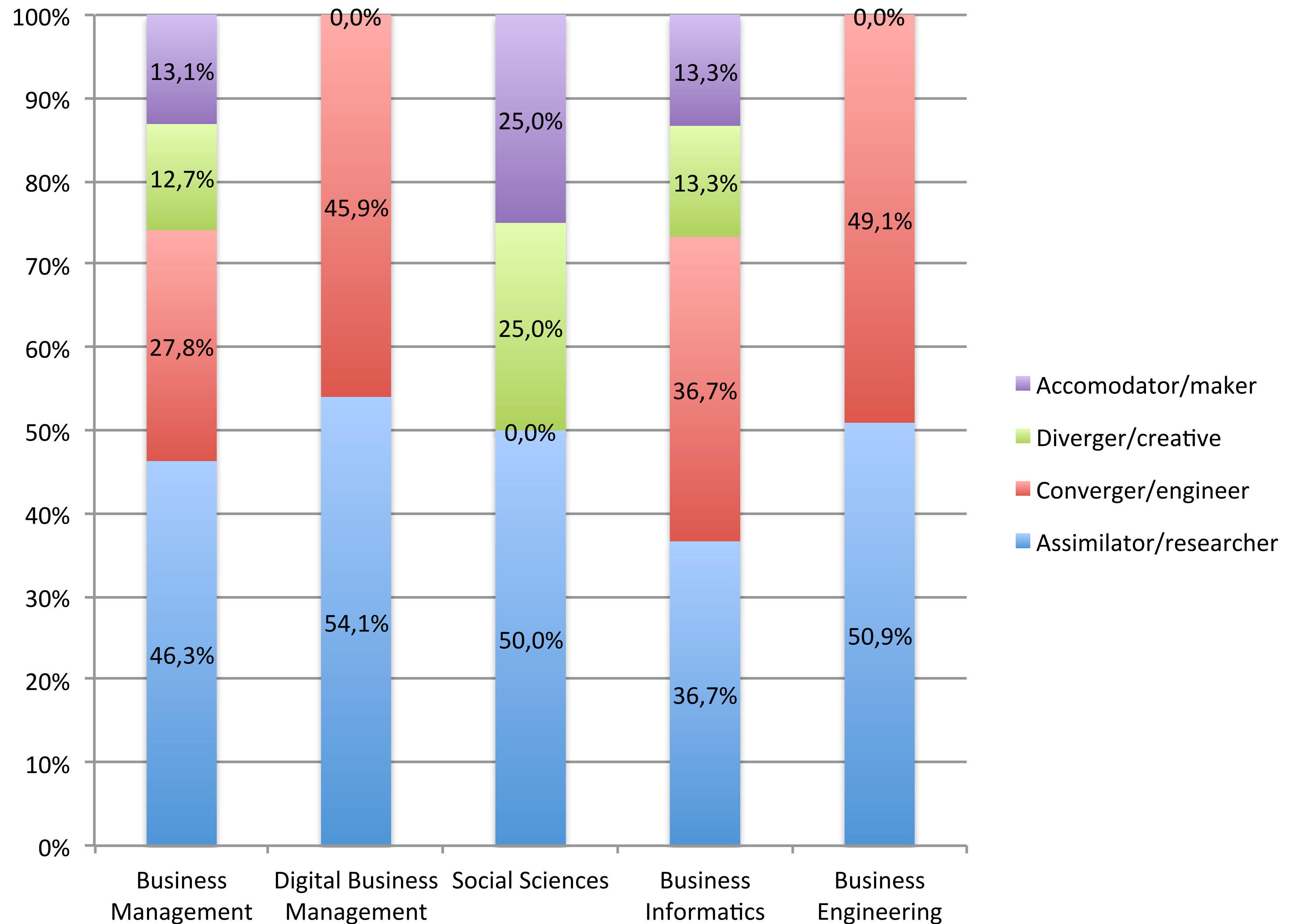


4

Result Discussion

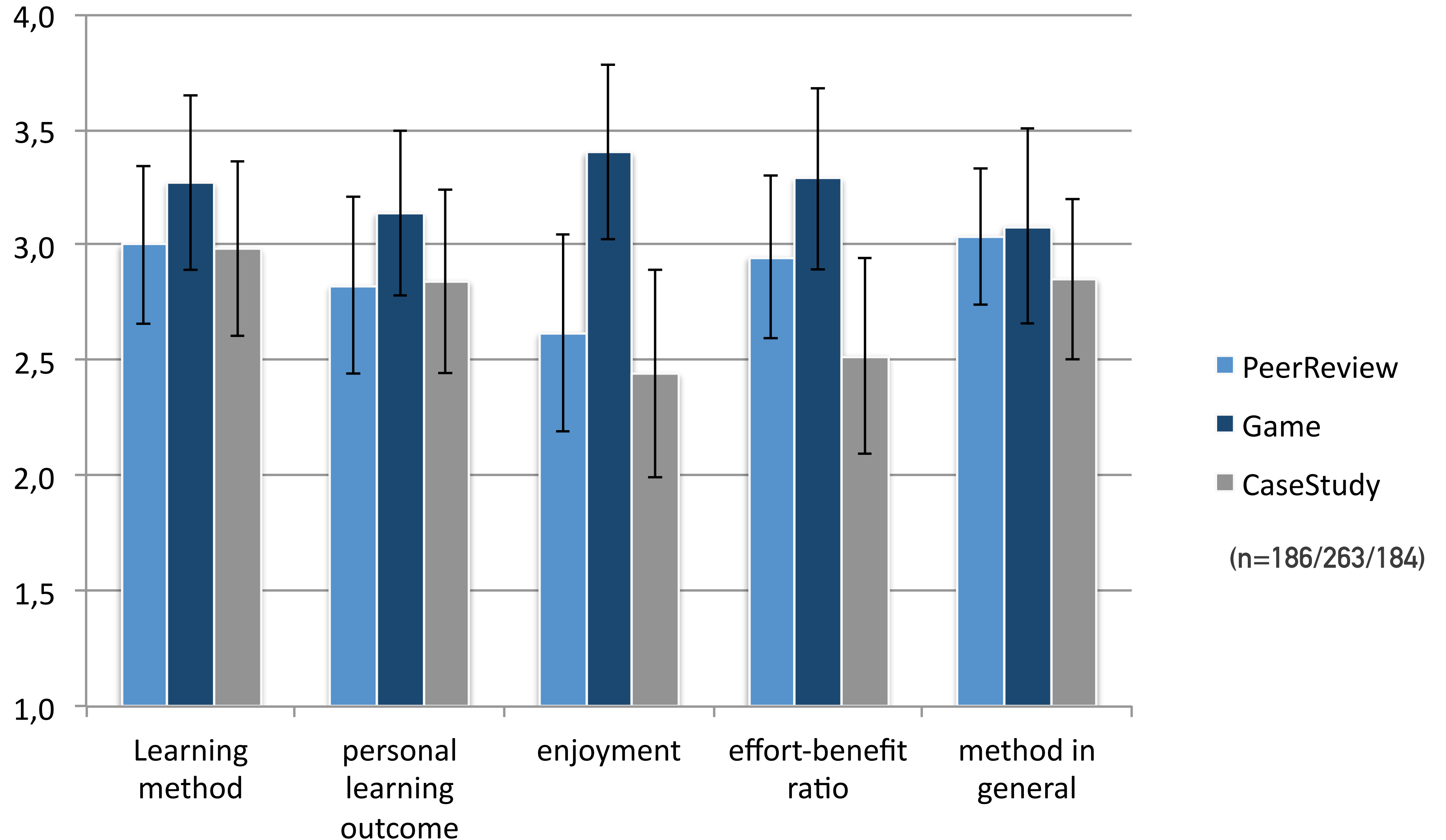
- ▶ Learning styles
- ▶ Students feedback
- ▶ Learning outcome

Learning style by subject of study (n=438)

