

Minnesota's Multiple Measurements Rating (MMR) System

ESEA Flexibility Background

- **The Elementary and Secondary Education Act (ESEA) was reauthorized in 2001 and became known as No Child Left Behind (NCLB)**
- **The U.S. Department of Education (ED) recognized that the state accountability and reform landscape had significantly changed since No Child Left Behind was passed**
- **In September 2011, President Obama announced that ED would be formally inviting states to apply for "ESEA Flexibility" (waivers) in exchange for state leadership in meeting four key principles**
- **Under ESEA Flexibility, Minnesota built a next generation accountability system that builds on and moves beyond NCLB requirements**

Accountability, Recognition and Support

- **The NCLB Flexibility Waiver strengthens Minnesota school accountability by:**
 - **Transitioning from a punitive, compliance-based system to one of targeted, strategic support**
 - **Creating opportunities to learn from the best practices of our highest-performing schools**
 - **Empowering a statewide system of support that can provide better professional development to teachers through the work of the Regional Centers of Excellence**
 - **Setting a new goal and targets to reduce the achievement gap in half by 2017**
 - **Giving every school an achievement gap measure**
 - **Raising the graduation rate goal to 90% for every student group, not just for students overall**
 - **Ensuring all students demonstrate growth through a new growth measure**

Multiple Measurements Rating

- **Multiple measures are used to compute two different ratings and determine designations and recognition for Title I schools**
 - **Multiple Measurements Rating (MMR)**
 - **Proficiency**
 - **Growth**
 - **Achievement Gap Reduction**
 - **Graduation**
 - **Focus Rating (FR)**
 - **Focused Proficiency**
 - **Achievement Gap Reduction**

Total MMR

- **Each domain is worth 25 points**
- **The MMR is generated by dividing the total number of points earned by the total number of points possible**
- **For most elementary and middle schools, 75 points possible**
- **For most high schools, 100 points possible**
- **The MMR is a 0-100 percentage for all schools**

Proficiency Domain

- **Proficiency domain uses Adequate Yearly Progress (AYP) index model**
 - Look at each student group in a school and determine whether they have adequate proficiency index rates and are meeting established targets
 - Targets are set in order to reduce the achievement gap by 50 percent by 2017
- **Schools earn points based on a weighted percentage of student groups making AYP**
 - Weighting is based on the size of the student group
- **Only student groups with at least 20 students are included**

Proficiency Example

- **Secondary School Example:**
 - **Weighted percentage of student groups reaching AYP target = 74.8%**
 - **.748 x 25 points possible = 18.7**
 - **18.7 points earned in Proficiency domain**

Growth Domain

- **Growth measures ability of schools to get students to exceed predicted growth**
- **Student growth scores are based on:**
 - The students' last assessment result
 - Being above or below prediction
- **School growth score is average of student growth scores**
- **Positive growth score indicates success**

Growth Domain Continued

- **Uses individual student growth scores**
- **Averages all growth scores for reading and math to generate one school growth score average**
- **Students need matching tests across years to measure growth**
- **Limited to grades 4 through 8 and 11 for math and grades 4 through 8 and 10 for reading**

Allocating Points for Growth Domain

- **Normal Curve Equivalents (NCEs) are used for assigning points**

- **A z-score is calculated as:**

$$z - score = \frac{\textit{observed school data} - \textit{mean for school type}}{\textit{standard deviation for school type}}$$

- **The z-score is turned into an NCE:**

$$NCE = 50 + 21.063 \cdot (z \textit{ score})$$

- **NCEs have a range of 0 to 100**
- **School's NCE is divided by four to calculate the points**

Growth Example

- **Secondary School Example:**
 - Average growth score = .3302
 - Based on other secondary schools in the state, this gives the school a normal curve equivalent (NCE) score of 80
 - $80/4 = 20$ points
 - 20 points earned in Growth domain

Achievement Gap Reduction Domain

- **Measures the ability of schools to get higher levels of growth from lower-performing student groups than statewide average growth for higher-performing groups**
 - School Indian growth compared to statewide White growth
 - School Asian growth compared to statewide White growth
 - School Hispanic growth compared to statewide White growth
 - School Black growth compared to statewide White growth
 - School LEP growth compared to statewide non-LEP growth
 - School Special Ed growth compared to statewide non-Special Ed growth
 - School FRP growth compared to statewide non-FRP growth

Achievement Gap Reduction Domain (continued)

- **Uses average growth score for seven AYP student groups including American Indian, Asian, Hispanic, Black, FRP, Special Ed, and EL**
- **Needs at least 20 unique students across all student groups**
- **Limited to grades 4 through 8 and 11 for math and grades 4 through 8 and 10 for reading**
- **Negative Achievement Gap Reduction score indicates success**

