



The University of Chicago
Department of Statistics

Master's Seminar

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**Statistical Analysis of Children's Performances
and Their Demographic Characteristics**

**THURSDAY, November 16, 2006 at 3:00 PM
110 Eckhart Hall, 5734 S. University Avenue**

ABSTRACT

Who is left behind, and where?

Sociologists and educators strive to discover possible relationships or associations present among childrens performances and their demographic characteristics. By discovering patterns and trends, educators can develop different strategies and recommendations to improve the effectiveness, efficiency, and quality of current education systems. With 92 children from Chicago public schools and the demographic characteristics included in this study through model building and other statistical techniques, one wishes to explore possible associations among children's demographic characteristics and performances in areas like language arts, visual arts, mathematics, sciences, and performing arts. Interestingly, grade, ethnicity and number of repetition of an exam are indeed significant covariates in terms of predicting childrens performances. Furthermore, there seems to be a relatively low correlation present among different performances within a child. This suggests that there is a unique learning profile for each child. Unlike usual, the results indicate that ethnicity and socio-economic status are not the only primary factors which may affect childrens performances in various areas.

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