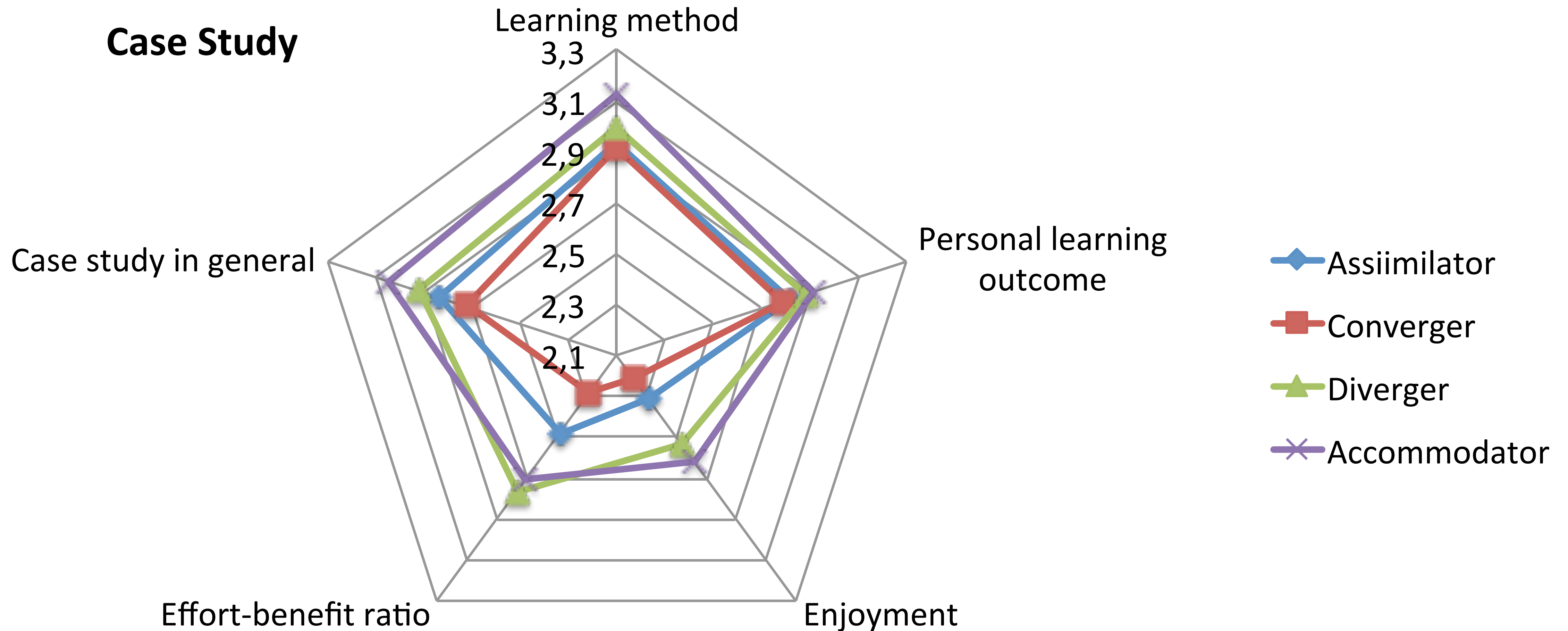


Ranking of different learning methods method

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

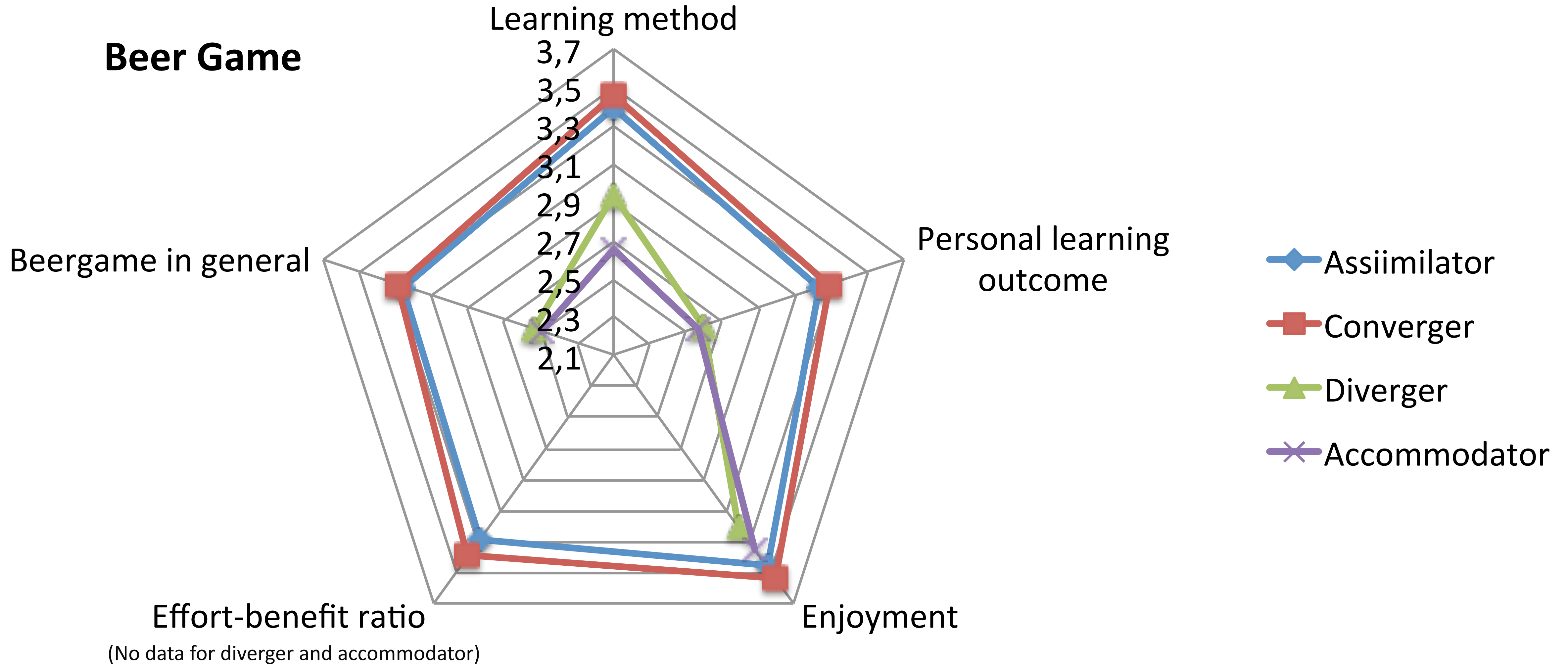


