Does Including Students with Special Needs in Grade-3 Classes Affect the Achievement of Students without Special Needs?

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Key words: special education, disabilities, elementary education, inclusive schools

Background:

Some parents and educators worry that inclusion – that is, placing students with special needs in the regular classroom – will negatively affect the academic achievement of the students without special needs, for example, by creating more demands on the teacher’s attention and for other resources. This study uses data from the 1997-1998 Ontario provincial assessment to investigate the relationship between the number of students with special needs in almost 2,000 grade-3 classes and the achievement scores of their peers without special needs. Students with special needs included those students formally deemed to have a disability that affects their learning, plus students receiving special programs due to an Individual Education Plan (IEP).

Main Question:

Does the presence of students with special needs have a negative effect on the academic achievement of students without special needs?

Findings:

Participants and Measures: Almost 2,000 grade-3 classes in Ontario were included in this study. These classes were single-grade (that is, only grade-3 students), had at least 16 students, and included no more than one-third of the students in the class with special needs. The achievement
of the students without special needs in those classes was measured by Ontario's provincial
assessment of reading, writing, and mathematics. Other information collected during the testing
provided the numbers of students with and without special needs in each class. Because other
studies have shown that socio-economic status (SES) is positively correlated with achievement,
the researchers included SES in this study. Using 1996 census data, they obtained the SES of
each school by computing the average income of the families living within the postal code of
each school.

Analyses: The relationships between the number of students with special needs and the large-
scale assessment scores of their peers without special needs were examined, while statistically
controlling for differences among classes in SES and overall class size.

Results: When the variance in achievement scores due to differences in class size and SES was
removed, the relationship between the number of students with special needs and the
achievement scores was small, but positive and statistically significant: .05 for reading and
writing and .07 for mathematics. In other words, when the researchers controlled for other
sources of variance, students without special needs performed slightly better as the number of
students with special needs in their classes increased.

Implications:

These findings question the widely held belief that the number of students with special needs
who are present in classrooms negatively affects the academic achievement of students without
special needs. This holds despite the fact that the number of students with special needs
comprised up to one third of the total class size in the classes studied. Although other studies
have also shown no negative impact of inclusion of students with special needs, those studies
were limited by small sample sizes. This study, based on almost 2000 grade-3 classrooms across
Ontario, is the largest Canadian study to date of the effect of inclusion.

Summary Written by: Mindy R. Carter (UBC doctoral student)