

**EIMAC Spring 2008 Meeting**  
**Lessons Learned in Growth Models**  
**Tuesday, April 22, 2008**  
**Presenters: Matthew Cohen, OH; Gary Williamson, NC**

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Ohio

- Value-Added Model
  - Value-added analyses for state local report card (LRC) state accountability system starting 2007-08 for grades 4-8
  - SAS only bidder who met requirements
  - Longitudinal database, student-to-student comparison rolled up to school/district
  - Measures contribution of school or district to student test scores using scale score. Are schools adding value?
  - Can't use with 1% students because no scale score on alternate assessment
  - Comparison standard is 2006-07 distribution of scores
  - Two impacts of value-added results
    - Several years of above/below expected growth impacts state LRC designation
    - Also impacts AYP status
  - Value added analysis detects progress (or lack of gains) from both high and low performing districts
  - Surprising: Positive correlation between poverty and status achievement but no relationship between poverty and gains
  
- AYP Growth Model
  - AYP growth model to be implemented 2008-09
  - Measures each student's growth trajectory out to next school (maximum of three years). Is student on track to proficiency?
  - Only apply growth model if do not meet AYP
  - New perspective on accountability, may have pushback from high performing schools that are not meeting value-added expectations
  - Larger agenda of using data to improve schools, EVAAS reports from SAS, high training requirement
  - Complicated model threatens transparency
  - Vendor challenge - SAS multiple models, Battelle using different models with different districts
  - High costs re infrastructure (e.g., data system), personnel, training, and data crunching. Training is major component for school buy-in
  - Caused more focus on improving tests themselves

North Carolina

- Progressive evolution over 40 years from state sample to statewide testing to district recognition (high stakes for first time) to school accountability and need

- for quicker student gains
- Ongoing challenge: quick reporting turnaround - pressure to rush, curricular revisions every five years
- 1st growth model - based on previous performance only, not different standards based on demographics. Curriculum revised ongoing based on new attention on test. Students realized that field test didn't count so not engaged and state stopped field testing. Saw-tooth pattern of gains and dips attributed to statistical flaw (e.g., no schools meeting 6th grade growth expectation)
- 2005 - moved to status projection growth model including extant data, used for NCLB pilot
- 2005-06: growth model didn't help schools make AYP
- 2006-07: 12 schools made AYP based on growth but 10 of these made safe harbor or confidence interval (CI) anyway
- Lots of work, little benefit
- NCLB still all or nothing
- Safe harbor/CI steals some of the thunder
- Three years working at private research firm, findings looking at lexiles and growth curves for students in state for five years (not done at state):
  - Overall trend of improvement over time not detected from state analyses (realized that saw tooth pattern preceded first growth model)
  - Overall trend of gaps closing over time
  - Can only determine these trends in this way over six years, not the four years that's part of the state system
  - Average growth curves projects to readability for workplace/community college texts

### Growth Models Q and A

- Advice to states
  - Context of using data generally, not isolated. Interested in school improvement generally, this is one component, not that you're interested in growth models
  - Consider assumptions/perspective over time
  - Will never be finished, long list of modifications in NC for NCLB and state approaches, annual
  - Should be driven by purpose, use as tool to reach main purpose of supporting student improvement, driven by overall accountability system not NCLB
- Insights re analysis on students with disabilities
- Development of assessments themselves, accommodations, alternate assessments; and maintain fairness
- No guarantee that will hold true for each subgroup
- Transparency vs. rigor, how to move forward in reporting as change from system of color status: green, yellow, red
  - New system is check plus, check, check minus. Yellow wasn't clear. Don't let those discussions overwhelm more important issues