Case study as learning method (assessment by students) N=265



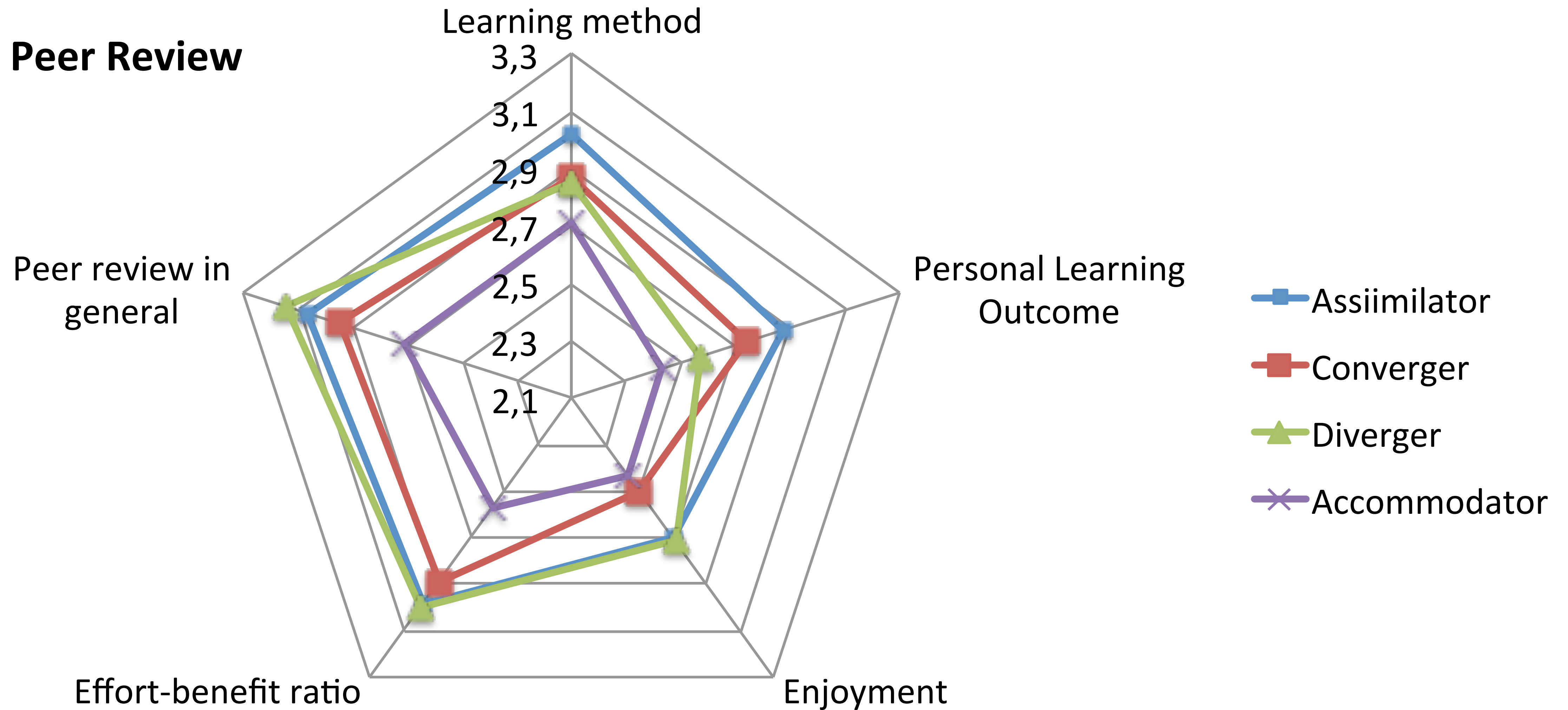
Beer Distribution Game as learning method (assessment by students) N=274