Achievement Gap Reduction

- **A student group's achievement gap reduction score can be calculated as:**
- **(Growth of state comparison group – growth of school student group) = Achievement Gap Reduction Score**
- **School receives achievement gap reduction score for each applicable student group and content area AND an aggregated achievement gap reduction score for the school as a whole**

Allocating Points for Achievement Gap Reduction Domain

- Normal Curve Equivalents (NCEs) are used for assigning points

- A z-score is calculated as:

$$z - score = \frac{\textit{observed school data} - \textit{mean for school type}}{\textit{standard deviation for school type}}$$

- The z-score is turned into an NCE:

$$NCE = 50 + 21.063 \cdot (-z \textit{ score})$$

- NCEs have a range of 0 to 100
- School's NCE is divided by four to calculate the points

Achievement Gap Reduction Example

- **Secondary School Example:**
 - **Achievement Gap Reduction Score = -0.1181**
 - **Based on all other secondary schools in the state, this gives the school an NCE score of 91**
 - **$91/4 = 22.75$ points**
 - **22.75 points earned in Achievement Gap Reduction domain**

Graduation Rate Domain

- **Graduation Rate domain uses AYP index model**
 - Look at each student group in a school and determine whether they have adequate graduation rates or are showing adequate improvement from year to year
- **Schools earn points based on the weighted percentage of student groups that meet AYP graduation rate target or demonstrate improvement from the prior year**
 - Weighting is based on the size of subgroups
- **Grad rate targets are 90% for all students AND each student group**
- **Only student groups with at least 20 students are included**

Graduation Example

- **Secondary School Example:**
 - **Weighted percentage of student groups reaching graduation rate target = 88%**
 - **.88 x 25 points possible = 22 points**
 - **22 points earned in Graduation domain**

Total MMR Example

- **The MMR is generated by dividing the total number of points earned by the total number of points possible**
 - **Proficiency: 18.7 points**
 - **Growth: 20 points**
 - **Achievement Gap Reduction: 22.75 points**
 - **Graduation: 22 points**
 - **Total points earned divided by points possible:
83.45/100**
 - **Secondary School MMR = 83.45%**

Total Focus Rating (FR)

- **All schools in the state also get an FR**
- **Focus Rating measures proficiency and growth of minority students and students receiving special services (EL, Special Ed, Free and Reduced Price Lunch) in the following two domains:**
 - **Focused Proficiency**
 - **Achievement Gap Reduction**
- **Each Domain is worth 25 points, for 50 possible points**

Focused Proficiency

- **Calculated the same as the MMR Proficiency Domain using fewer student groups**
- **Uses only seven AYP student groups including American Indian, Asian, Hispanic, Black, FRP, Special Ed, and EL**
- **Only groups with at least 20 students are included**

Focused Proficiency Example

- **Secondary School Example:**
 - **Weighted percentage of groups reaching AYP target = 100%**
 - **1.00 x 25 points possible = 25 points**
 - **25 points earned in Focused Proficiency domain**

Achievement Gap Reduction

- **The Achievement Gap Reduction domain in the MMR and the FR are the same**
- **See slides 12 to 16 for information**
- **Secondary School Example:**
 - **Achievement Gap Reduction Score = -0.1181**
 - **Based on all other secondary schools in the state, this gives the school an NCE score of 91**
 - **$91/4 = 22.75$ points**
 - **22.75 points earned in Achievement Gap Reduction domain**

Total FR Example

- **The FR is generated by dividing the total number of points earned by the total number of points possible.**
 - **Focused Proficiency: 25 points**
 - **Achievement Gap Reduction: 22.75 points**
 - **Total points earned divided by points possible:
47.75/50**
 - **Apple Secondary School FR = 95.5%**

How are schools identified for support?

- **Title I schools that perform in the bottom 25% of schools within their grade grouping (high school, middle school, elementary) are identified as:**
 - **Priority Schools**
 - Bottom 5% on MMR
 - Identified every three years
 - **Focus Schools**
 - Bottom 10% on FR
 - Some schools are identified as Focus schools for persistent low graduation rates
 - Identified every three years
 - **Continuous Improvement**
 - Bottom 25% on MMR not already identified as Priority or Focus
 - Annual designation

How are high-performing schools recognized?

- Schools that perform within the top 40% of schools within their grade grouping (high school, middle school, elementary) are *annually* designated as:
 - **Reward Schools**
 - Top 15% on MMR
 - **Celebration Eligible**
 - Next 25% on MMR (in the 60th to 85th percentile)
 - Celebration Eligible schools are then invited to apply for the Celebration recognition

Contact

Email mde.nclbwaiver@state.mn.us with questions about the ESEA Flexibility Waiver or school designations

Email mde.analytics@state.mn.us for questions specific to MMR or FR data