Angewandte Linguistik

Creativity meets technology

Embracing digital transformation with an interdisciplinary course for students in applied linguistics and software engineering

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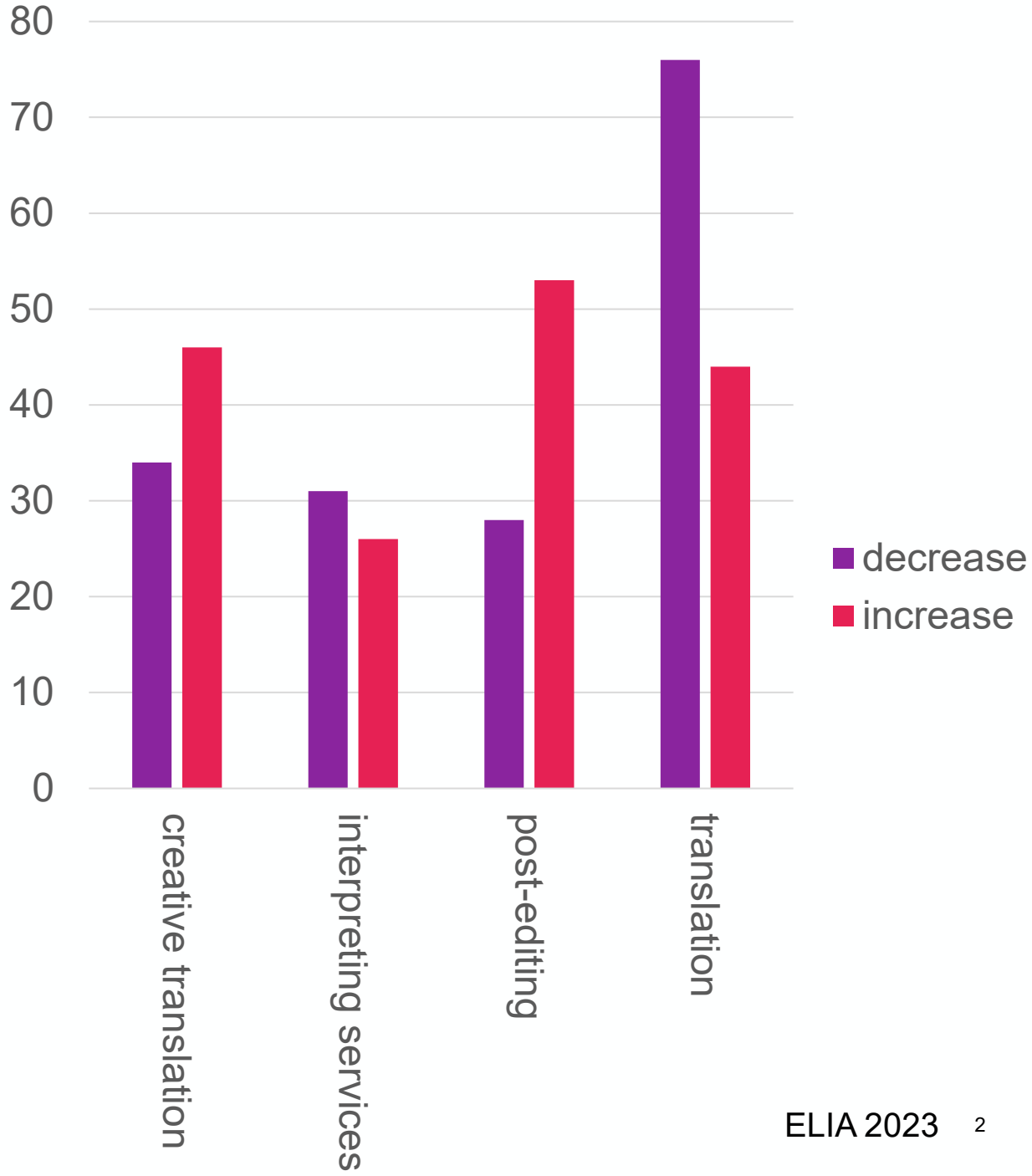
The one side of the story: Language professions

- Human translation services dereased according to over 70% of the respondants
- 28% of language professionals consider AI and MT a major stress factor
- 56% of the students enrolled in translation and interpreting programs worry about their professional future:
- The student numbers are decreasing and budgets are tightening



The other side of the story: software development

- Success of product depends on how well they meet the needs of the users
  - Need assessment
  - Requirement elicitation

- Constant feedback loops important sustainability criterion

➢ Requires comprehensive domain knowledge
(Wahler, Seyff, Soriano Ramirez, 2023)

4.4 Multidisciplinarity of the Development Team

Different disciplines have been included in the development of the software.