Beer Game



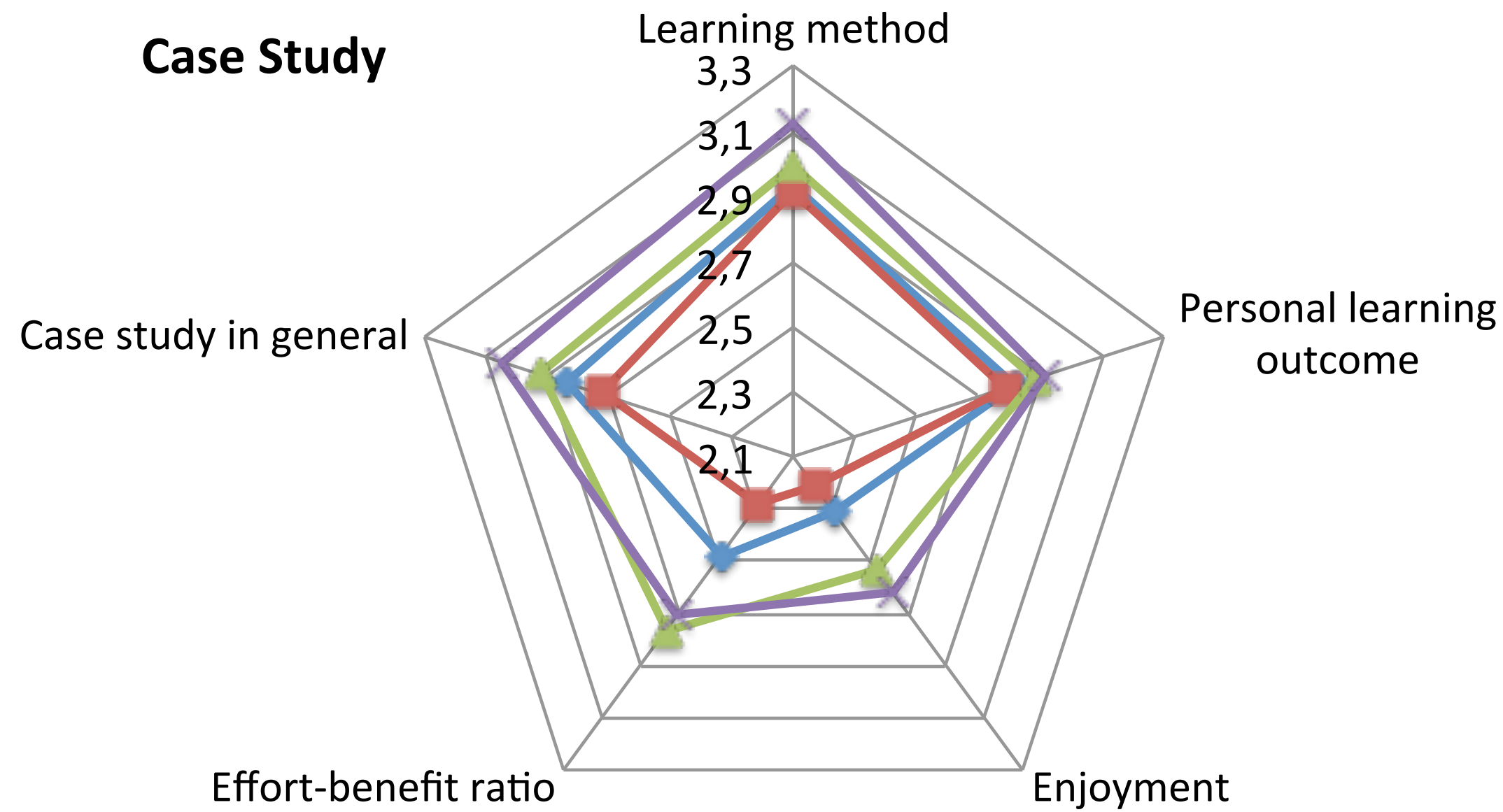
Peer-review as learning method (assessment by students) N=310

