

Abstract

Given the past 15 years of reporting on student subgroups and 10 years using various growth models, accountability systems can now be better informed. In this study, we analyze identification and services of students with specific learning disabilities (SLD). We document the degree to which SLD students are identified and receive special services, then evaluate growth with a transition matrix and a multi-level model. Results indicate some students change in their identification as SLD over time, but the effect is negligible on growth. Time-varying student characteristics therefore likely have little implication for models not accounting for this variability.

Method

Measure. Oregon Assessment of Knowledge and Skills (OAKS)

- Computer adaptive
- Vertical scale
- Statewide test for accountability (during the time of the study)

Sample.

- Longitudinal data, Grades 6-8
- 128,114 students
 - Approximately 43,000 students per cohort
- Three cohorts
 - 2007-2008 to 2009-2010
 - 2008-2009 to 2010-2011
 - 2009-2010 to 2011-2012

Analyses.

Multilevel Model

$$y_{ij} = \pi_{0j} + \pi_{1j}(\ln(w_{ij})) + e_{ij}$$

$$\pi_{0j} = \beta_{0\{0\}} + \beta_{0\{1\}}(C_6) + \beta_{0\{2\}}(C_7) + \beta_{0\{3\}}(Male) + \beta_{0\{4\}}(FRL) + \beta_{0\{5\}}(LEP) + \beta_{0\{6\}}(AmInd) + \beta_{0\{7\}}(Asian) + \beta_{0\{8\}}(Black) + \beta_{0\{9\}}(Hispanic) + \beta_{0\{10\}}(MultiEth) + \beta_{0\{11\}}(Decline) + \beta_{0\{12\}}(SLD_s) + \beta_{0\{13\}}(SLD_a) + u_{0j}$$

$$\pi_{1j} = \beta_{1\{0\}} + \beta_{1\{1\}}(C_6) + \beta_{1\{2\}}(C_7) + \beta_{1\{3\}}(Male) + \beta_{1\{4\}}(FRL) + \beta_{1\{5\}}(LEP) + \beta_{1\{6\}}(AmInd) + \beta_{1\{7\}}(Asian) + \beta_{1\{8\}}(Black) + \beta_{1\{9\}}(Hispanic) + \beta_{1\{10\}}(MultiEth) + \beta_{1\{11\}}(Decline) + \beta_{1\{12\}}(SLD_s) + \beta_{1\{13\}}(SLD_a) + u_{1j}$$

Changes in Status and Performance for Students with Learning Disabilities

Daniel Anderson (daniela@uoregon.edu)

