

(Under-)Utilization of a system for self-paced learning

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In my courses Statistics 1 and 2 students are provided with ~30 exams of previous semesters which can be used in an electronic system to train for the final exam, getting feedback and explanations. Logfile analysis showed that students use this system relatively late in the semester and underutilize older exams. Also, some specific tasks requested by students could not easily be performed in the existing system (e.g. training which statistical test to select).

Therefore, we separated the existing exams into single questions coded by topic (hierarchically), year and difficulty, and created a new interface which allows students to select smaller tasksets, repeat tasks not solved to criterion, get individual feedback, and work in their own pace and structure. For Statistics 2, two different hierarchical structures (by test properties/course structure vs. by data set properties) were used for coding each question by topic. Additionally, an interface to the course management system was created which allows students to semiautomatically generate discussion groups to specific exercises.

Logfile analysis shows that a considerable proportion of students do not use the new system as intended. Exercising is still delayed until one month before the exam, even if the opportunity to exercise exists from day one of the course, and even if the new system is announced at several points in the semester. Also, a small proportion of students does not use the system to select specific problems, but creates a collection of all exercises published. In WS24, even a restriction on set size had to be enforced because this misuse led to server problems. The technology to initiate discussions was also not used as intended, despite repeated instructions of use. Thus, a well-intended intervention based on principles of effective learning did not lead to respective changes in learner behavior.

Is the first author also the speaker?

Yes

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Please indicate up to five keywords regarding the content of your contribution

self-paced learning, logfile analysis, electronic training system

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