Zürcher Hochschule
für Angewandte Wissenschaften

ZHAW Zurich University of Applied Sciences

Welcome to our Show & Tell

Morgan Kavanagh
English Lecturer

Daniela Lozza
E-Learning LSFM

Lisa Messenzehl
E-Assessment

https://creativecommons.org/licenses/by/4.0/

What we do

Moodle exams with

Safe Exam Browser (SEB)

on students' devices

https://creativecommons.org/licenses/by/4.0/

Until today…

- pilot exams in 2016: 2 classes (151 students)
- exams in January 2017: 4 classes (226 students)

Incidents

- Macs had navigation problem in Moodle, caused by old WebKit-version in combination with SEB/Moodle version 2.7 → bug fixed
- few (temporary) Internet losses on students' devices → backup devices and extra time for affected student
- very few students who couldn't remember aai password

https://creativecommons.org/licenses/by/4.0/

How we do it

- Tutorials for teachers on how to prepare e-assessments
  - Checklist
  - Instructions for SEB configuration (power users)
- Moodle course for students on how to install and test SEB (compulsory!) prior to the exam; partially mock exam
- Support for students in case of any problems with SEB (e-mail or session)
- Exam day: backup devices, backup Moodle users, technical support, presentation to guide through the exam

https://creativecommons.org/licenses/by/4.0/

LSFM: Paperless studies with 400 students

Notebook without Touchscreen 34%

Windows Notebook with **Touchscreen** 27%

Microsoft Surface Pro 24%

Apple Mac Book (Air / Pro) 25%

Apple iPad (Mini/Air/Pro) 11%

Android Tablet 2%

*Some students have more than one device.

https://creativecommons.org/licenses/by/4.0/

Lessons Learned

Paperless studies are providing a good framework for e-assessments

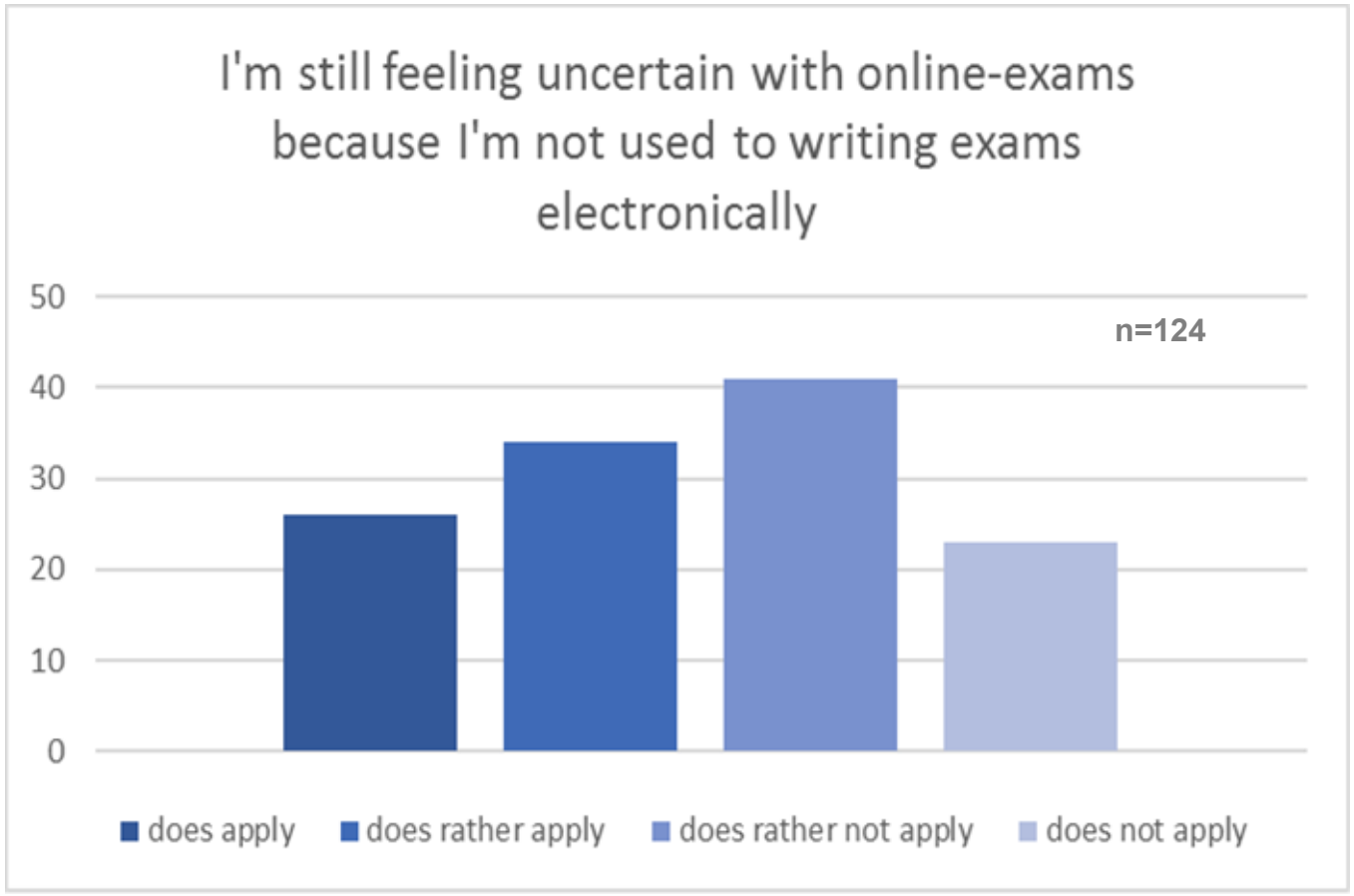
- Students' hardware is renewed much faster than we could afford with managed devices.
- 64% of the students already have at least one device with a touchscreen.
- The more the students work with their devices the less problems they have.

