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CUSD220
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From: Adam Larsen, Assistant Superintendent

To: Board of Education

Cc: Thomas Mahoney, Superintendent

Re: March 2022 Board Report

Spring Testing Season

Spring 2022 testing has begun. Students are taking the Illinois Science Assessment (ISA), starting with DLR on March 17 and OES On April 4. The Illinois Assessment of Readiness (IAR) begins on April 6 for OES and April 5 for DLR.

The following table summarizes the testing times for the Illinois Assessment of Readiness for students in grades 3 through 8:

Table 2.1 Unit Testing Times for Grades 3–5

Subject(s)	Unit	Section	Unit Testing Time (Minutes)
Mathematics Grade 3 Mathematics Grade 4 Mathematics Grade 5	Unit 1	Non-calculator	60
	Unit 2	Non-calculator	60
	Unit 3	Non-calculator	60
ELA/Literacy Grade 3	Unit 1		75
	Unit 2		75
ELA/Literacy Grade 4 ELA/Literacy Grade 5	Unit 1		90
	Unit 2		90

*Some schools will be selected for field testing in English language arts/literacy for the spring administration. If a school is selected, some students will take an additional unit: a field test task (Grade 3 unit time = 75 minutes, Grades 4 & 5 unit time = 90 minutes).

Table 2.2 Unit Testing Times for Grades 6–8

Subject(s)	Unit	Section	Unit Testing Time (Minutes)
Mathematics Grade 6 Mathematics Grade 7	Unit 1	Non-calculator Calculator	60
	Unit 2	Calculator	60
	Unit 3	Calculator	60
Mathematics Grade 8	Unit 1	Non-calculator	60
	Unit 2	Calculator	60
	Unit 3	Calculator	60
ELA/Literacy Grade 6 ELA/Literacy Grade 7 ELA/Literacy Grade 8	Unit 1		90
	Unit 2		90

*Some schools will be selected for field testing in English language arts/literacy for the spring administration. If a school is selected, some students will take an additional unit: a field test task (unit time = 90 minutes).

The Illinois Science Assessment is for grades 5, 8, and 11. There are three sections in each grade, and each section has 32 items (30 multiple choice, 2 written response) for a total of 96 items.

Both of these assessments take place on computers, and our students will be completing them on their Chromebooks. When the PARCC assessment (precursor to the current IAR) first went to an online platform, our students did not yet have Chromebooks, and we needed to move all kids through all test events in a limited number of computer labs. The advent of individual student devices has made scheduling, completing, and making up tests a great deal easier. Students can all test at essentially the same time, as we do not have limited seats in the labs holding us back from administering the assessments.

Results for both assessments will not be available until over the summer. Those results will be shared with the Curriculum, Technology, and Data (CTD) Committee and the full board as they arrive.

NWEA MAP Achievement

Our students take the Northwest Evaluation Association (NWEA) Measure of Academic Progress (MAP) test three times a year. It is used for a wide variety of purposes and is reported on at regular intervals throughout the school year.

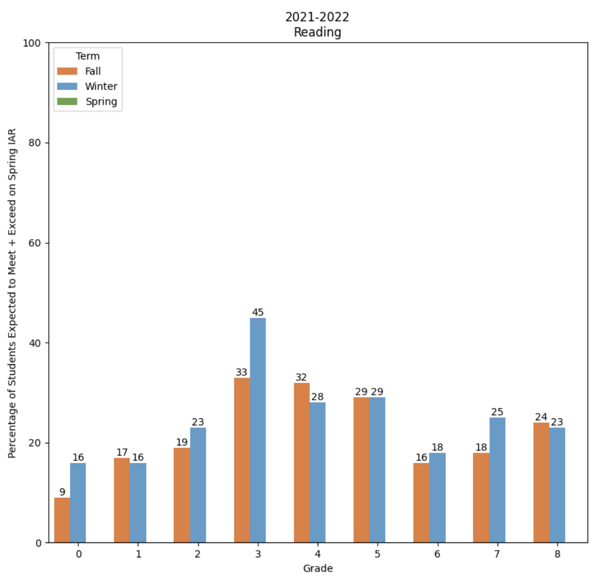
NWEA regularly releases updated cut scores that correspond to the state outcome measure that students take in the spring. That assessment is currently known as the Illinois Assessment of Readiness (IAR). This alignment process was last completed in January of 2021.

