

**Summary Notes (Working Document: 9/30/10 Draft)**  
**Growth Model Technical Assistance Committee Meeting**  
**September 16, 2010, 4:30 PM, through September 17, 2010, 2:00 PM**

**Attendees**

TAC Members: Damian Betebenner, Derek Briggs, Mark Ehlert, William Elder, Douglas Harris, Howard Jones, Cory Koedel, Robert Lee, Daniel McCaffrey, Michael Podgursky, Mark Reckase, Steven Rivkin, Sharon Schattgen  
 DESE Staff: Leigh Ann Grant-Engle, Karla Eslinger, Margie Vandeven  
 CTB Staff: Karla Egan  
 Observers: Ann Jarrett (MNEA), Stacey Preis (Joint Committee on Education), Soo-Yeon Cho (MU/OSEDA), John Hagar (MU/OSEDA)

**Background Information**

DESE's Purposes for Measuring Missouri Students' Growth in Achievement

- a. To inform judgments about an individual student's learning (presentation by Schattgen)
- b. To inform decisions about the quality of a building's or a district's programs/services, including accreditation/accountability judgments made by the Missouri School Improvement Program (presentation by Vandeven)
- c. To inform judgments about the effectiveness of teachers and leaders (presentation by Eslinger)
- d. To inform judgments about the quality of educator-preparation programs (presentation by Eslinger)

Context for Committee's Work

- a. Recommendations from "Missouri Model for Measuring Teacher/Leader Effectiveness" Stakeholder Work Group (presentation by Schattgen)
- b. Missouri Assessment Program Technical Characteristics (presentation by Egan)

Status of Work to Date

- a. Student growth percentiles (presentations by Betebenner and Elder)
- b. Value-added estimates (presentation by Podgursky, Ehlert, and Koedel)

**Major Points Made by TAC Members**

- a. Always consider purpose(s) first. Then determine how accurate our growth data must be, given our purpose(s).

- b. Invest in our assessment system (particularly in terms of addressing the vertical scale problem) as well as in our processes for determining and reporting growth. And, we must also invest in how the data will be used and how we handle stakeholders' responses to it.
- c. Our theory of action is that teaching will improve and achievement will increase if we attach high stakes to growth data. Are our assessments sensitive enough to capture these actions?
- d. Do not attach high stakes to growth data until we are truly ready—after we have piloted, checked, analyzed, etc.
- e. Go slow. Don't try to do everything at once.
- f. Control for every variable we can that would likely, if not controlled for, confound our findings.
- g. We can make inferences about growth, but it is much more challenging to determine causality.
- h. Education of stakeholders is crucial! We must communicate clearly and in an accessible manner. We must also involve stakeholders in meaningful conversations about the data and what it means; we can't just "tell" them what it is and how to use it.
- i. We don't know much about what really happens in schools when educators look at growth estimates (see McCaffrey paper on Pennsylvania pilot).
- j. We can deal with the error in student growth percentiles by reporting the three-year median for accountability purposes, or we can use the most recent year's median, if it is higher.

### **Key Questions Posed to TAC (Responses Shown in Italics)**

- a. Given what you know about the psychometric characteristics of the MAP Communication Arts and Mathematics assessments, what must we keep in mind as we use MAP data to calculate student growth percentiles and value-added estimates?  
*There seems to be a problem with the vertical equating for both the Communication Arts and the Mathematics assessments. This problem with the CA and MA vertical scales needs to be addressed before VAM estimates are calculated. Student growth percentiles are not as dependent on vertical scales as VAM estimates.*

- b. Do the merits of piloting growth measures with a small group of schools outweigh the desire for a “sooner-rather-than-later” statewide implementation? If so, how would you structure the pilot?