SEB needs further development

- SEB needs an automated update modus for installation on student devices.
- Students should be able to use annotated digital documents during open book exams.

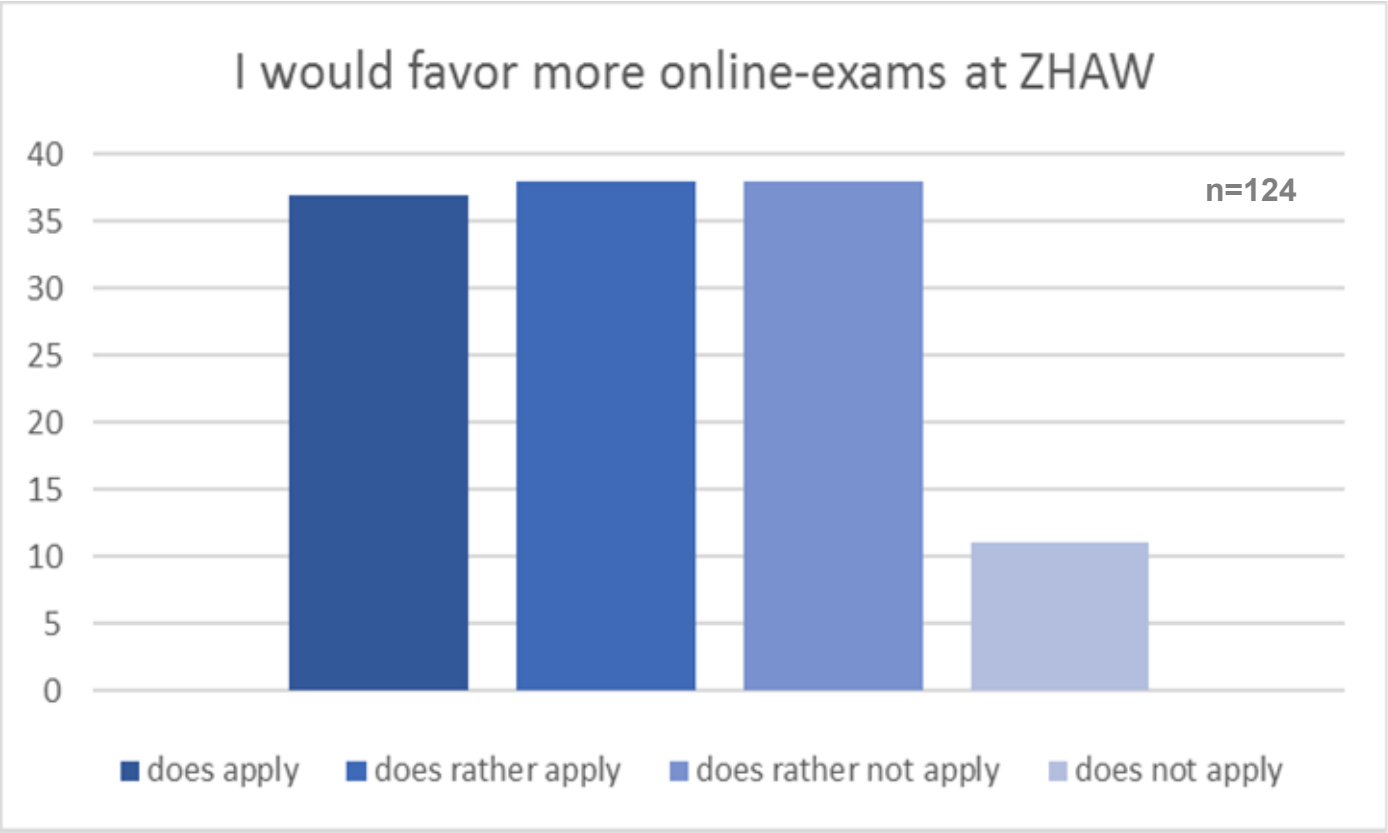
https://creativecommons.org/licenses/by/4.0/

