

Understanding Academic Performance

October 13, 2014

Minnesota Comprehensive Assessments

- **MCA-II**

- Beginning in 2006, a census test given annually to grades 3-8 and 10 for Reading and grades 3-8 and 11 for Math. We no longer offer the MCA-II.

- **MCA-III**

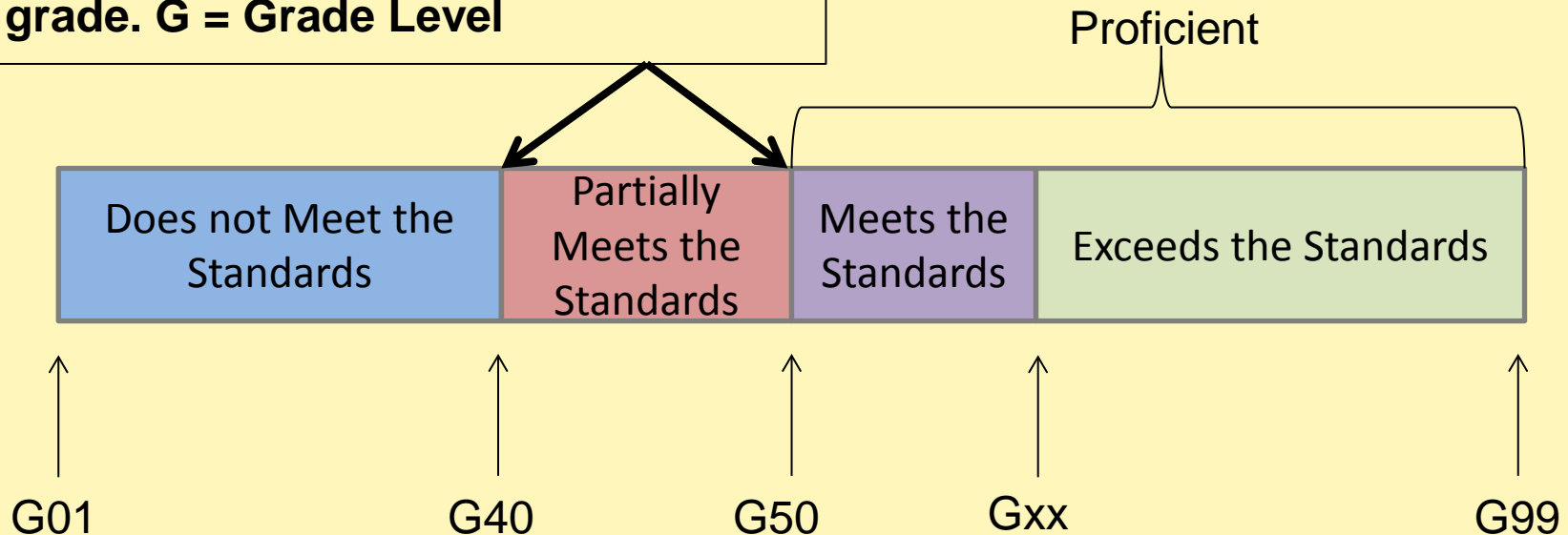
- Beginning in 2011, a census test given annually to grades 3-8 for Math replacing the MCA-II. In 2013, this was expanded to Reading for grades 3-8 and 10. In 2014, this was expanded to grade 11 Math.

2014 MCA Mathematics and Reading Achievement Levels and Percent Proficient

- **Four Achievement Levels**
 - **Does Not Meet the Standards (D)**
 - **Partially Meets the Standards (P)**
 - **Meets the Standards (M)**
 - **Exceeds the Standards (E)**
- **Students reported as “proficient” are those that have met or exceeded the standards**

MCA Scale Scores and Achievement Levels

The first two cut scores will be constant over grades and testing years, G40 and G50. The third cut score can vary slightly for each grade. G = Grade Level



For example, grade 3 scores range from 301-399, with 340 and 350 serving as the cut scores for Partially Meets the Standards and Meets the Standards.

