

#### Information Services

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Andrew Statz, Chief Information Officer

Jane Belmore, Ph.D., Interim Superintendent of Schools

DATE: December 3, 2012

Appendix OOO-6-4 December 17, 2012

**TO:** Board of Education

FROM: Jane Belmore, Superintendent

**RE**: Measures of Academic Progress (MAP) Scores

#### I. Introduction

A. Title/topic: Report on Fall 2012 Measures of Academic Progress (MAP) Scores

#### B. Presenter/contact person:

Andrew Statz Bo McCready

- C. Background information: MMSD has administered the Measures of Academic Progress (MAP) examination to students in Grades 3-7 since the fall of the 2011-12 school year with Grade 8 being added during the 2012-13 school year. The MAP is a computer based adaptive examination. The MAP is administered in Reading, Mathematics, and Language Arts, although this report focuses only on Reading and Mathematics. The MAP is given in fall and spring, with a midyear winter assessment offered for diagnostic purposes.
- **D. BOE** action requested: Review and acceptance of this report

#### **II. Summary of Current Information**

**A. Summary:** Unlike other assessments, MAP measures both student performance and growth through administering the test in both fall and spring. No matter where a student starts, MAP allows us to measure how effective that student's school environment was in moving that student forward academically.

This fall's administration serves as a baseline for that fall to spring growth measure. It also serves as an indicator for teachers. As we continue professional development around MAP, we will work to equip schools to use this data at the classroom and individual student level. In other words, at its fullest use, a teacher could look at MAP data and make adjustments for the classroom or individual students based on where that year's class is in the fall, according to these results.

Meeting growth targets on the fall administration indicates that a student met or exceeded typical growth from Fall 2011 to Fall 2012. Typical growth is based on a student's grade and prior score; students whose scores are lower relative to their grade level are expected to grow more than students whose scores are higher relative to their grade level.

In Reading, more than 50% of students in every grade met their growth targets from Fall 2011 to Fall 2012. In Mathematics, between 41% and 63% of students at each grade level met their growth targets. The highest growth in Mathematics occurred from fourth to fifth grade (63%) and the lowest growth occurred from fifth to sixth grade (41%).

It is important to note that across student groups, the percent of students making expected growth is relatively consistent. Each student's growth target is based on his or her performance on previous administrations of MAP. The fact that percent of students making expected growth is consistent across student subgroups indicates that if that trend continues, gaps would close over time. In some cases, a higher percentage of minority students reached their growth targets relative to white students. For example, at the middle school level, 49% of white students met growth targets, but 50% of African American students and 53% of Hispanic students met their growth targets. In addition, English Language Learners, special education students, and students receiving free and reduced lunch grew at similar rates to their peers.

MAP also provides status benchmarks that reflect the new, more rigorous NAEP standards. Meeting status benchmarks indicates that a student would be expected to score "Proficient" or "Advanced" on the next administration of the Wisconsin Knowledge and Concepts Examination (WKCE).

That means that even though overall scores haven't changed dramatically from last year, the percent of students identified as proficient or advanced will look different with these benchmarks. That is not unique for MMSD – schools around the state and nation are seeing this as they also work toward the common core.

While these scores are different than what we have been used to, it is important to remember that higher standards are a good thing for our students, our districts and our community. It means holding ourselves to the standards of an increasingly challenging, fast-paced world and economy. States all around the country, including Wisconsin, are adopting these standards and aligning their work to them.

As we align our work to the common core standards, student achievement will be measured using new, national standards. These are very high standards that will truly prepare our students to be competitive in a fast-paced global economy.

At each grade level, between 32% and 37% of students met status benchmarks in Reading and between 36% and 44% met status benchmarks in Mathematics. Scores were highest for white students, followed by Asian students, students identified as two or more races, Hispanic students, and African-American students. These patterns are consistent across grades and subjects.

Attachment #1 shows the percentage of students meeting status benchmarks and growth targets by grade, subgroup, and grade and subgroup. School- and student-level reports are produced by NWEA and used for internal planning purposes.

**Analysis: Status Benchmarks.** The gaps between the percentages of students meeting status benchmarks for each student subgroup are consistent with what we know about achievement gaps in MMSD. White student performance is strong overall, but performance for African American students, English Language Learners, special education students, and students receiving free and reduced lunch is low.

Overall, a higher percentage of students met status benchmarks in Mathematics than in Reading. The highest grade/subject performance area was fifth grade math, with 44% of students meeting status benchmarks. The lowest grade/subject performance area was eighth grade reading, with 32% of students meeting status benchmarks.

**GROWTH TARGETS.** In most cases, the percentage of students meeting or exceeding growth targets meets or exceeds national averages. Page 10 of Attachment #1 details the percentage of students meeting or exceeding growth targets at each grade level and how that percentage of students compares nationally.