Peer Review

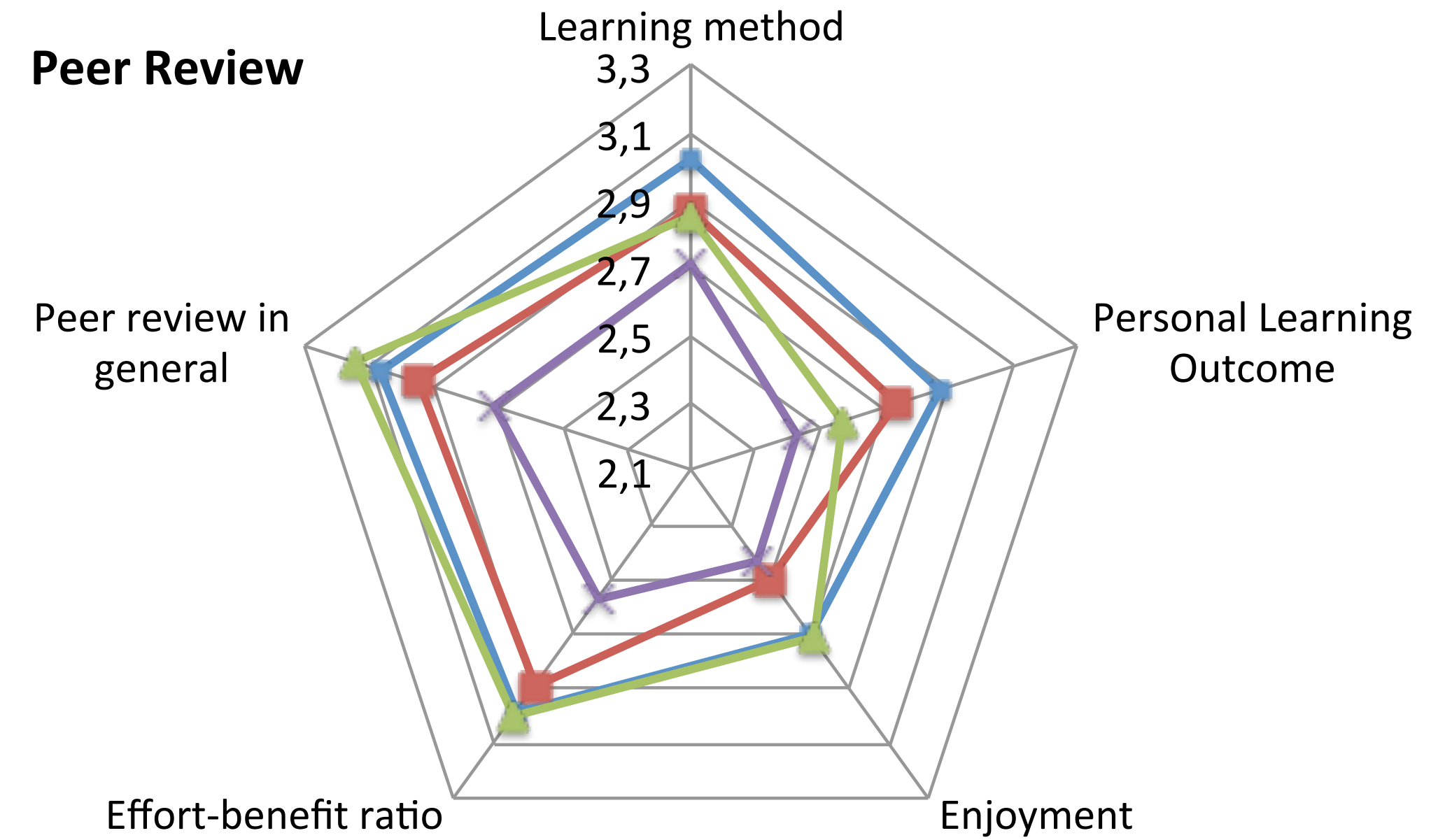


Peer-review as learning method (assessment by students) N=265/274/310

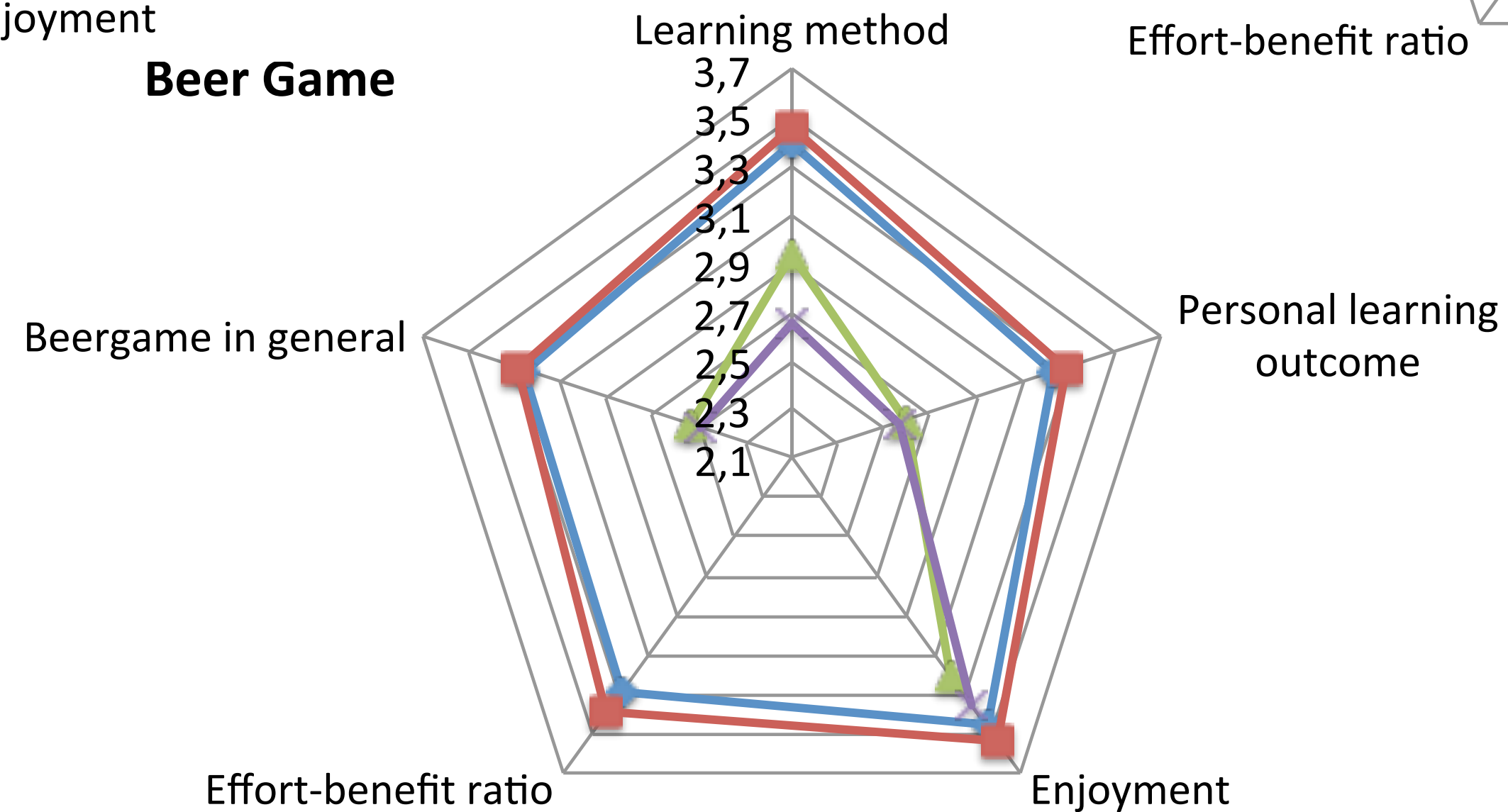
