**Abstract** 

In this paper, we estimate the extent of ability peer effects in the classroom and

explore the underlying mechanisms through which these peer effects operate. We

identify as low ability students those who are enrolled at least one year behind their

birth cohort ("repeaters"). We show that there are marked differences between the

academic performance and behavior of repeaters and regular students. The status of

repeaters is mostly determined by first grade; therefore, it is unlikely to have been

affected by their classroom peers, and our estimates will not suffer from the reflection

problem. Using within school variation in the proportion of these low ability students

across cohorts of middle and high school students in Israel, we find that the

proportion of low achieving peers has a negative effect on the performance of regular

students, especially those located at the lower end of the ability distribution. An

exploration of the underlying mechanisms of these peer effects shows that, relative to

regular students, repeaters report that teachers are better in the individual treatment of

students and in the instilment of capacity for individual study. However, a higher

proportion of these low achieving students results in a deterioration of teachers'

pedagogical practices, has detrimental effects on the quality of inter-student

relationships and the relationships between teachers and students, and increases the

level of violence and classroom disruptions.

**Keywords**: Peer effects, Education production function.

**JEL Codes**: 12, 121, J24