The consistent percentages of students meeting growth targets across student subgroups is an extremely encouraging result as it relates to closing achievement gaps. Because lower-performing students are expected to grow more than higher-performing students, similar rates of students meeting growth targets implies that the gap between higher-performing and lower-performing groups will narrow over time. If traditionally lower-performing groups (like African American students) continue to meet growth targets at similar rates to traditionally higher-performing groups (like white students), then these lower-performing groups will grow more and decrease gaps. When traditionally lower-performing groups meet growth targets at higher rates, as is the case for Hispanic and African American middle school students in Mathematics, gaps will close even faster.

For Mathematics, growth is particularly high from fourth to fifth grade and particularly low from fifth to sixth grade. Fourth to fifth grade growth is in the 90<sup>th</sup> percentile nationally but fifth to sixth grade growth is in only the 20<sup>th</sup> percentile nationally. This may be because of the significant presence of combined Grade 4/Grade 5 classrooms in MMSD. Research on multi-age classrooms indicates that the younger students in these classrooms tend to perform better than their peers in traditional classrooms and the older students tend to perform worse than their peers. This research is consistent with the patterns observed within MMSD.

**USING MAP RESULTS.** The MAP data presented in Attachment #1 is a communication to the Board and members of the public about the performance of the district as a whole.

At the school, subgroup, grade and individual student level, various reports and webbased applications are available from the vendor, NWEA. An example is the information packets sent to families that show a student's performance on the MAP over time. MAP results are available to individual teachers within a couple of days of their students taking the test. Building level results from the vendor are available within a couple of weeks of the testing window closing for the district.

Building leaders, administrators, and other staff have access to various Data Dashboard content and reports that feature MAP data. Data Dashboard content is automatically updated when results are posted to Infinite Campus. It is possible to drill into most dashboard content to student lists to see which students comprise certain results, such as those found not to be meeting growth targets.

Given that MAP is a computer adaptive assessment, the exact questions and their series experienced by each student are nearly unique. Because of this, strand level data is available which highlights individual student and aggregated results for the areas tested

within a subject. For example, data is available from the vendor and in the Data Dashboard for Foundations Vocabulary, Informational Text, and Literature – all of which comprise the Reading subject area score.

- **B.** Recommendations and/or alternative recommendation(s): It is recommended that the Board accept this report regarding MAP scores from the fall administration of 2012-13.
- C. Link to supporting detail: N/A

#### III. Implications

A. Budget: N/A

B. Strategic Plan: N/A

C. Equity Plan: N/A

D. Implications for other aspects of the organization: N/A

#### IV. Supporting Documentation

**A.** Attachment #1 – Fall 2012-13 MAP Report

# Fall 2012-13 Measures of Academic Progress (MAP) Report District Averages

#### Research & Evaluation

#### Madison Metropolitan School District

This report contains data from the Fall 2012 administration of the Measures of Academic Progress (MAP) examination in the Madison Metropolitan School District (MMSD). The MAP is a computer based adaptive examination, which means that a student's answer to each question affects the next question presented. Correct answers lead to more challenging questions and incorrect answers lead to less challenging questions. The difficulty of questions and subsequent responses determine each student's score.

MMSD administers the MAP in Reading, Mathematics, and Language Arts. This report, however, focuses only on Reading and Mathematics.

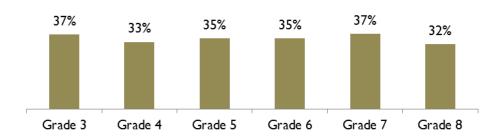
For each grade and demographic group, we report the percentage of students meeting defined status benchmarks that indicate proficiency and the percentage of students who met or exceeded typical growth rates from Fall 2011 to Fall 2012. Status benchmarks are aligned to the Wisconsin Knowledge and Concepts Examination (WKCE). Students meeting these benchmarks would be expected to score Proficient or Advanced on the WKCE, which the Wisconsin Department of Instruction (DPI) uses as its major test for school accountability. Typical growth rates are based on a student's grade and prior score; students whose scores are lower relative to their grade level are expected to grow more than students whose scores are higher relative to their grade level.

This report was prepared by Bo McCready in the MMSD Research & Program Evaluation office, bmccready@madison.k12.wi.us.

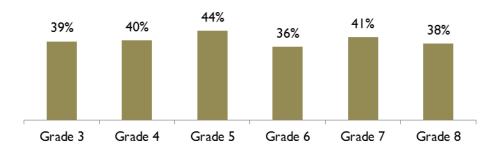
#### **Status Benchmarks**

Meeting fall and spring RIT status benchmarks is defined as scoring at a level where students would be expected to score Proficient or Advanced on the WKCE.