Students' evaluation of SEB exams



https://creativecommons.org/licenses/by/4.0/

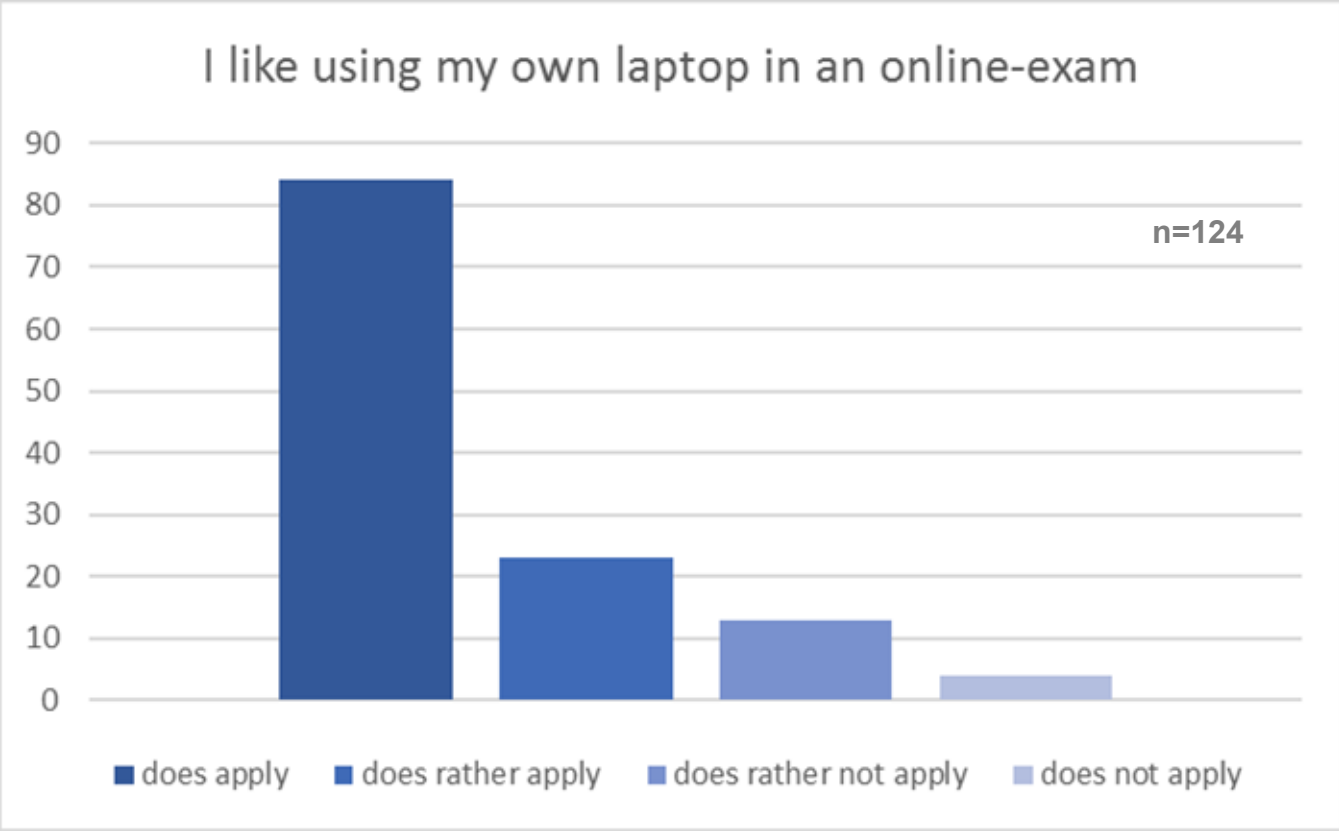
Students' evaluation of SEB exams



But 60% of the 400 paperless studies students prefer pen and paper exams.