Case Study



Peer Review

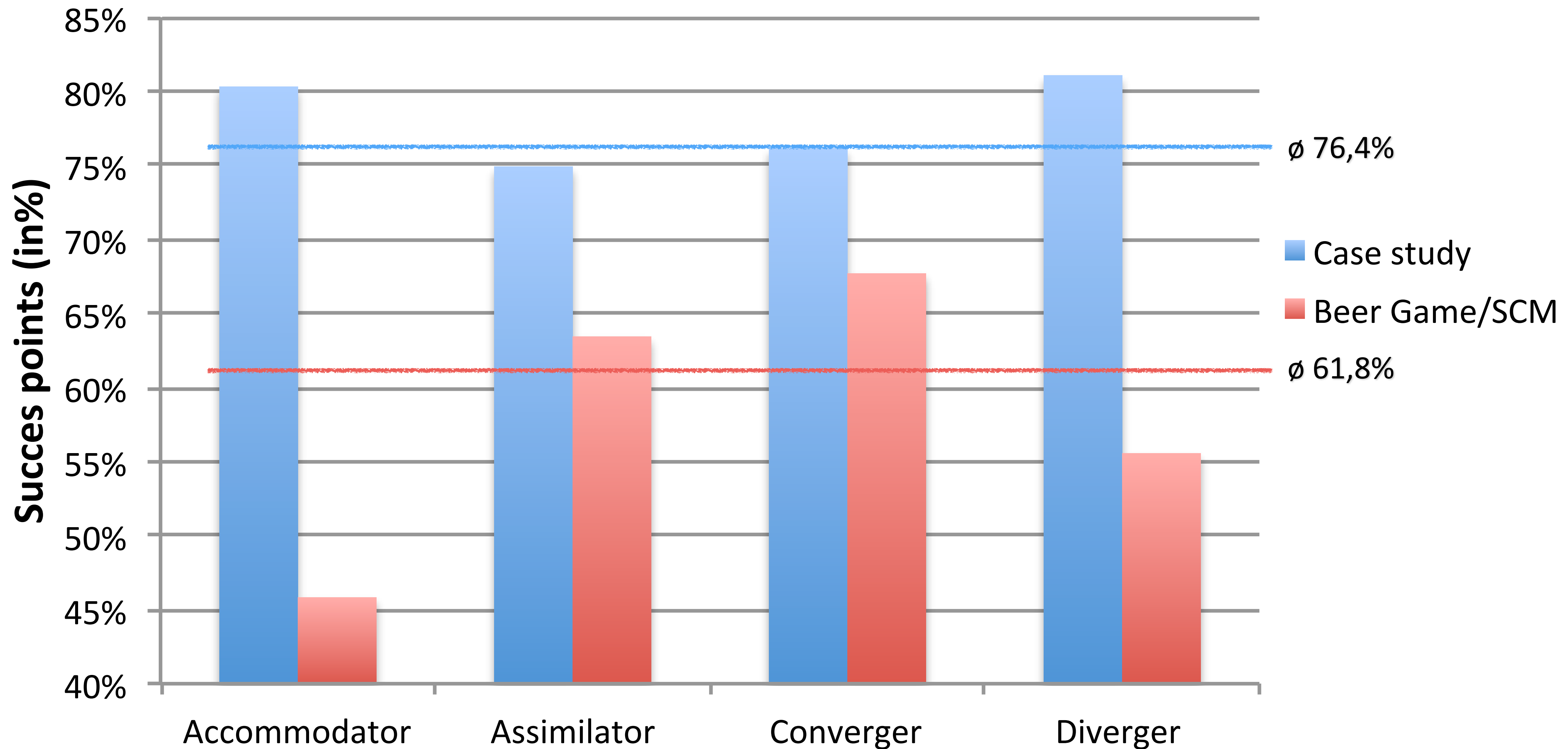


Beer Game

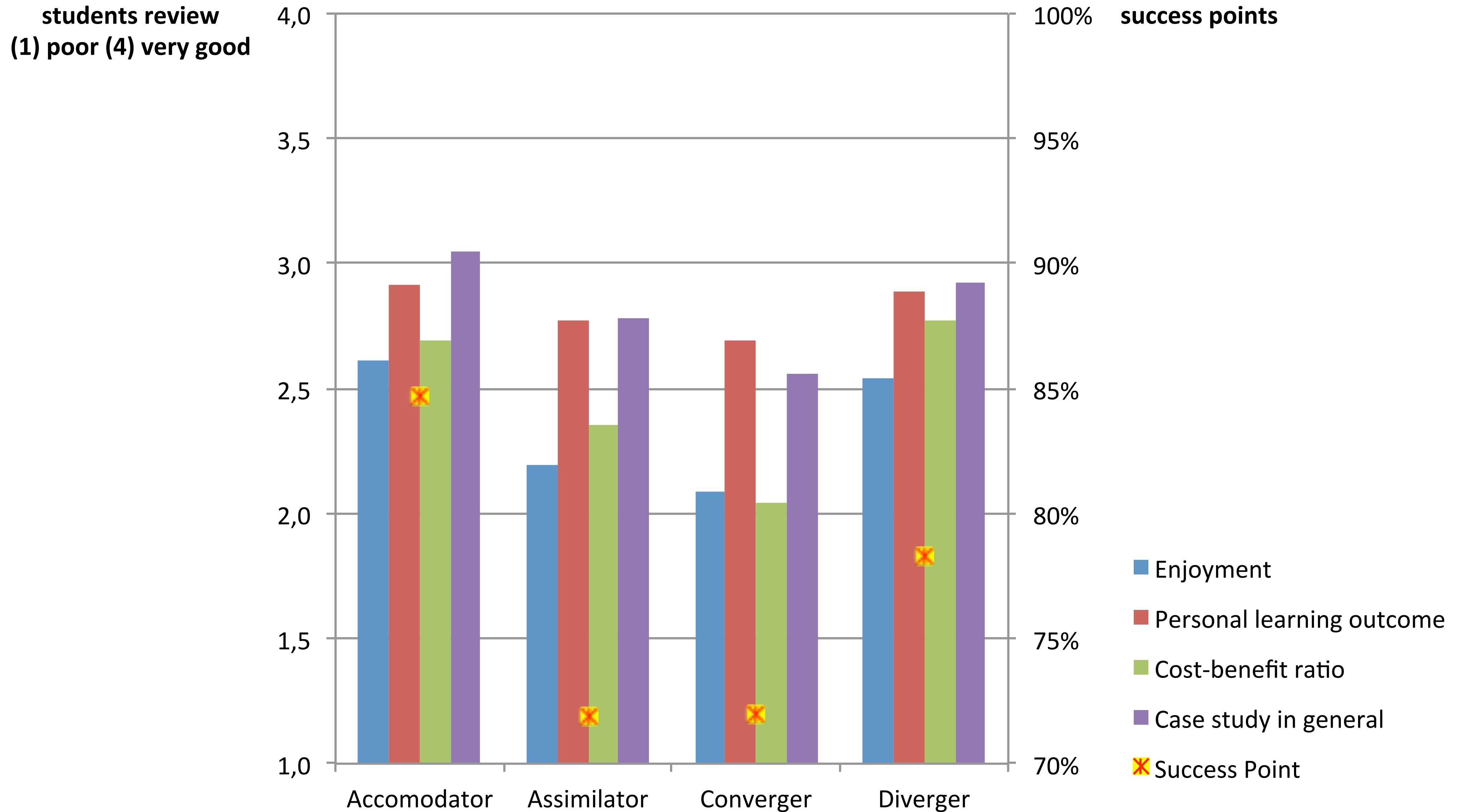


- ◆ Assimilator
- Converger
- ▲ Diverger
- ✕ Accommodator

Learning success and learning style (n=210)



Learning success and learning style in Case study scenario (n=210)

