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SCHOOL ACHIEVEMENT GAINS OF ELEMENTARY SCHOOL STUDENTS IDENTIFIED
AS GIFTED IN AN URBAN PUBLIC SCHOOL DISTRICT: AN EXPLORATORY STUDY
USING HIERARCHICAL LINEAR MODELING (132 pp.)

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        The current study examined data collected on a longitudinal cohort of students who were

identified as gifted and either received education in a self-contained classroom for gifted students

or in a regular education classroom as well as non-gifted students from the same grade cohort.

Hierarchical linear modeling (HLM) was used to compare the academic achievement growth of

these students in reading and math as measured by standardized and criterion referenced test

measures that utilized scaled scores. Specifically, scaled scores from the SAT (reading and math)

and OAT (reading) were examined. HLM was utilized since it takes into account the multilevel,

nested nature of observations within students over time and can compare academic achievement

growth between students. Student characteristics included in the model as controls were gender,

ethnicity, SES-level of the neighborhood school attended, and school ability level as measured

by the Otis Lennon School Ability Test (OLSAT) and class placement. Differences in initial

(baseline) scores of the students in each group as well as growth over time were examined with

and without controlling for student characteristics. Results indicated that with and without

controlling for student characteristics, gifted students in self-contained classrooms had higher

initial achievement than non-gifted students on the SAT-Math and OAT-Reading, but that they

did not have higher yearly growth on these two measures. However, gifted students in self-

contained classrooms did have higher growth than non-gifted students on SAT-Reading.

Additionally, gifted students in regular education classrooms had higher initial achievement than gifted students in self-contained classrooms on both SAT-Reading and SAT-Math, but there were no differences between these two groups in yearly growth on either of these achievement tests.