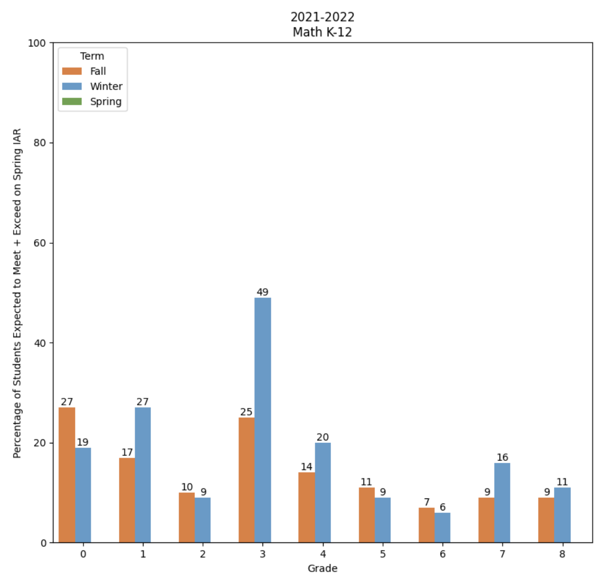
These cut scores allow school districts to make predictions about which students are expected to meet and not meet expectations when they take the IAR each spring. This analysis is useful both for 1) program evaluation, determining how well the overall curriculum is working to prepare students, and 2) resource allocation, identifying which students need additional support to make the gains they need to close the achievement gap with their peers.

The cut scores themselves are computed using an equipercentile method. They accomplish this by translating from one scaled score (IAR) to another scaled score (MAP) using percentile matching. Let us examine the fall of grade 3 in reading as an example. A student needs to score a 750 (on a scale from 650 to 850) on the IAR in order to be considered *Meeting Expectations*. Per the normative data from IAR, this translates to the 71st percentile. That means that the minimum score required to be considered at grade level is at or higher than what 71% of students actually score. (The complement of this statement is that 28% of students are expected to meet or exceed on this assessment, which is its own separate discussion.) Once NWEA knows that this scaled score is at the 71st percentile, that is translated to the 71st percentile on MAP, which is a scaled score of 196. This same procedure is applied to every performance level, term, grade, and subject of interest.

There are strengths and weaknesses of this approach. A strength is that it is fairly easy to follow and explain to stakeholders, at least in comparison to other equating procedures. Another strength is that it produces a clean and useful table that can be used to identify performance levels for students when they take the assessment and receive scores. A weakness is that it assumes strong concurrent construct validity between the two tests. That is, the tests must measure essentially the same thing in order for the same percentiles to mean the same level of performance. In practice, this weakness does not appear to be a concern. When we perform the analysis each fall, the ability for MAP to predict IAR performance is quite strong. The scores correlate well, and the students who are identified as being at risk for not meeting grade level expectations generally do not score in the meets + exceeds ranges on the IAR. This suggests that the two assessment have a great deal of overlap and measure the same constructs (reading and math achievement).

