October 26, 2021, 3:00 – 4:30 p.m., online meeting

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Early Detection of Student Dropout Using Machine Learning and How to Use the Information

In order to support students at risk of dropping out early in the course of their studies, the use of early detection systems can be useful. In the research project FragSte, an early detection system has been developed for a state university and a private university of applied sciences, using all administrative student data according to § 3 HStatG. The system determines the probability of students dropping using machine learning methods. Due to the self-learning and self-adjusting conception FragSte can be used at all German universities. It shows that students at risk of dropping out can be identified early in their studies. However, interventions that are offered to students at risk of dropping out represent a paradigm shift at German universities. Up to now, there has been a widespread lack of monitoring systems or a binding nature of such monitoring; even rarer are the measures that build on this. For this reason, a low-threshold intervention was tested experimentally for acceptance and effectiveness. It is shown that an intervention based on FragSte was accepted by students and administration. For the group of all students, the dropout behavior does not change as a result of the intervention. However, not all disciplines react in the same way and a change in dropout behavior can be demonstrated for subgroups.