Growth Z Scores

- **Growth can indicate a school's success in helping students learn.**
 - For example, it allows schools and teachers to track both those students who are making gains each year but are not proficient and those students who have previously attained proficiency but have not made expected progress in subsequent years.
- **Growth scores in represent a normative approach to gauging progress from year to year in academic achievement.**

Growth Z Scores continued

- **Growth at or above expectations is measured as growth at zero or above.**
 - **Positive growth indicates a student is progressing more than his/her academic peers.**
 - **Negative growth indicates a student is not progressing similarly to his/her academic peers.**
- **Students who did not attain normal grade progression, those without a score in the prior year, or those who were administered a different test in the prior year are not included in this growth measurement.**

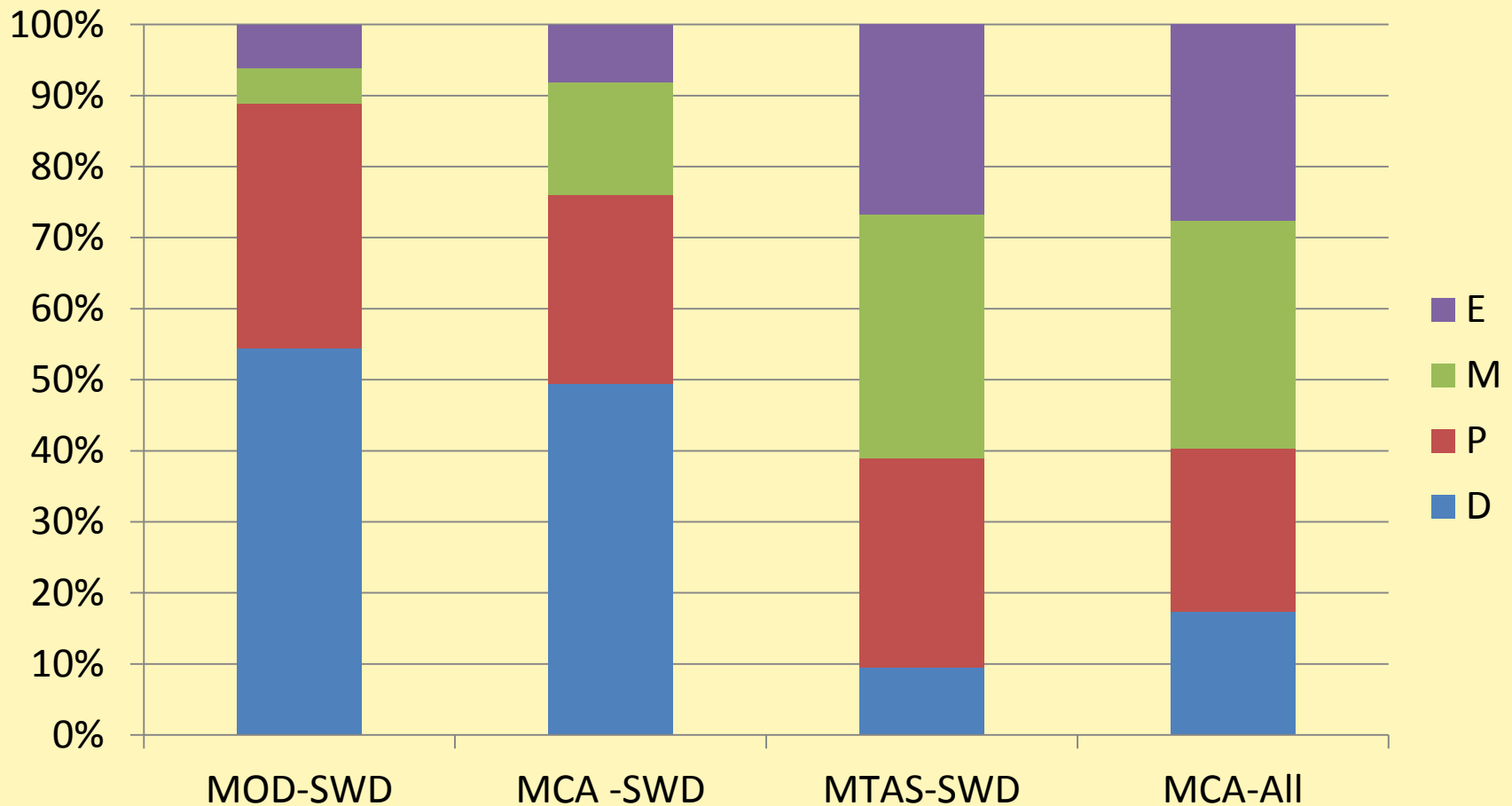
Other Growth Z Score Information

- **Growth is calculated at the student and school level for both math and reading.**
- **The Minnesota Dashboard uses Growth in Math as one of its indicators. This simply is the percent of students with a positive math growth z score in the state.**
- **Growth comprises two-thirds of the MMR.**

