

Missouri's AYP Growth Model

July 16, 2008

Accountability Models

- *Status* - AYP is a status model. Status is one component of the Missouri School Improvement Program's (MSIP) accountability model.
- *Improvement* –Improvement (progress) is the second component of the MSIP accountability model.
- *Growth* –The AYP growth model tracks the achievement of an individual student compared with the student's established growth target.
- *Value Added-Model* –VAM includes growth but is statistically complex.
- MSIP uses a status and improvement model while NCLB uses a status and growth model. MSIP plans to incorporate a growth model (different than that defined under NCLB) component in Fifth Cycle.

NCLB Requirements

- NCLB requires that all states develop state standards and assess students in Grades 3-8 and once in high school in Mathematics and Communication Arts and in Science once at the elementary, middle school, and high school
- States must use Math and Communication Arts assessment data to determine if Adequate Yearly Progress is made each year at the state, district, and school levels

Adequate Yearly Progress (AYP)

States, districts, and schools must:

- Meet the annual proficiency target in each content area for each subgroup
 - Race/ethnicity (Asian/Pacific Islander, American Indian, Black, Hispanic, White, Other/Non-Response)
 - LEP
 - IEP
 - Free- and reduced-price lunch
- Meet the participation rate (95%)
- Meet the additional indicator(s)
 - Attendance rate for elementary and middle schools
 - Graduation rate for high schools
 - Attendance rate and graduation rate for school districts

AYP

Current AYP includes:

- Participation Rate (95%)
- Cell Size (30)
- Proficiency Target
- Additional Indicator(s) – (attendance and graduation rate)
- Confidence Interval
- Safe Harbor
- Safe Harbor Confidence Interval

Growth Model

- USED allowed states to apply for a growth model as part of pilot project in 2005-2006 (9 states were approved)
- USED reopened pilot in December 2007
- Proposals due February 15, 2008
- Notified in June that Missouri was approved along with 1 other state

Growth Model

- Does NOT change the target of 100% Proficiency by 2014
- Will NOT impact a large number of schools initially, but will help some schools
- Will provide administrators, teachers, and parents with better information about individual student achievement
- Will help inform instruction

Growth Model Basics

- Provides opportunity for schools and districts to meet AYP by receiving credit for students who demonstrate improvement over time
- Growth calculations will be used in making AYP determinations for 2008-2009
- Individual student growth targets determine if each student is “On Track to be Proficient” (On Track) within four years or by grade 8
- Students who are “On Track” are added to the students who are Proficient in determining if the AYP Proficiency target is met

Student Growth Targets

- Students who transfer among Missouri school districts will retain their original growth targets
- Student growth targets will be established using the student's first MAP grade level assessment data (baseline) beginning with the 2006-2007 school year
- Growth trajectories will be established for all students (Proficient or not Proficient)
- Students will have four years or until grade 8 to become Proficient
- DESE will calculate growth targets for each student and provide districts with the data via Crystal Reports

Student Growth Targets

- For students who transfer into Missouri from another state, their first MAP grade level assessment will be used to establish a baseline for calculating growth
- Growth targets will be recalculated for students who score below Proficient after scoring Proficient. Such students will have four years or until grade 8 to become Proficient
- Students assessed in grade 3 and in high school (end-of-course assessments) will be included in the percent Proficient, but will not be evaluated for growth

Calculating Student Growth Targets

Grade 3 Mathematics

2007 Baseline Score Grade 3 = 477

Proficiency Cutpoint Grade 7 = 685

Total Growth = $685 - 477 = 208$

Annual Growth = $208 / 4 \text{ years} = 52$

2007 Baseline Score Grade 3 = 477

Annual Growth $\quad \quad \quad + \underline{52}$

2008 Growth Target Grade 4 = 529 (On Track) *Not Proficient

2009 Growth Target Grade 5 = $529 + 52 = 581$ (On Track)

2010 Growth Target Grade 6 = $581 + 52 = 633$ (On Track)

2011 Growth Target Grade 7 = $633 + 52 = 685$ (Proficient)

Impact on AYP Status

AYP Math Proficiency Target = 50%

District % Proficient = 40%

AYP = Not Met

Growth Calculation = $\frac{\# \text{ Proficient} + \# \text{ On Track}}{\# \text{ Reportable}}$

Proficient = 40

On Track = 10

Reportable = 100

Proficient + # On Track = $\frac{50}{100} = 50\%$

AYP = Met **

AYP with Growth

1. Participation Rate (95%)
2. Cell Size (30)
3. Proficiency Target (Status Calculation)
4. Additional Indicator(s) – (attendance and graduation rate)
5. Confidence Interval
6. Growth
7. Safe Harbor *Applied to Status Only
8. Safe Harbor Confidence Interval *