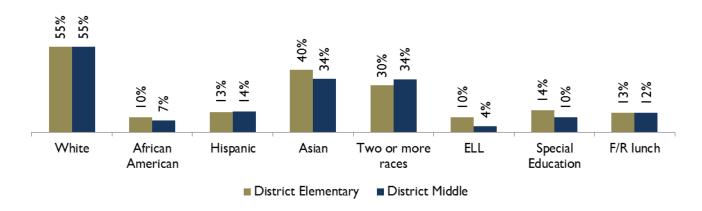
**Reading - % Meeting Benchmarks** 



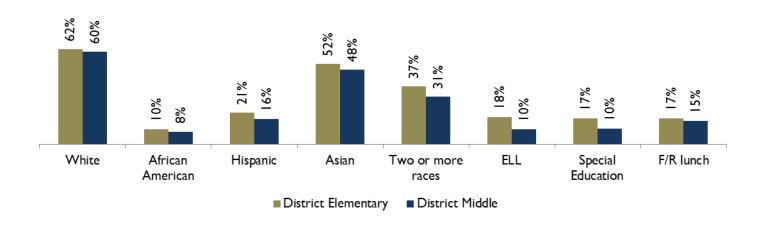
**Math - % Meeting Benchmarks** 



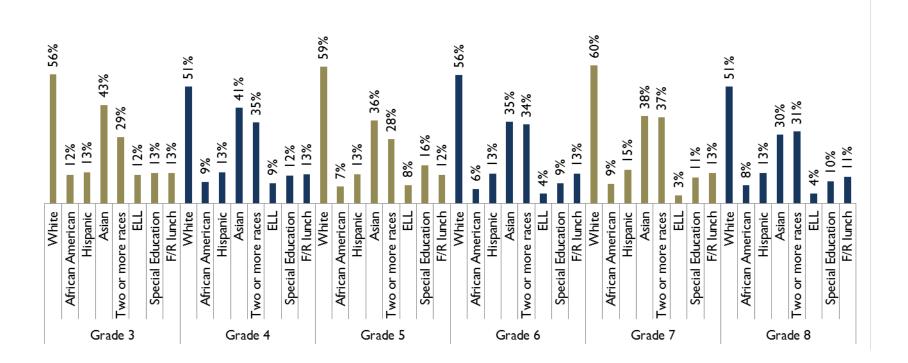
# Reading - % Meeting Benchmarks



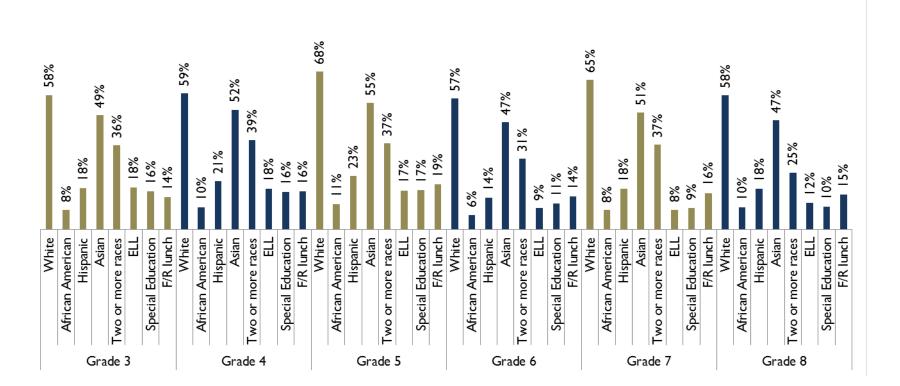
## **Math - % Meeting Benchmarks**



## **Reading - % Meeting Benchmarks**



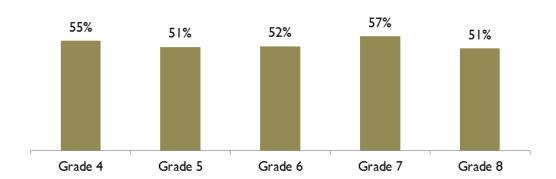
## Math - % Meeting Benchmarks



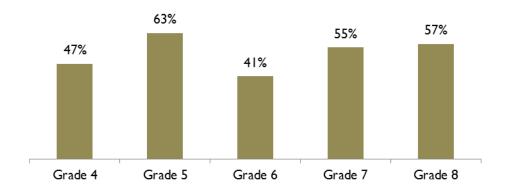
#### **Growth Targets**

Meeting growth benchmarks is defined as achieving a score increase between fall and spring greater than or equal to the NWEA-projected increase. The projected increase is based on each student's prior scores and the mean growth of students achieving similar scores nationwide.