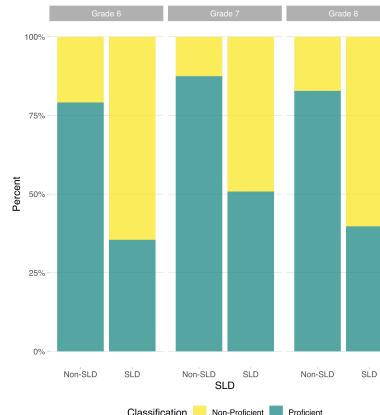
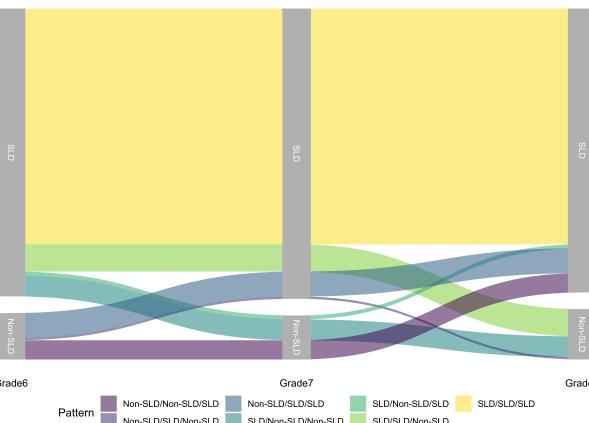
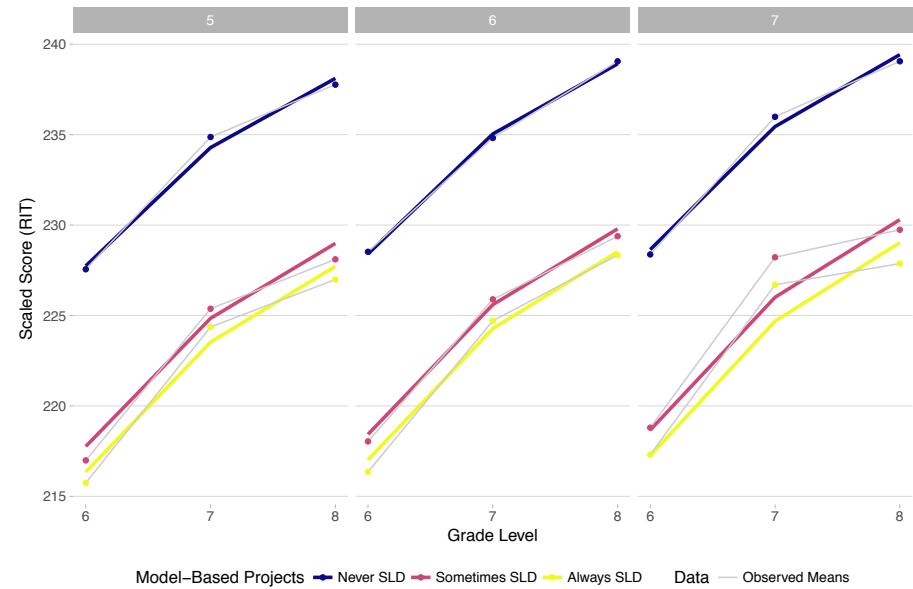
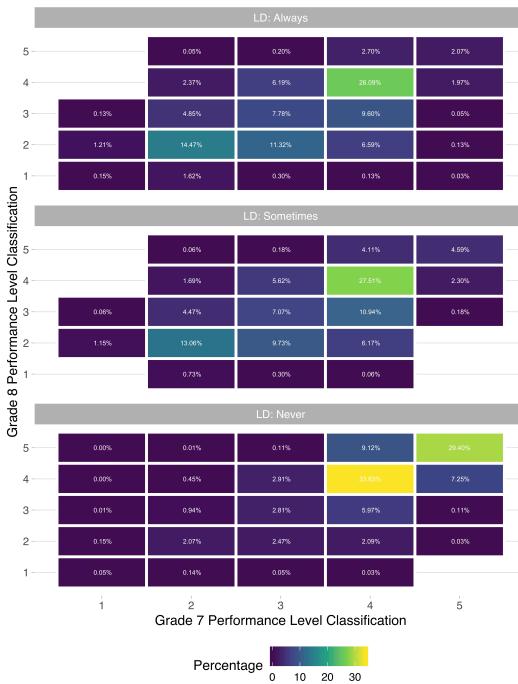
Gerald Tindal (geraldt@uoregon.edu)

Behavioral Research and Teaching, University of Oregon

Funding Sources

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R324C110004 to the University of Oregon. The opinions expressed are those of the author and do not represent views of the Institute or the U.S. Department of Education.

Results



Discussion

Students who were *always* SLD progressed, on average 0.70 [CI: 0.56, 0.85] points more per year than students who were *never* SLD, while students who were *sometimes* SLD progressed 0.61 [CI: 0.35, 0.86] points more per year, while controlling for a range of other demographics. The overlap of the confidence intervals indicates non-significant differences in the growth rates between these two groups. Further, as shown by the heatmap, students who were *always* and *sometimes* identified transitioned between Grades 7 and 8 with very similar patterns overall. These results suggest that, at least over a three year period, accountability models are likely impervious to these "wandering" SLD identifications.