

## English abstract:

Currently, there is an increasingly interest for the concept education outside the classroom (EOtC) in Denmark as well as internationally. A recent mapping of the prevalence of EOtC in Denmark shows that almost 20 percent of Danish schools practice this teaching method weekly or bi-weekly. Case studies suggest positive effects of EOtC on physical activity, academic achievement, and mental health. But there is still lack of research in this area, especially concerning academic achievement.

Therefore, the overall aim of this thesis was to gain knowledge on the association between EOtC and pupil's motivation for school and learning operationalized as reading skills and skills in mathematics. This thesis is a part of the larger project called TEACHOUT, which aims to gain knowledge on several potentials and effects of EOtC.

Three specific research questions were identified: 1) what is the association between EOtC and pupils motivation for school? (Paper I), 2) what is the association between pupils skills in reading and systematic exposure to EOtC? (Paper II) and 3) whether EOtC increases pupils' skills in mathematics, using a quasi-experimental design? (Paper III).

Method: This explorative, quasi-experimental study involved school children (aged 9-13 years) from 18 Danish public schools who participated in EOtC through a school year, and included 911 pupils with 569 pupils participating in EOtC and 342 pupils as control pupils (non-EOtC), not participating in EOtC. The number of participants varied between the studies.

Paper I: The pupils motivation to learn was measured through the questionnaire: Academic Self-Regulation Questionnaire (SRQ-A). The pupils answered the questionnaire in August 2014 and in May 2015. This study included the social economic status of the pupils. The number of participants ended up to be 311 from the EOtC group and 56 from the control group. The results show, that pupils from the EOtC group had a significant higher score on intrinsic motivation than the control group.

Paper II: To investigate the pupils reading skills all pupils were tested with a reading test from Hogrefe called the Text-Reading Test. The two groups (n= 376 EOtC and n= 153 non-EOtC) were tested in August 2014 and May 2015. The result show that the pupils from the EOtC group, who were exposed for around 5 hours a week of EOtC during the year, had a significantly better result in reading than the control group, who were exposed to EOtC for around 1 hour a week during the school year. The results did not depend on gender or the amount of Danish lessons (mother tongue) in EOtC.

Paper III. The relationship between EOtC-Math and the pupils result in math was investigated with the math test from Hogrefe called the MG Test. The study included 421 pupils from the EOtC class who were exposed for EOtC math for 0.68 hours a week compared with 198 pupils from the control group, who did not receive any math lessons in EOtC. The results showed no significant difference between the two groups.

All data was analysed in SPSS using mixed model analysis.

The results from the three sub-studies are in line with previous studies, and the thesis illustrates that EOtC can promote pupils skills in reading and improve their intrinsic motivation. The results can neither reject nor prove that EOtC math relates to an increase in results in math tests.

All results are discussed in relation to the Danish Public school and previous studies in this area.