*Yes, DESE would be well-served by working with selected districts/buildings to pilot the roll-out of growth data and the guides for interpretation/use as well as other supporting documents/processes.*

*With respect to the pilot, first report growth data for buildings, not teachers. Run comparative analyses to determine if both types of yield consistent information. (Think about what LEA staff would do if the two types of data sent contradictory messages.) Provide clear and accessible information (supported by training) about how to use data.*

*Move to grade level next, then to teacher—but only when you are ready!*

*We should probably think carefully about the time line for releasing student growth percentiles for individual students. We may want to wait until Damian’s visualization tools (especially the trajectory tool) are refined before reporting data at this level.*

- c. With respect to value-added analyses in particular, which model would be most appropriate for us to use for the purpose of: 1) making district/building accreditation decisions, 2) evaluating teacher/leader effectiveness, 3) evaluating educator-preparation programs?

*We need to select the value-added model that best fits our particular purpose. We also need to keep in mind that it will be challenging to assign causality when evaluating educator-preparation programs.*

*We also need to keep in mind that value-added estimates are useful for identifying extremely “effective” teachers and extremely “ineffective” teachers, but that the estimates do not discriminate well in the middle range.*

*The methods we use for calculating growth data are not as important as how we communicate the data and what it means.*

- d. Given what you know about the Missouri School Improvement Program, what are your recommendations for incorporating information about growth into accreditation decisions?

*Incorporate growth as a separate standard.*

- e. What considerations/cautions must we keep in mind as we prepare to report student growth percentiles at the individual student level?  
*See note about time line above (question/response b).*
- f. What considerations/cautions must we keep in mind as we prepare to report student growth percentiles and value-added estimates at the teacher level? What criteria must be met before teacher-level data are disseminated?  
*We must be very cautious about reporting teacher-level growth data. We don't want to create a situation akin to what happened in Los Angeles. We need to pilot this data just as we do the building-level data.*
- g. What considerations/cautions must we keep in mind as we prepare to report value-added estimates and student growth percentiles at the grade and building levels?  
Responses to previous questions apply to this one.
- h. What considerations/cautions must we keep in mind as we prepare to report student growth percentiles and value-added estimates associated with educator-preparation programs? What procedures/policies should we put in place to maximize desired consequences and minimize negative impact?  
*It will be challenging to attribute causality to educator-preparation programs. [The TAC didn't really speak in a detailed way to this question.]*
- i. What components should effective programs of professional development (for various stakeholders—k-12 educators, teacher/leader educators, boards of education, etc.) include? How do we ensure that we properly prepare all stakeholders to interpret and use growth data?  
*Lessons from MA and from other states/districts:*  
*First impression is critical.*  
*Get initial buy-in.*  
*Make sure reports and documentation are complete and clear!*  
*Move users from awareness to understanding through involvement with data.*  
*Focus on what the data mean for stakeholders.*  
*Develop a curriculum so several "trainers" can teach about growth data.*  
*Take advantage of stakeholder networks (superintendents, principals, etc.)*  
*Create some type of "certification" for district staff.*  
*Don't focus the attention just on one number; look at a wider view.*  
*Learn from stakeholders' misconceptions.*  
*Gather feedback about obstacles/impediments.*

- j. What important lessons have other states learned that will be helpful to us?  
*MI uses value tables and incorporates data from alternate assessment. PA and OH produce school-level VAM estimates. Milwaukee produces school-level VAM estimates, which are used for accountability purposes. Houston uses two teacher-evaluation systems. HI hasn't yet released student growth percentiles, even though they have calculated them.*

*A local "core group" needs to "run" the process—to provide the leadership necessary for success.*

- k. What are the considerations/cautions associated with using data from other assessments to calculate growth?  
*We don't know enough about the technical characteristics of the data resulting from other assessments. NWEA assessments and Acuity assessments have potential, but we need to be sure they were administered in ways that allow for comparability across buildings/classrooms and that the resultant data are appropriate for growth calculations.*

Notes:

Doug Harris has written a new book about growth analyses, which is designed especially for policy makers. It will be published in December by Harvard Educational Press.

TAC members were told that they were not expected to answer each key question at the first meeting—that these questions are the ones DESE ultimately wants answered.