

Gower District #62

Superintendent's Report

Appendix A

Date: April 18, 2018

Title: Range of Readiness Model (5 minutes)

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Background:

As part of the October 13, 2013 Superintendent's Report to the Board of Education, it was reported that a "review of 2012-13 academic performance led to the development of academic performance goals at both campuses that shift the focus from absolute performance (summative) to individual student growth (formative)". This specific effort was further detailed in the Annual Student Performance (Data) Presentation (Superintendent Report Appendix B) in which the following points were highlighted:

- NWEA/MAP is an additional measure of student performance and becomes increasingly powerful when combined with classroom assessments/performance and response to ongoing (differentiated) instruction
- A SHIFT in focus *From* "absolute performance" *To* "student growth" is an important Next Step. A concept referred to as 'Data Slices'
 - The specific 'slices' or 'performance bands' were aligned to varying degrees of 'college and career readiness' in an effort to develop more targeted performance goals, and in return, design and target instruction and instructional resources more effectively (referred to in Gower as *Just Right Learning*)
- It is important to be mindful that although this data is extremely helpful to teachers, administrators, students, and parents, it represents a single point on a more comprehensive spectrum of student data

Student Normative (Percentile) Performance on NWEA/MAP Growth Test in Reading or Mathematics	Performance Category or 'Band'/'Slice'
0-20%	Intensive Risk
21-35%	At Risk
36-50%	Adequate Yearly Progress (AYP)/Meets
51-65%	High School Ready
66-75%	College Ready
76-89%	Advanced Placement (AP) Success
90-95%	State Honors
Above 95%	National Merit Scholar

Since adopting these "stretch goals" at the start of the 2013-2014 school year student performance data suggests:

- A 39% decrease in the number of students testing at or below the 35th percentile in Math
 - 147/792 students BOY 2013-14 (18.6%) to 91/804 students MOY 2017-18 (11.3%)
- A 41% decrease in the number of students testing at or below the 35th percentile in Reading
 - 141/797 students BOY 2013-14 (17.7%) to 84/805 students MOY 2017-18 (10.4%)
- A 62% increase in the number of students testing at or above the 90th percentile in Math
 - 175/792 students BOY 2013-14 (22.1%) to 289/804 students MOY 2017-18 (35.9%)
- A 25% increase in the number of students testing at or above the 90th percentile in Reading
 - 177/797 students BOY 2013-14 (22.2%) to 223/805 students MOY 2017-18 (27.7%)

As reported to the Board of Education in the Superintendent's Report [Appendix A - Middle-of-Year Student Performance Data NWEA/MAP](#) as part of the regularly scheduled Board meeting on Feb. 20, 2018:

Given the recent attention to 'Freshman Readiness' at the local high school level, parents are encouraged to consider the number of factors involved in what it means to be 'ready' and be sure to seek clarification from high school officials when needed. The simple application of a cut score (e.g 227 end of 8th grade MAP reading score, or 243 end of 8th grade MAP math score aligned to an ACT of 22) to determine a student's level of academic readiness is one factor being utilized by the local high school and the Gower administrative team has been clear that such a measure may not be the most appropriate or responsible approach to utilize. This is especially true given what we know about individual student growth, differentiated instruction, intervention strategies, and other student-focused metrics that keep personalization and student support atop the list of priorities in our school. Our perspective in Gower is that 'readiness' involves varying degrees and should not be boiled down to a yes or no proposition. When our 8th graders graduate from Gower, we hold a high degree of confidence and certainty that they have the skills, knowledge and ability to find success at the next level - regardless of what form that success may hold. Locking into an ACT-of-22-or-bust mentality may have its merits, but if it is going to be applied across the board, there is a level of clarity required to specify the types of supports that will be put into place for students that may not meet such predefined standards. Gower has a long-standing goal and an unwavering commitment to ensure that our students are prepared for the academic challenges they will face after 8th grade. District administrators will expedite the work with our partners at NWEA MAP to build a model that clearly illustrates the levels of preparedness exhibited by our students prior to their matriculation to high school.

Using the end-of-year MAP cut score values aligned to an ACT score of 22 with no more than typical (average) growth throughout high school required, our current 8th grade class middle average exceeds both Reading and Math standards:

- Gower 8th Grade Reading = Middle of Year Average score of 232 vs. End of Year Cut Score of 227
- Gower 8th Grade Math = Middle of Year Average score of 247 vs. End of Year Cut Score of 243

As reported to the Board of Education in the Superintendent's Report [Appendix B - High School Readiness in Gower](#) as part of the regularly scheduled Board meeting on March 20, 2018:

Gower administrators continue to work with local district leaders and external partners to develop a more appropriate and inclusive model for 'high school readiness'. As one of the 21 external invitees to the March 7, 2018 NWEA External Insights Conference: NWEA Strategies and Opportunities to Support the Future of Learning, Gower was able to meet with members of the NWEA Research Team in Portland at no cost to the school district, to explore some of the approaches we have suggested locally to using and expanding 'on-track' or 'readiness' data for application prior to and through high school.