Consequence of Negligence A narrowly-focused team can undermine efforts to create solutions with different perspectives

Levels of Maturity

low

The involved stakeholders communicate to gain insights of different perspectives. Developers, Architects and Project Managers use the information from the stakeholders and add new requirements or ideas into the development of the software.

medium

A workshop held among stakeholders of different disciplines reunite and participate by providing ideas. Requirements or processes may appear or change for developers, architects or project managers to review.

high

Multidisciplinarity development teams ensure that all the necessary disciplines are involved on the development process.

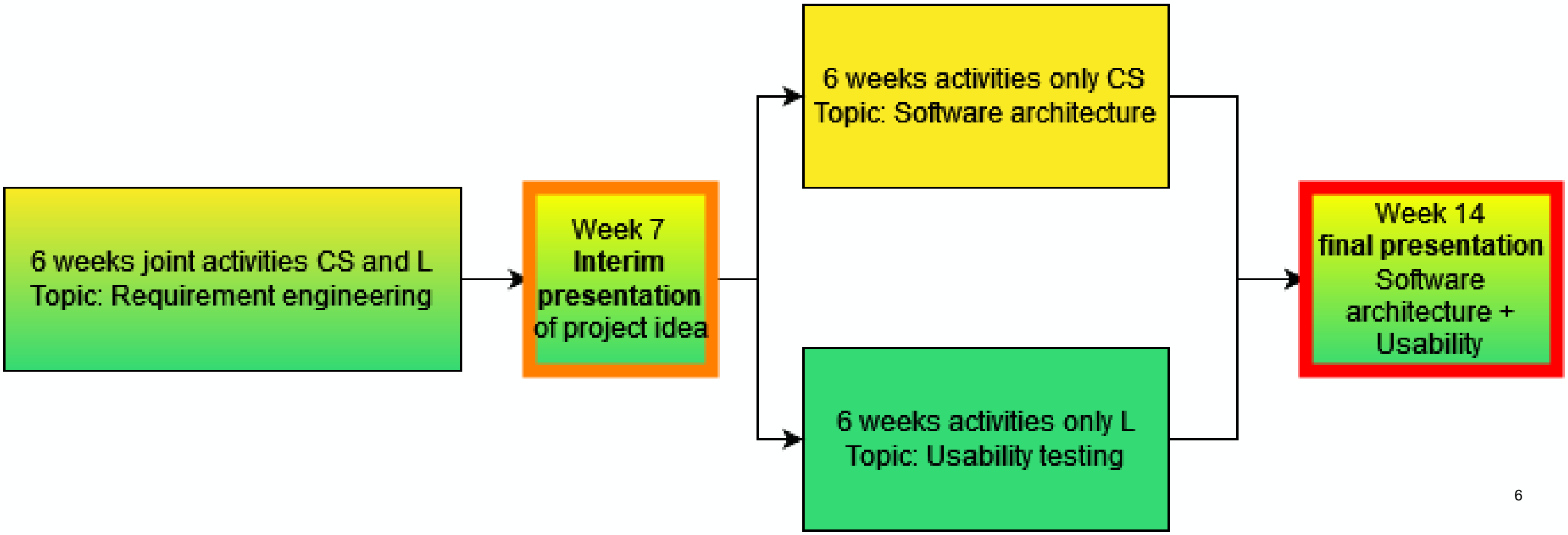
Course goals

- Leverage students' domain knowledge
- Communicate software requirements efficiently
- Use software elicitation tools effectively
- Refine software requirements and architectures
- Create and test mock-ups

