Detecting cheaters and plagiarism in online exams- techniques and data

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INTRO

We developed techniques to detect cheating and plagiarism in online exams. And did not find many cheaters.

METHODS

Logfile analysis of text answers (edits per second) identifies copy-pasting text from the internet/other users. Further edits to disguise the plagiarism are made transparent.
Individualized data sets in statistics exams lead to individualized correct solutions. Identical solutions are an indicator of cheating.

RESULTS

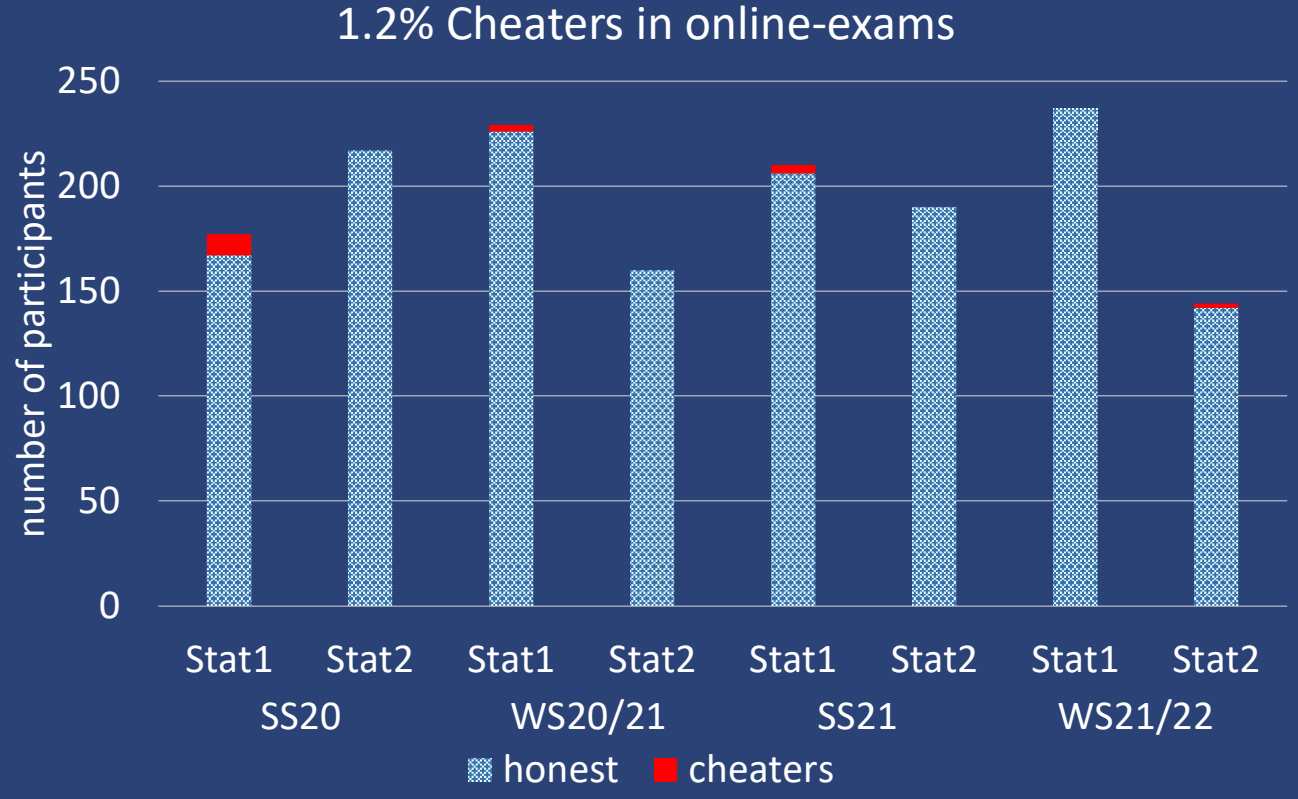
Logfile analysis was available for 8 exams in WS20; singular suspicious activities were detected in 6 exams, but ignored by 5 instructors/exams. In SS21 and WS21 no potential user requested the analysis. Individualized data and comparison of error patterns identified (4+4+2) + (3) + (2+2) + (2) = 19 cheaters in 8 statistics exams with 1564 participants.

DISCUSSION

The methods can only detect specific cheating behavior / work only for a subclass of tasks/questions. Even if available, most instructors do not use the methods and prefer to ignore the problem. Cheating rates cannot be compared to traditional exams due to missing data.
But still: There is no evidence of massive cheating in online exams.

Students rarely cheat in online exams

and instructors seem to count on that

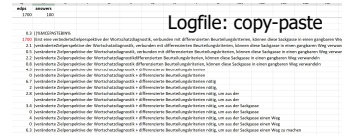


https://go.uniwue.de/mvwji casetrain@uni-wuerzburg.de @CaseTrain

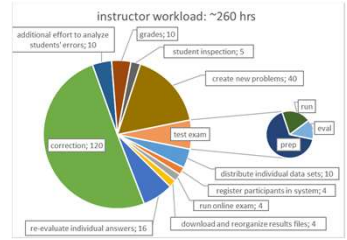
Messy section

How to run online exams
student info

Logfile: normal typing

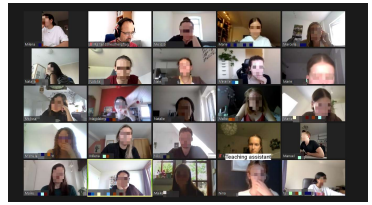

Logfile: copy-paste

Individual data and error patterns

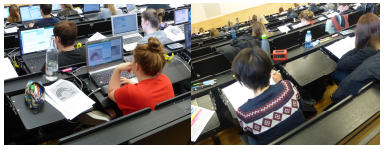


Post facto: What happens to cheaters?

Online-exam: Breakoutroom



lecture-hall-exams



More or less cheating possible?