https://creativecommons.org/licenses/by/4.0/

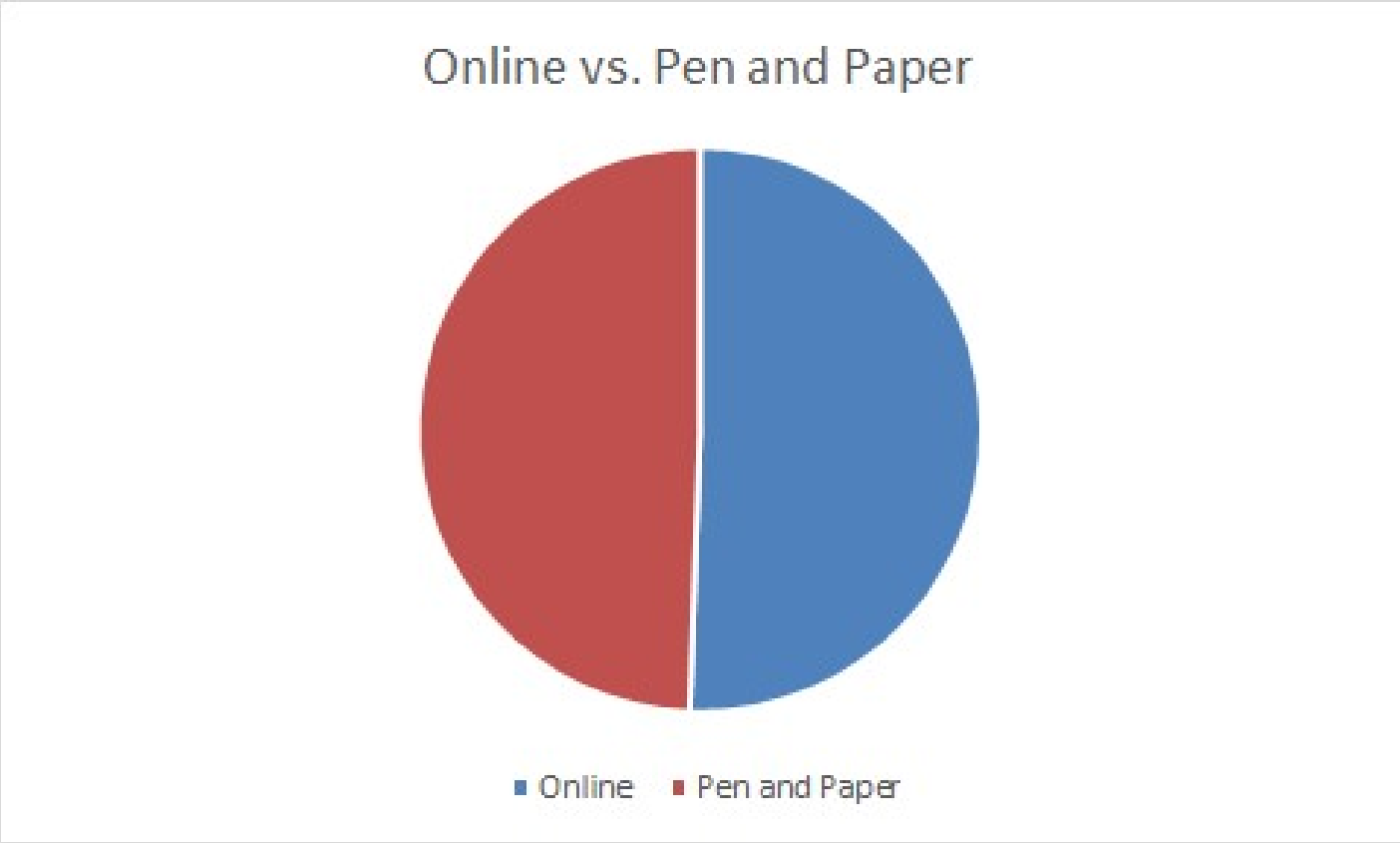
Students' evaluation of SEB exams



86% like BYOD…

https://creativecommons.org/licenses/by/4.0/