The IAR assessment begins at grade 3, while MAP begins at grade 2. We also administer the MAP for Primary Grades (MPG) assessment at grades K and 1, but we have not typically attempted to map these scores backward to earlier grades levels to see how those students are doing before they reach grade 2. It is questionable whether those results would be valid or reliable, but in an effort to bridge the gap between K-2 and 3-8, we have mapped the grade 2 percentiles back to grades K and 1 and plotted those levels of proficiency in the current year. The results of this bridging are shared in the following graph:





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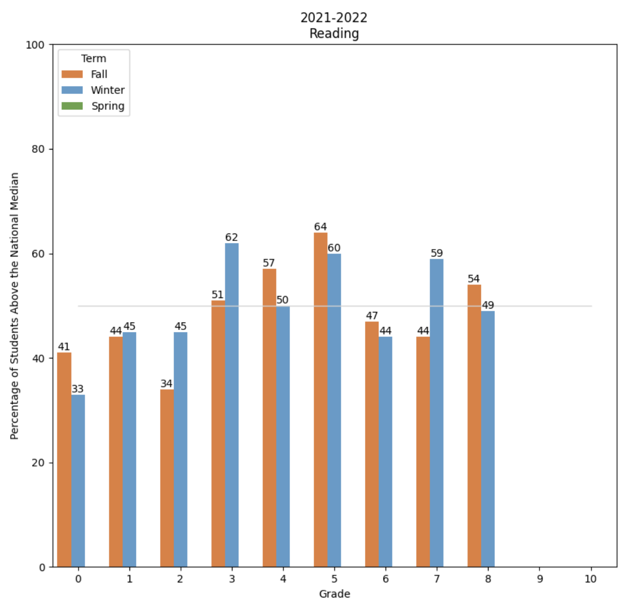
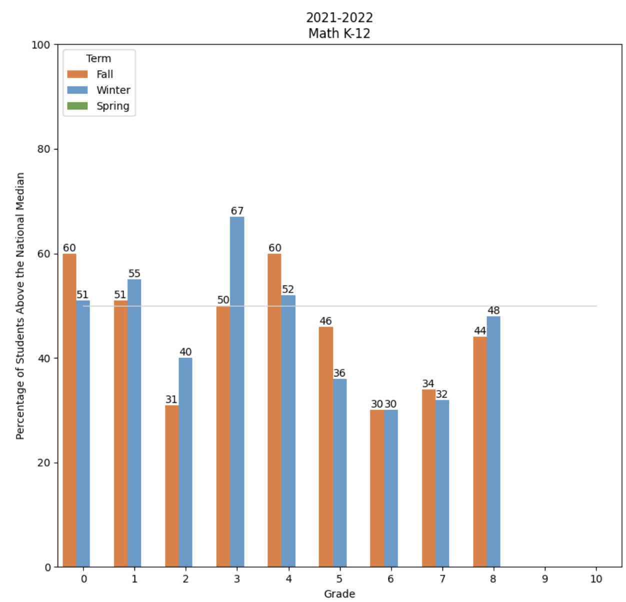
Another method for crossing this barrier between grades 2 and 3 is to ignore the performance levels entirely and just consider local percentiles against national percentiles. This ignores the concept of meeting grade level expectations and instead relies on comparing students against their peers across the country. This should be a more apples-to-apples comparison than is extrapolating minimum cut scores from NWEA's Illinois Linking Study.

In order to analyze the data this way, the percentages of students scoring at or above the national median (the 50th percentile) were computed at each grade level, term, and subject. This makes it easy to compare grade levels, since all grade levels are now on the same playing field when it comes to computing an overall performance score. This method also allows us to create a convenient heuristic for comparing performance against the normative data. We can draw a horizontal line at 50% and use it to identify grade levels where students are performing above or below the national norms.





These two methods answer slightly different questions and serve slightly different purposes, but both are valuable in identifying strengths and weaknesses in student achievement. Considering grade-level expectations is required in any conversation about the school accountability formula found in the Every Student Succeeds Act (ESSA), but those cut scores are computed externally and without a great deal of transparency. They also do not translate directly down to earlier grade scales without making some complicated assumptions. National percentiles remove the ESSA formula from the discussion, but they are directly comparable across grade levels and subjects, which simplifies those conversations about strengths and weaknesses.

Respectfully Submitted,

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