

**STUDENTS COMPETENCES IN DEALING WITH THE CLASSICAL AND  
FREQUENTIST APPROACH TO PROBABILITY**

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The concept of probability is a key concept. The classical approach was defined by Laplace and prevailed in teaching probability at the beginning. The focus on the classical approach raised criticism and nowadays the frequentist approach is widely promoted for teaching probability. The aim of the project was to identify secondary students' competences in dealing with the classical and the frequentist approach to probability. Therefore, approximately 500 students in Germany from grade 8, 9 and 10 performed a paper and pencil test. The analysis of the item difficulties was conducted with item response theory. The results showed that students had basic competences in dealing with the classical concept of probability but struggled to apply and comprehend the frequentist approach to probability.