Current State: Widely distributed ACT materials estimate that students meeting or exceeding 22 points on the ACT have a 50% chance of obtaining a grade of "B" or higher or about a 75% chance of obtaining a "C" or higher in corresponding credit-bearing first-year college courses ([link](#) to web source). NWEA publications are clear that for the ACT = 22 benchmark, middle school students are likely to be college ready if they performed between the 61st to 76th percentiles in mathematics (8th grade Spring RIT score of 236-244) or between the 59th to 69th percentiles in reading on MAP Growth (8th grade Spring RIT score of 224-228). When the more stringent ACT=24 benchmark is applied, students are considered 'ready' if they performed between the 70th to 84th percentiles in mathematics (8th grade Spring RIT score of 241-250) and the 66th to 75th percentile in reading (8th grade Spring RIT score of 227-231). "It is important to stress that the estimated MAP benchmarks are anchored on the ACT score of 24, for both reading and mathematics, a benchmark recommended for use with NWEA partners. This benchmark, which takes into consideration the college admissions profile of enrolled students in major state universities across the country, is more stringent than the widely-circulated ACT college readiness benchmark of 22" (Thum, 2015).

More recent NWEA research has linked student performance on NWEA MAP to the SAT as well. Using the college readiness benchmarks from the College Board (SAT) of 530 in mathematics and 480 for Evidence-Based Reading and Writing, Thum (2017, p.7) concludes that middle and high school students in grades 5 through 9 are likely to be on-track in the preparation for college if they performed between the 60th to 70th percentiles, or above, in mathematics or between the 40th to 50th percentiles, or above in reading. In terms of national percentile ranking, a SAT mathematics score of 530 registers at the 61st percentile and a SAT Evidence-Based Reading and Writing score ranks at the 41st percentile, according to The College Board (2016).

One limitation to these linking studies is that 'College Readiness' is not limited to an ACT = 22 or 24. Individual students may score well above or well below a composite score of 22/24 on the ACT. Remember that colleges and universities accept students within a range of ACT scores and also take a variety of other factors into consideration during the admissions process. The National ACT average is 20.9 and the most recent IL average is 21.4. Click [here](#) to view a chart from ACT.org of ACT test scores and associated percentiles/norms.

According to Thum (2015), "Preparing students for success in college and the workplace is at the center of educational policy debates across the country. According to a widely-accepted definition (Conley, 2007, p. 5), a student who is college ready is someone who can "enroll and succeed – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program." Although ACT scores of 22 and 24 may be good indicators of such 'readiness', they are most certainly not absolute.

Thum (2015) is also clear that, "Rather than use a cut-score to make a simple pronouncement of whether a student is college ready or not, inference statements that provide a suitable normative context and acknowledges that data quality precludes such deterministic characterization are to be preferred (Maruyama, 2012)."

- It is important to note in terms of the Range of Readiness Model being proposed in Gower that the current District 86 High School Readiness model uses a reading and math cut-score correlated to an ACT=22 score to make such pronouncements for high school readiness.

Gower has continued to work with local school districts and external partners to expand the current 'high school readiness' model and to move away from the limitations of 'benchmark or standard thinking' and toward a continuum of student performance, individualized learning, growth, and the resulting implications for a range of readiness for high school and beyond. The district will also continue to engage and collaborate with NWEA to help develop a tool, based on the expansion of 'readiness', that can be used - in any school district - to set specific attainment and growth goals in the context of an individual student's overall learning environment. As educators, we know that having information early on about a student's 'readiness' for a particular academic end-goal is helpful in terms of shaping a more personalized educational experience. Interventions, opportunities for acceleration, curriculum and course design are all items that can become much more targeted with reliable measures in terms of being 'on-track'.

For example, the NWEA [College Explorer Tool](#) is available to help fifth through ninth grade students to use their NWEA/MAP scores to see which colleges and universities they're on track to enter long before they embark on the college application process. The tool is intended to be a conversation-starter for students, parents, and educators who want insights into what college opportunities may be available to students based on academic performance.

One thing to keep in mind is that 'college readiness' can't be defined by a test score alone, so it's important for students using the tool to understand that it's not meant to limit their options. The purpose of the College Explorer Tool is to give students a data-based review of which institutions they're currently a good fit for and some idea of what academic goals they may need to set in order to get into their school of choice. [Mapping the Road to College with the College Explorer Tool](#) (April 2016)

Range of Readiness

Table 1		MAP® Growth Mathematics RIT Scale Benchmarks Corresponding to ACT® Composite Scores of 18, 20, 22, 24, 26, & 28 ¹					
Grade	Term	ACT-18 (38%) ²	ACT-20 (51%)	ACT-22 (63%)	ACT-24 (74%)	ACT-26 (82%)	ACT-28 (89%)
5	Fall	209	213	217	221	225	229
	Spring	217	221	226	230	234	238
6	Fall	217	221	225	230	234	238
	Spring	223	228	232	237	241	246
7	Fall	223	228	232	237	242	246
	Spring	228	233	238	243	248	252
8	Fall	228	233	238	243	248	253
	Spring	233	238	243	248	253	258
9	Fall	232	237	243	248	253	259
	Spring	235	241	246	252	257	263