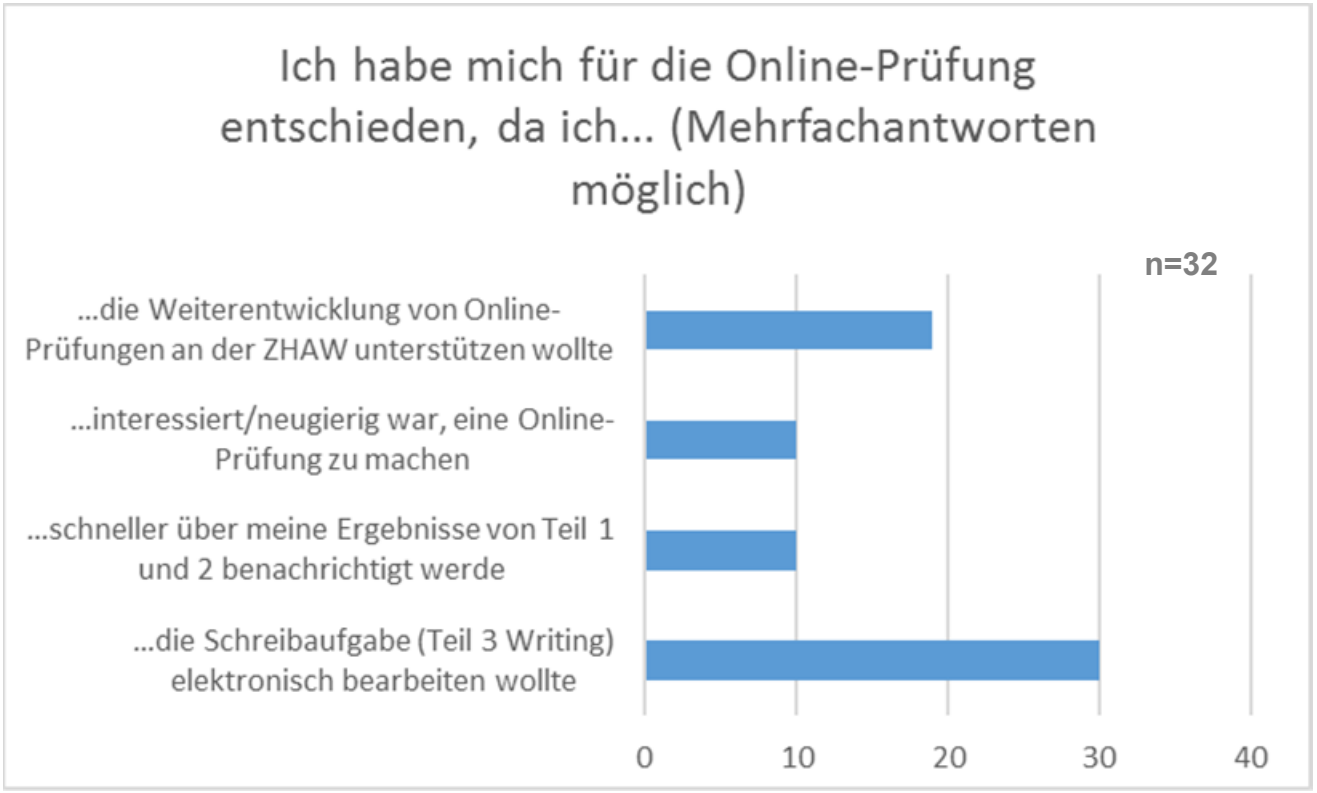
At SML, we let them choose…



44 online
43 pen and paper

https://creativecommons.org/licenses/by/4.0/