Assessment Options for Students with Disabilities (SWD)

- **MCA**
 - Majority of SWD
 - 65% of SWD in Grade 8 Math
- **MCA-Modified**
 - 25% of SWD in Grade 8 Math
- **MTAS**
 - 11% of SWD in Grade 8 Math

2014 Grade 8 Mathematics Performance on Statewide Assessments



Can we describe student performance at each of the achievement levels on the various assessments?

Achievement Level Descriptors

- Developed by content and assessment specialists; independently reviewed
- Based on assessment results
- Developed for each assessment, content area, and grade level
- Used during standard setting to create threshold “just barely meets” descriptors and cut scores
- Range of performance within each achievement level; ALDs describe mid-range performance for each level

Performance on Grade 8 MTAS Algebra Strand

PARTIALLY MEETS	MEETS
Recognize that one or more values can replace a variable	Evaluate an algebraic expression when the value of one variable is given

Performance on Grade 8 MCA-Modified Algebra Strand

PARTIALLY MEETS	MEETS
Evaluate simple expressions by substituting whole numbers	Solve algebraic equations at specified values of their variables

Performance on Grade 8 MTAS Algebra Strand Example

PARTIALLY MEETS	MEETS
<p>Recognizes familiar linear functions in symbolic (using key variables) and graphic presentations</p> <p>Translates linear representations from an equation in slope-intercept form to a graph</p> <p>Identifies y-intercept and slope from graphical representation or an equation written in slope-intercept form</p> <p>Evaluates routine algebraic expressions</p> <p>Solves equations with variables using substitution</p>	<p>Recognizes a linear function in symbolic and graphic presentations</p> <p>Represents familiar and routine linear situations with tables, verbal descriptions, symbols, equations, and graphs and translates from one representation to another</p> <p>Identifies graphical properties of linear functions</p> <p>Generates and evaluates equivalent algebraic expressions</p> <p>Identifies systems of linear equations when provided a verbal description</p> <p>Identifies the solution of a linear system as the intersection of the two lines when given the graph</p> <p>Solves equations and inequalities using algebraic properties</p>

Achievement Level Descriptors

Achievement Level Descriptors

[Item Samplers](#)[Register for Advisory Panels](#)[Test Specifications](#)

Contact

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Achievement Level Descriptors (ALDs) describe the four levels of achievement on the Minnesota Academic Standards. Developed by panels of Minnesota teachers, ALDs from the Individual Student Reports for reading, mathematics, science and English learner assessments are provided here. ALDs for the alternate assessments, the Minnesota Test of Academic Skills (MTAS) and the MCA-Modified, represent reduced depth, breadth and complexity of the academic standards. Several new ALD translations are available.

Translated Achievement Level Descriptors

Mathematics MCA-III, Grade 11: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Mathematics MCA-III, Grades 3-8: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Mathematics MCA-Modified, Grades 5-8: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Mathematics MCA-Modified, Grade 11: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Mathematics MTAS, Grades 3-8: [Hmong](#), [Somali](#), [Spanish](#)

Mathematics MTAS, Grade 11: [Hmong](#), [Somali](#), [Spanish](#)

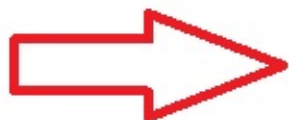
Reading MCA, Grades 3-8 and 10: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Reading MCA-Modified, Grades 5-8 and 10: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Reading MTAS, Grades 3-8 and 10: [Hmong](#), [Somali](#), [Spanish](#)

Science MCA, Grades 5, 8 and High School: [Arabic](#), [Chinese](#), [Hmong](#), [Khmer](#), [Laotian](#), [Russian](#), [Somali](#), [Spanish](#), [Vietnamese](#)

Science MTAS, Grades 5, 8 and High School: [Hmong](#), [Somali](#), [Spanish](#)



[MCA-Modified Achievement Level Descriptors - 8/13/14](#)

[MCA Achievement Level Descriptors - 8/13/14](#)

[MTAS Achievement Level Descriptors - 8/13/14](#)