Evaluating Growth of Students with Significant Cognitive Disabilities on Alternate Assessments

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NCAASE National Center on Assessment and Accountability for Special Education
Advancing research on growth measures, models, and policies for improved practice

Abstract

We focus on participation of students with significant cognitive disabilities in a statewide alternate assessments (AA) and address issues in tracking growth (change over time). Accountability data from a state are used to address development of data sets, selection of an appropriate growth models, and preparation of accountability results for public dissemination.

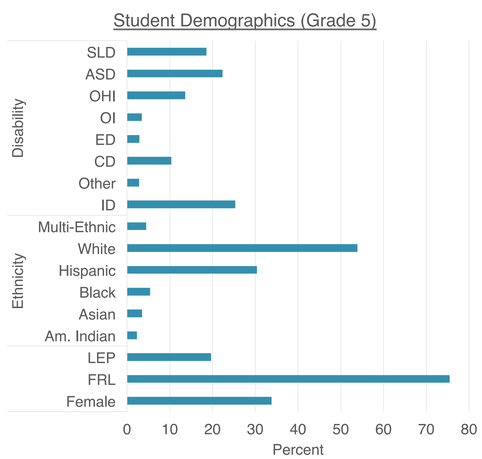
With a decade of outcomes, we can determine if this population has benefited from participating in accountability systems. To document growth, however, educators need to consider the students (their needs and characteristics), the manner in which data are organized and analyzed, and the accountability reports that are developed and disseminated for critical stakeholders.

Method

Measure
The state reading Alternate Assessment was linked to grade level content standards that had been reduced in depth and breadth (USED, 2005), and administered using a paper-pencil format (Anderson, Farley, & Tindal, 2013). Test results for the AA were reported for the scaled RIT score, and at four performance levels (*does not yet meet*, *nearly meets*, *meets*, *exceeds*) or two performance levels (*does not meet* and *meets*).

Analyses
We used descriptive statistics to analyze the Grade 4 to Grade 5 change in proficiency level (5 or 2 categories) and scaled RIT scores. For school effect sizes we used change in percent proficient and change in mean RIT scores with the Grade 4 and 5 student pooled *SD* (Bloom, Hill, Black, & Lipsey, 2008).

Sample
The original sample for this study included four cohorts of students in Grades 3 through 5 from 2007-08 to 2012-2013 whose scores on a state Alternate Assessment reading test were included in AYP school performance calculations. Exclusion rules: students who did not follow the typical grade level sequence; students with missing Grade 4 or 5 RIT score or School ID; schools with < 10 qualifying students. Final sample included 1324 students in 87 schools.

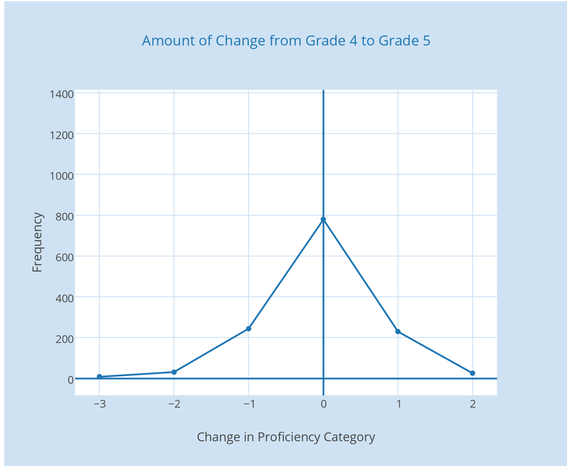


Results

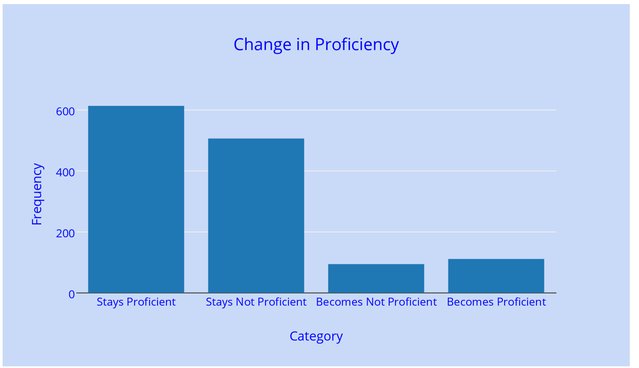
Transition Matrix

Proficiency Grade 4 \ Proficiency Grade 5	Low	Nearly Meets	Meets	Exceeds	Total
Low	**286**	33	14	4	337
Nearly Meets	93	**94**	81	12	280
Meets	26	54	**199**	116	395
Exceeds	9	5	97	**201**	312
TOTAL	414	186	391	333	1324

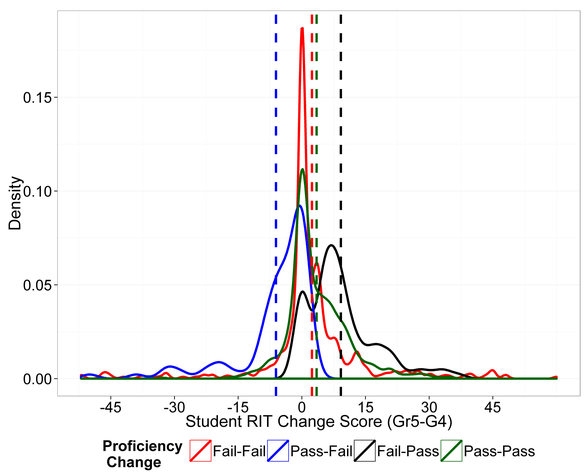
Proficiency Movement



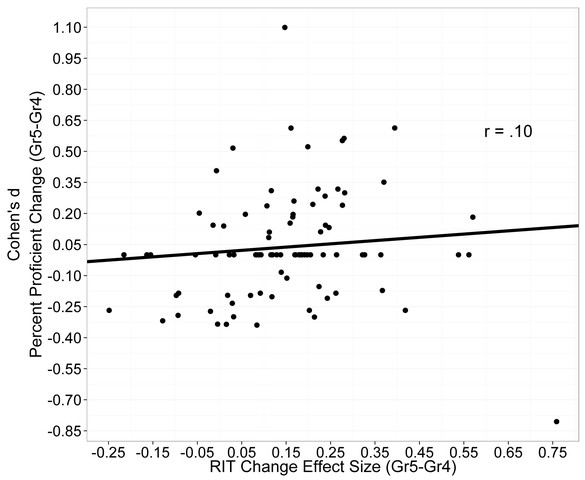
Proficiency Stability



Student Change from Two Models



School Effects from Two Models



Discussion

Limitations:
- In order to have ≥ 10 student within schools, we had to combine four cohorts of students. This resulted in the exclusion of many students and schools who participate in the AA.

Conclusions aboutStudents and Schools:

Students
- The majority of students remained in the same proficiency category from Grade 4 to Grade 5.
- Similarly, the RIT change across Grades 4 to 5 tended toward 0 for all student groups.
- Thus, growth measurement for this population is important but difficult.

Schools
- The nonparametric Effect Size estimates (i.e., Percent Proficient and Mean RIT change) result in different school effect estimates.
- Majority of RIT ES > 0; trend does not follow for Percent Proficient ES.
- Is 10 AA students per school satisfactory for a school effect size estimate?

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Further Information

Contact: Joe Nese (**jnese@uoregon.edu**).
More information on this and related projects can be obtained at **http://brtprojects.org** and **http://ncaase.com**.

References

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