Students

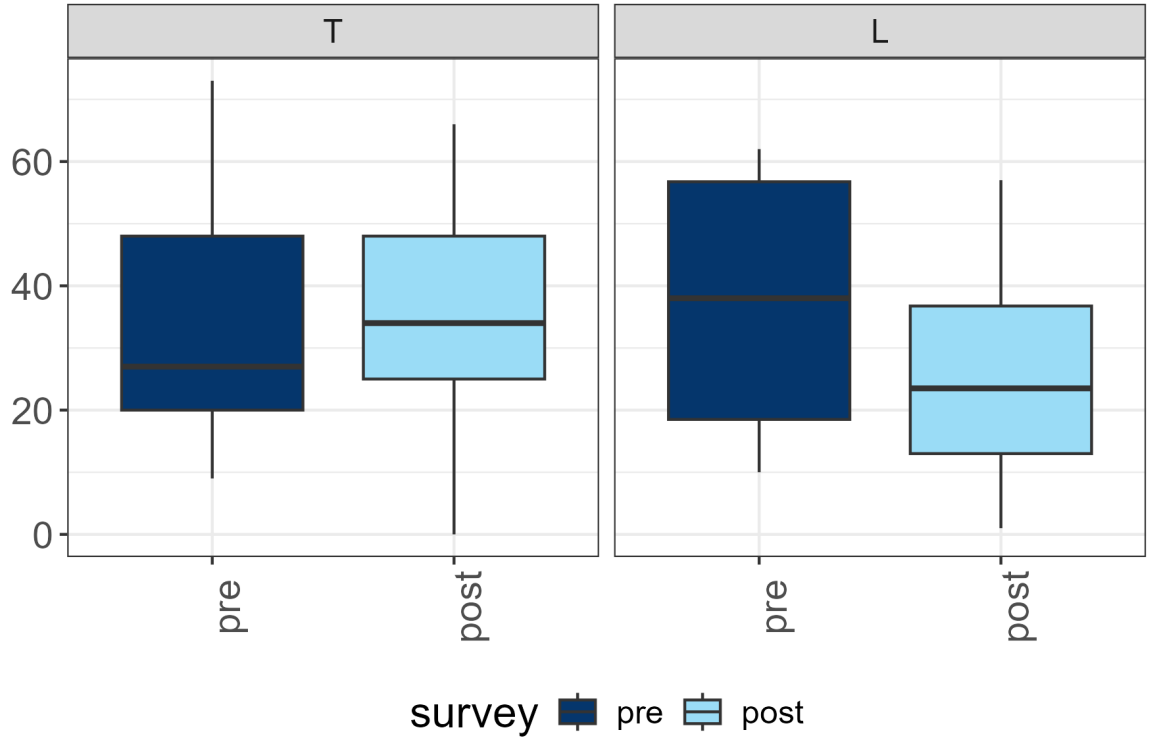
- For students in BA 5th semester
- 38 students in informatics («T-students»)
  - Problem: Course material dry due to board exams, no “real project”
- 8 students in applied linguistics (“L-students”)
  - Problem: use, but do not shape technologies