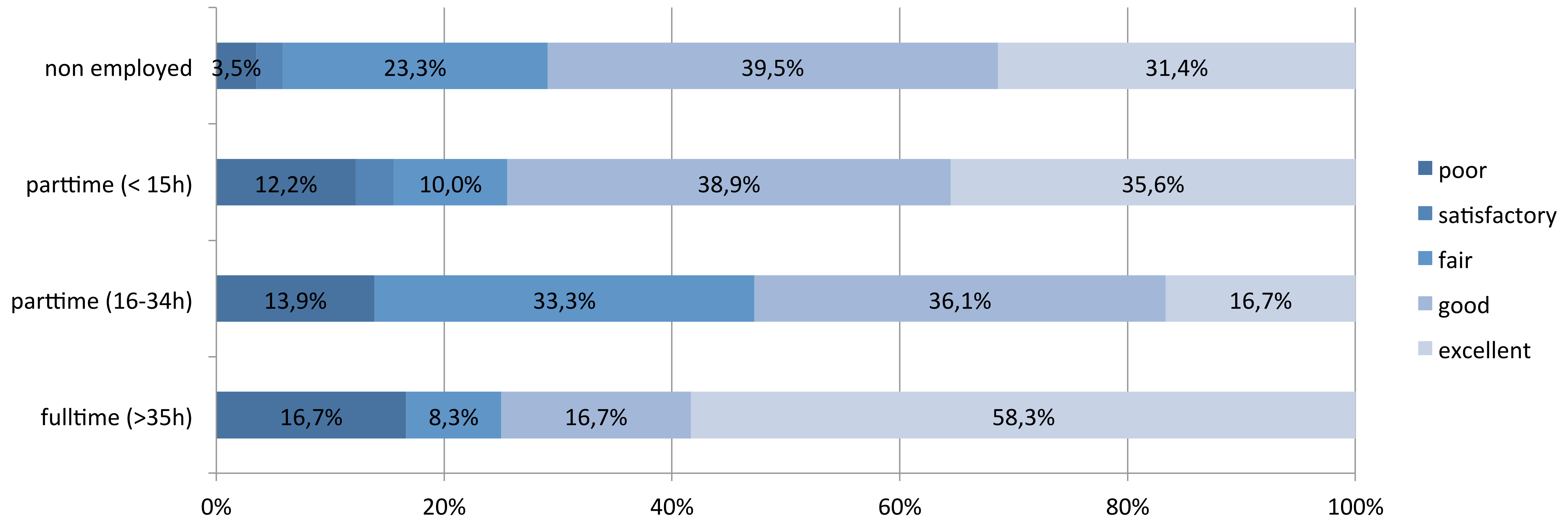


Conclusion & next steps

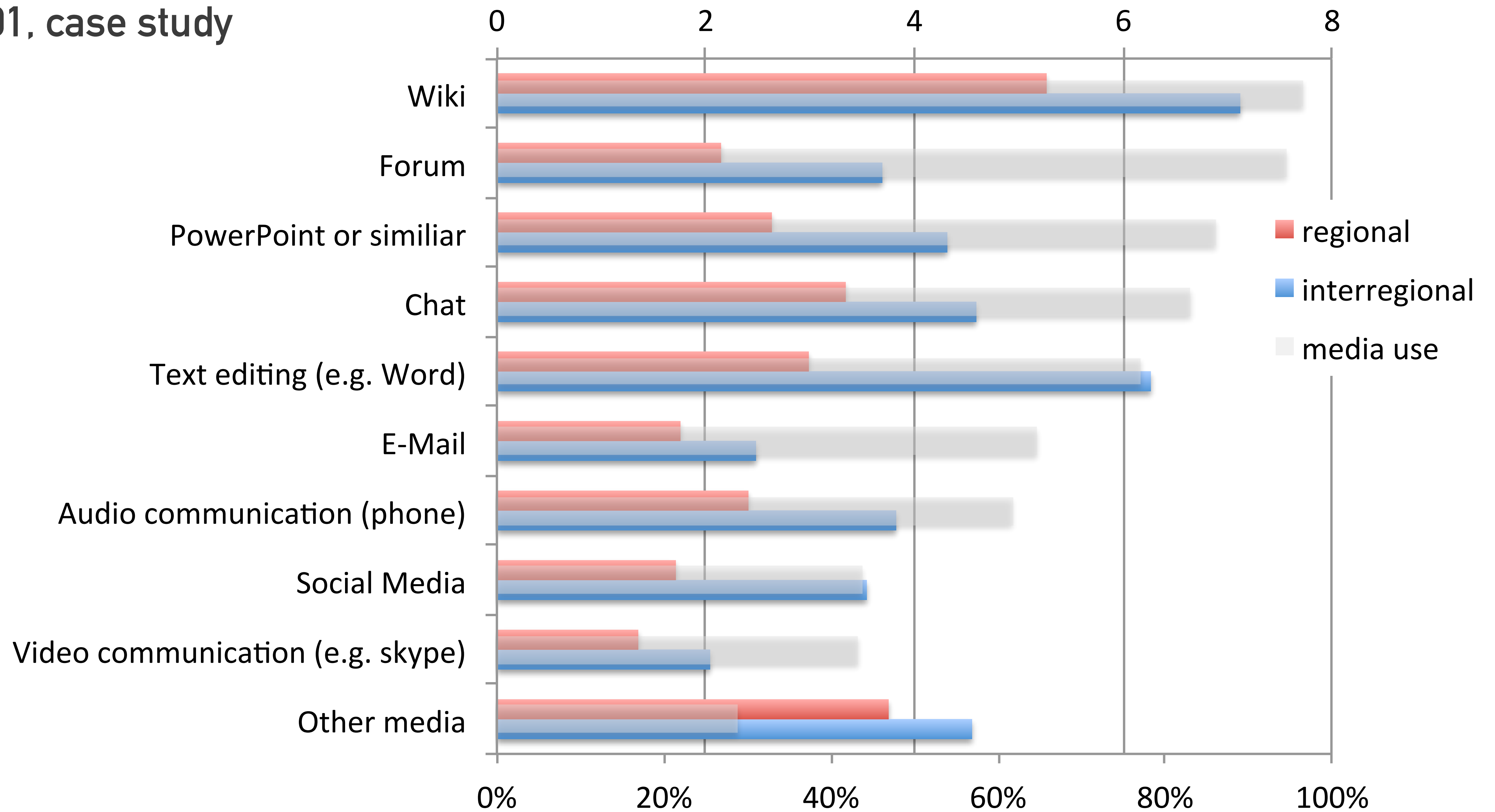
- ▶ Knowing your students better is beneficial!
- ▶ Different learning scenarios for different learning styles? Worth to try!
- ▶ Create groups after learning styles:
 - Case study: mixed groups vs. homogeneous
 - Game Scenario, Peer Review: theory placement in process
- ▶ Development of learning style adoptive approaches to increase media literacy
- ▶ Improvement of learning scenarios
 - adaptivity and effort-benefit relation
 - placement of feedback for different learning styles




Learning outcome and employment of students (n=224)



n=201, case study





Thank you for your interest!

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The Long, Lonely Job of Homo academicus

Focusing the research lens on the professor's own schedule



John Ziker
RESEARCH
03.31.2014



Tags: academic freedom, apps, Boise State, GTD, Higher Ed, research, survey, time allocation

In this piece, anthropologist John Ziker details the first stage of a study of faculty time allocation based on a self-monitoring survey instrument that uses time allocation reporting, a technique used by anthropologists in the field. The first phase of the study found that respondents — all professors at Boise State — spend a large amount of time in meetings and 30 percent of their time doing administrative tasks unrelated to teaching and research. Faculty work well over a 40-hour work week, including putting in time off campus and during the weekends. And they spend a majority of time working alone. —Eds.

TBR Research presents insights and excerpts from peer-reviewed scholarship.

The days of the ivory tower are a distant memory. We may hear about them from our ancestors — our teachers' teachers' predecessors who lived in the days when social philosophers wrote voluminous comparative works and most teaching was done in small groups in the Socratic tradition. But my mentors also taught me to be wary of idealizing the past.

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