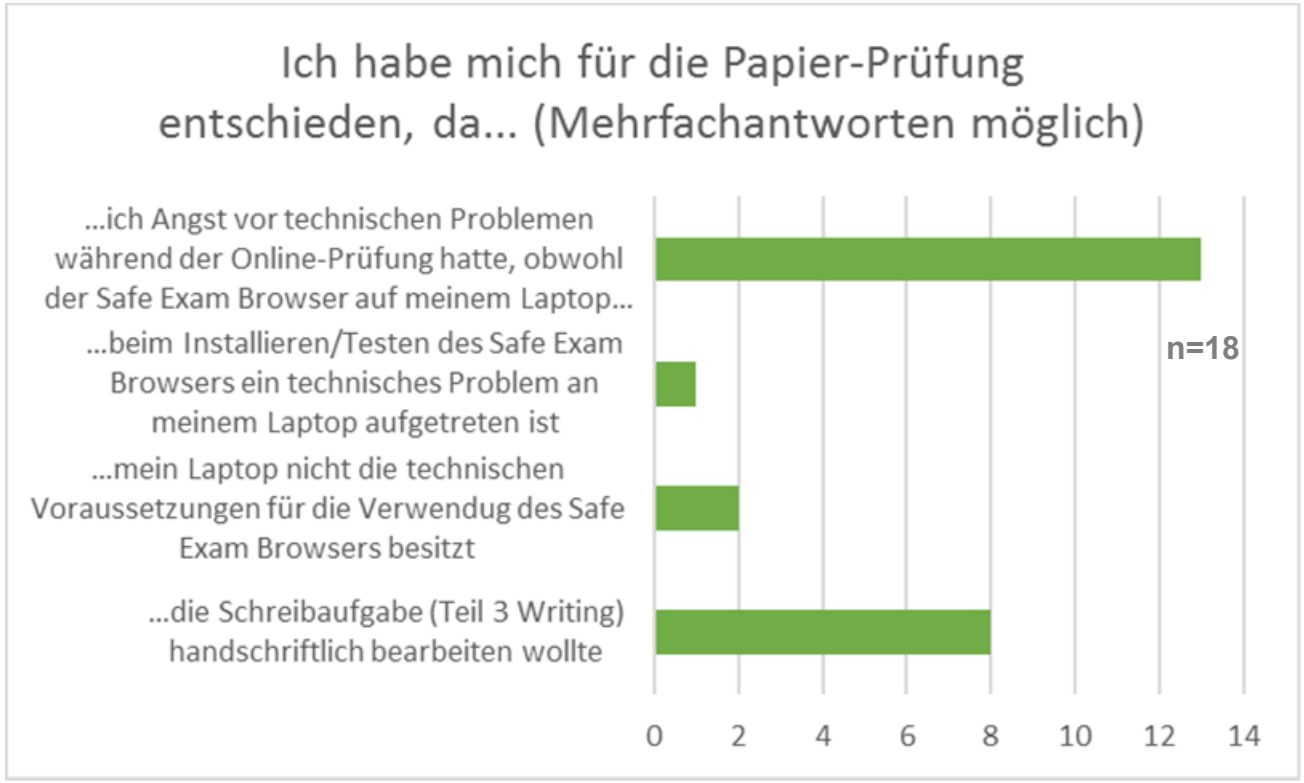
Students' evaluation



94% of the e-examinees were motivated to do the online-exam by the possibility of typing texts.