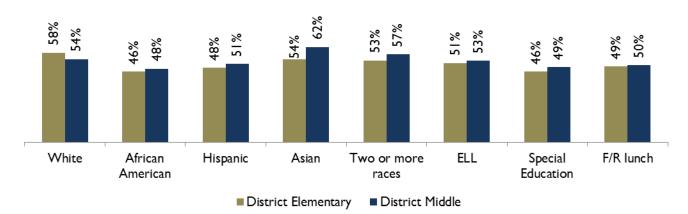
## **Reading - % Meeting Growth Targets**

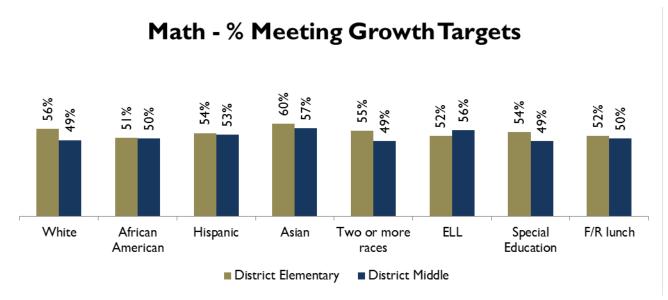


# **Math - % Meeting Growth Targets**

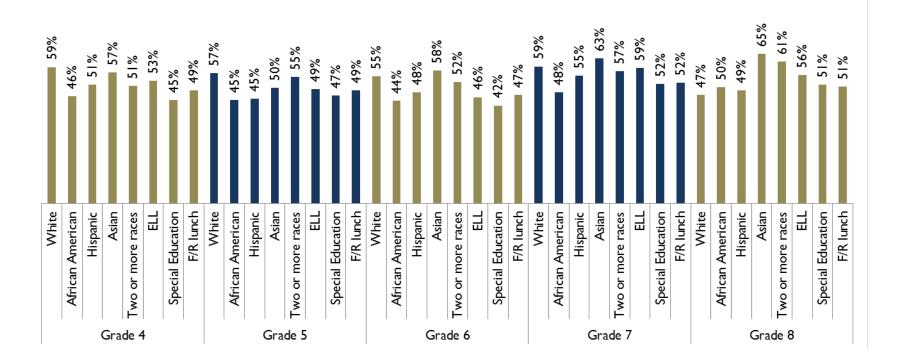


## **Reading - % Meeting Growth Targets**

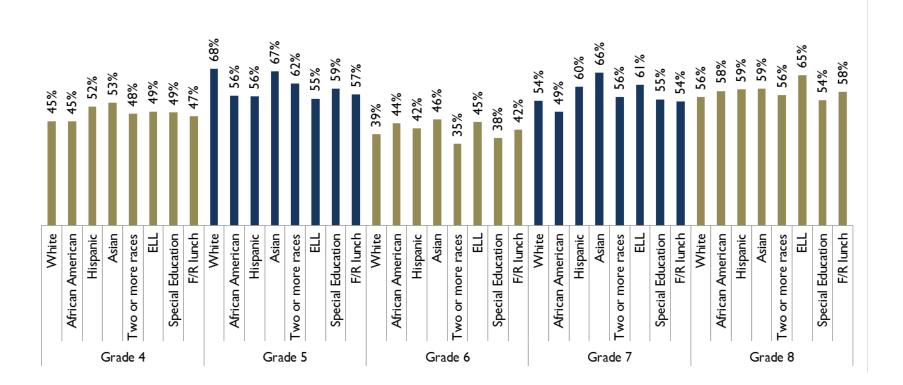




## Reading - % Meeting Growth Targets



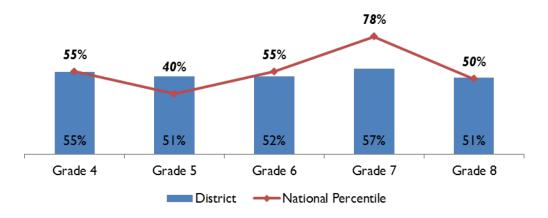
## **Math - % Meeting Growth Targets**



#### **Growth Targets and National Percentiles**

This page illustrates the percentage of students meeting growth targets for each grade, as well as where MMSD falls nationally relative to other districts on student growth (in **bold and italics**). For example, 51% of students in Grade 5 met their growth targets in reading from Fall 2011 to Fall 2012, placing MMSD in the 40<sup>th</sup> percentile nationally. In math, 63% of students in Grade 5 met their growth targets, placing MMSD in the 90<sup>th</sup> percentile nationally. These percentiles are based on the 2009 NWEA study "School Growth Study: School Level Performance on a Growth Index."

## % Meeting Growth Targets - Reading



## % Meeting Growth Targets - Math

