The "Test of Cognitive Ability" ("TCP") is a language-free test of reasoning ability that was created at the heart of the Luxembourg Centre for Educational Testing (LUCET). The TCP was initially developed for children at the age of 10 and can be applied in a group context. Since no advanced language-skills are required in order to take this test, it is perfectly suited not only to serve as a cognitive ability screener in a multilingual context, but also to study the relationship of cognitive ability and academic success within a demanding schoolsystem that deals with a very complex mixture of student backgrounds (spoken languages, socio-economic status, culture, etc.). Using traditional intelligence tests with language-based tasks and instructions could, in this context, result in biased data since maximum performance relies on a good understanding of task requirements. Being language-free, the TCP can help in gaining a more precise understanding of academic performance under different circumstances and prevent wrong conclusions as to the fairness of curricular requirements for different student populations.

We deepened the exploration of the impact of language spoken at home on the relationship between cognitive potential and school performance with regression analysis, controlling for socio-economic status (SES). On the right you can find interaction effects of language spoken at home and cognitive potential on Math performance and German Reading. We can observe that for students speaking a foreign language at home, a gain in cognitive potential corresponds to less gain in educational performance compared to students speaking Luxembourgish or German with their parents.

Conclusion:
1) The TCP allows studying the relationship between cognitive potential and school performance in a non-biased manner.
2) The relationship between cognitive potential and school performance is weaker for students speaking a foreign language at home.