Designing an interdiciplinary course

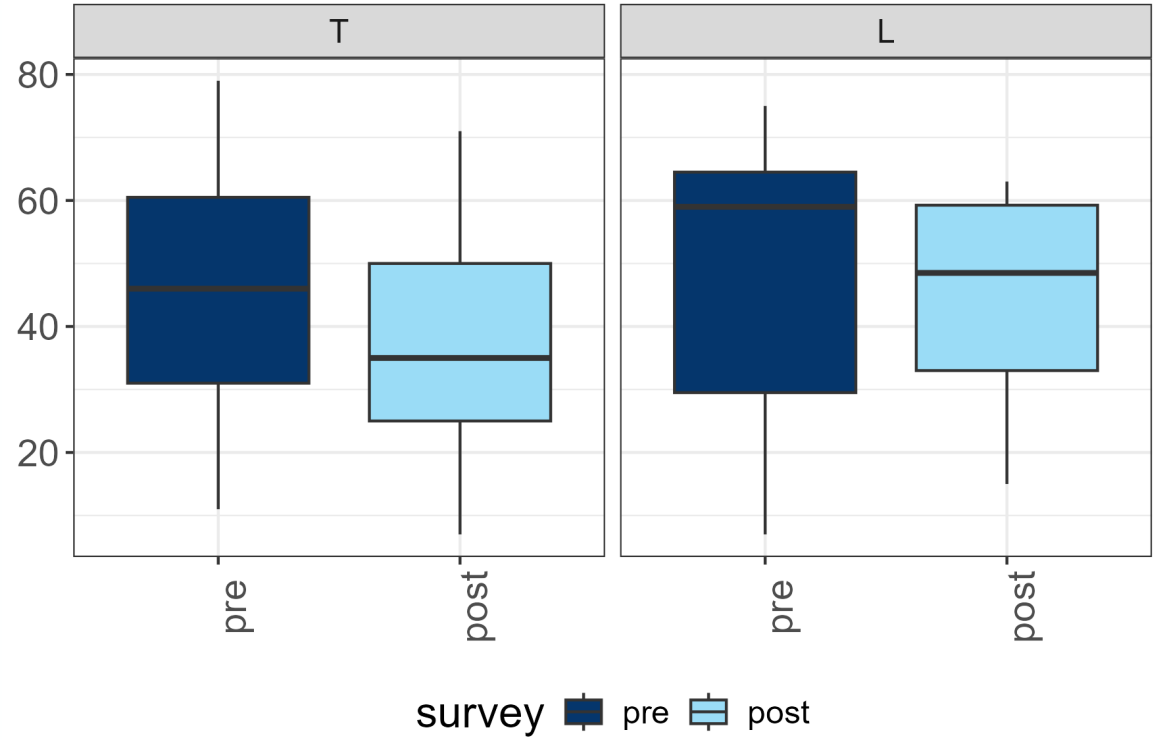


Students’ impressions

Difficulty of the course and the interdiciplinary collaboration

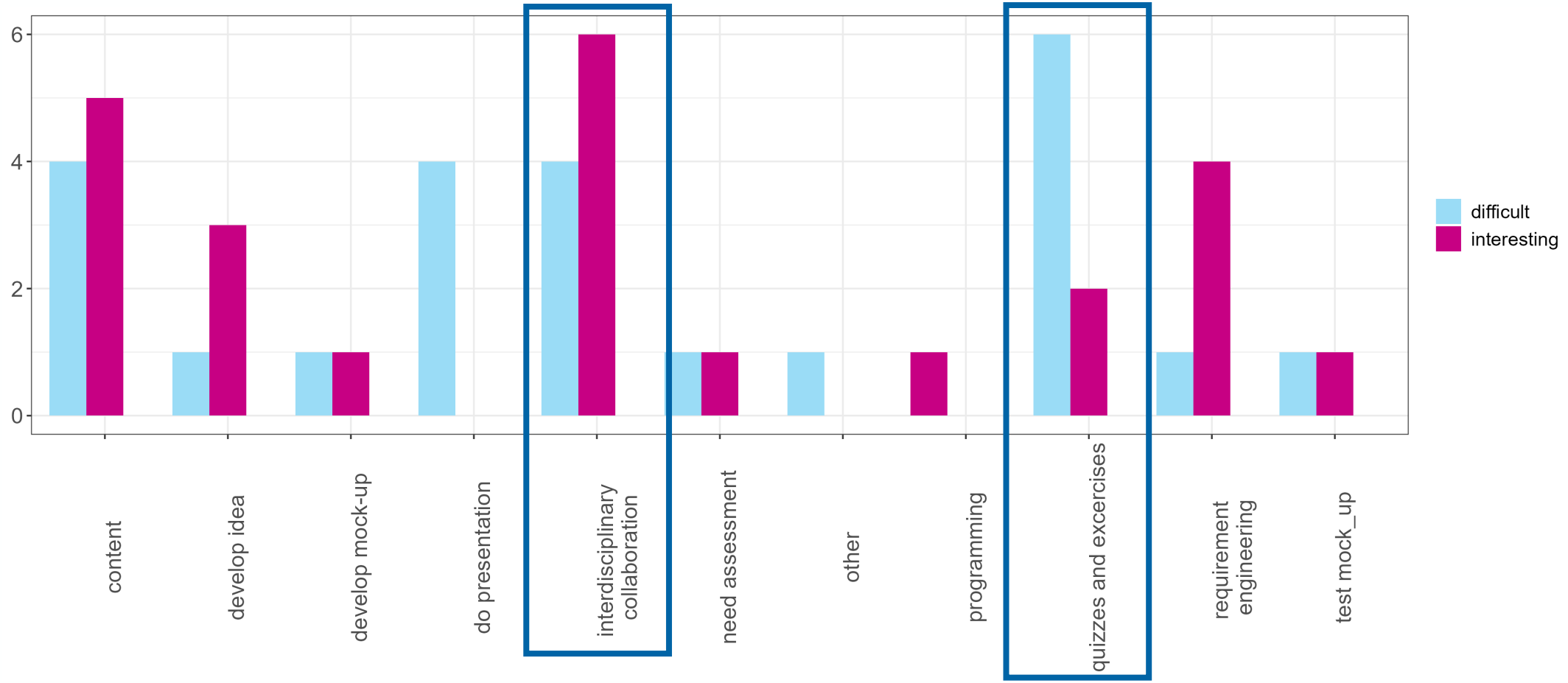


Difficulty of Interdisciplinary collaboration

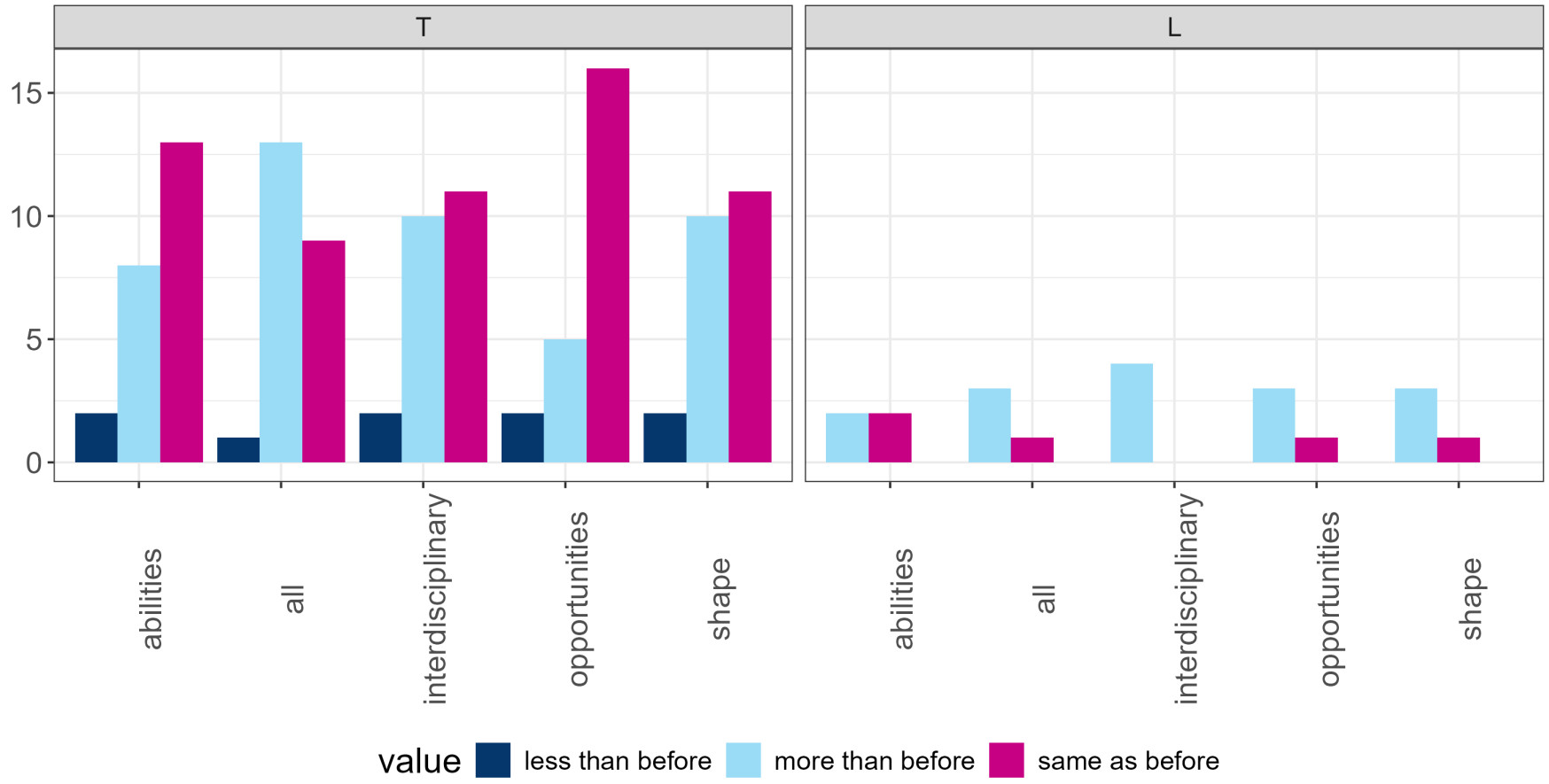


Difficulty of the course

Most interesting and difficult aspects



Attitude towards digitization



Conclusions

- Interdiciplinary collaboration most interesting aspect for many students
- Need assessment most difficult aspect
- Enhanced belief in self-efficacy and opportunities

- Knowledge gain in both groups
  - L: all areas
  - T: usability, software development projects

- For L-students:
  - Collaboration easier than expected
  - Course very relevant

- T-Students were very engaged: attendance increased by 400% compared to previous years
- L-Students were enthusiastic (but no comparison, it was the first time…)

Teaching together = learning from each other

- Administrative challenges:
  - Finding a common slot
  - Arrange time for group work
  - Making learning material available

- Defining instructions and grading systems

- Not being the expert
  - But students can also learn from each other
  - And they outperformed us in many ways…

Un grand merci pour votre attention!

Vielen Dank für Ihre Aufmerksamkeit!

Thank you for your attention!

Zürcher Hochschule für
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Organisationseinheit

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