https://creativecommons.org/licenses/by/4.0/

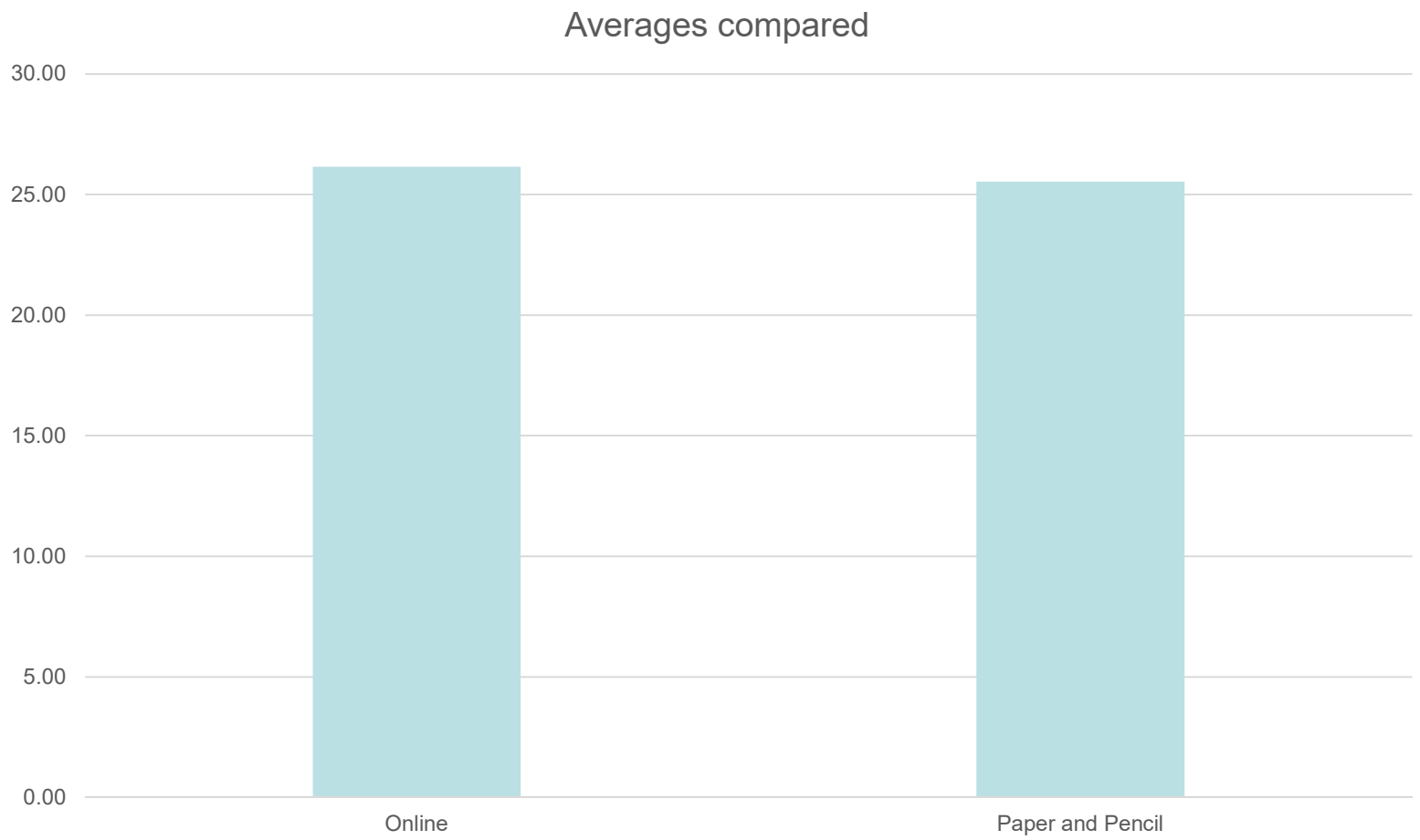
Students' evaluation



72% of the paper-examinees indicated that they were afraid of technical problems during the online-exam.

https://creativecommons.org/licenses/by/4.0/

Was there any difference in performance?



https://creativecommons.org/licenses/by/4.0/

Key messages

Where technology is involved, risks of failure can not entirely be eliminated, but managed

- ✓ BYOD: Offer good support and practice, students should have their devices updated
- ✓ Always have enough backup devices
- ✓ Communicate a backup plan in order to reduce anxiety.
- ✓ Clarify actions for teachers and students in case of technical failure.
- ✓ Manage expectations: Technical issues can affect managed devices as well
- ✓ Be positive: If there are technical problems, we'll find a solution
- ✓ Start now: experience comes from practice

https://creativecommons.org/licenses/by/4.0/

Key questions

- What can we do in order to make e-assessments more appealing to students?
- How can we further reduce tech anxiety?

https://creativecommons.org/licenses/by/4.0/