Table 2		MAP® Growth Mathematics Normative Benchmarks ¹ (by percentile) Corresponding to ACT® Composite Scores of 18, 20, 22, 24, 26, & 28					
Grade	Term	ACT-18 (38%) ²	ACT-20 (51%)	ACT-22 (63%)	ACT-24 (74%)	ACT-26 (82%)	ACT-28 (89%)
5	Fall	44	55	66	75	83	89
	Spring	40	50	60	70	78	85
6	Fall	47	59	69	78	85	91
	Spring	45	56	66	75	83	89
7	Fall	51	62	72	80	87	92
	Spring	50	60	70	79	86	91
8	Fall	54	65	74	82	89	93
	Spring	53	64	73	81	88	92
9	Fall	54	65	75	84	90	94
	Spring	54	65	75	83	89	93

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¹Normative Data from: Thum, Y. M., & Kuhfeld, M. (2018). *MAP Growth C&CR Benchmarks for the ACT: Additional Tables and Plots* per partner requests to provide tables of *MAP Growth*® C&CR benchmarks keyed on the ACT®, expanding the set of benchmarks in [Thum Y. M., & Matta, T. \(2015\). MAP College Readiness Benchmarks: A Research Brief. NWEA Research Report. Portland, OR: NWEA](#)

²ACT Score percentiles listed represent National Norms from 2015, 2016, and 2017 testing data. Web source: <https://www.act.org/content/dam/act/unsecured/documents/MultipleChoiceStemComposite2017-18.pdf>

Range of Readiness

Table 3		MAP® Growth Reading RIT Scale Benchmarks Corresponding to ACT® Composite Scores of 18, 20, 22, 24, 26, & 28 ¹					
Grade	Term	ACT-18 (38%) ²	ACT-20 (51%)	ACT-22 (63%)	ACT-24 (74%)	ACT-26 (82%)	ACT-28 (89%)
5	Fall	203	206	209	213	216	219
	Spring	208	211	215	218	221	224
6	Fall	208	212	215	218	222	225
	Spring	213	216	220	223	226	229
7	Fall	213	216	220	223	227	230
	Spring	217	220	224	227	230	234
8	Fall	217	220	224	227	231	234
	Spring	220	224	227	230	234	237
9	Fall	220	224	227	231	234	238
	Spring	223	226	230	233	237	240

Table 4		MAP® Growth Reading Normative Benchmarks ¹ (by percentile) Corresponding to ACT® Composite Scores of 18, 20, 22, 24, 26, & 28					
Grade	Term	ACT-18 (38%) ²	ACT-20 (51%)	ACT-22 (63%)	ACT-24 (74%)	ACT-26 (82%)	ACT-28 (89%)
5	Fall	42	51	59	68	75	81
	Spring	40	49	58	66	74	80
6	Fall	43	52	61	69	76	83
	Spring	43	52	60	69	76	82
7	Fall	46	55	64	72	79	84
	Spring	47	56	64	72	79	85
8	Fall	49	58	66	74	80	86
	Spring	51	59	67	75	81	86
9	Fall	50	59	67	75	81	87
	Spring	53	61	69	76	82	87

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²ACT Score percentiles listed represent National Norms from 2015, 2016, and 2017 testing data. Web source: <https://www.act.org/content/dam/act/unsecured/documents/MultipleChoiceStemComposite2017-18.pdf>

Future State: The Gower Administration recommends formal adoption of the Range of Readiness model based on the ongoing work and support of our external partner, NWEA. Once adopted, Gower will continue to collaborate with NWEA and other area elementary and high school districts interested in utilizing appropriate measures of high school readiness, based on student performance on NWEA MAP Growth, in their respective teaching and learning models.

It is critical to note that NWEA/MAP data represents only one aspect of a student’s performance in school. This Range of Readiness model can be a valuable tool and can promote more targeted conversations around student performance and the accompanying academic and instructional plans/response. The model is limited in scope to a student's NWEA/MAP performance and growth over time. The model can provide insight to and projections for performance later in a student's academic career on ACT and also SAT through correlation. The model does not include the wide variety of additional, and arguably much more important, quantitative, qualitative, and anecdotal measures that are used regularly as part of the Teaching and Learning model in Gower School District to ensure student growth and preparedness for their future academic, civic, emotional, personal, and social endeavors.

The Gower Administrative Team plans to review the current performance bands/ranges and category titles introduced in 2013 and update as needed and according to the expanded Range of Readiness model.

Current

Student Normative (Percentile) Performance on NWEA/MAP Growth Test in Reading or Mathematics	Performance Category or ‘Band’/’Slice’
0-20%	Intensive Risk
21-35%	At Risk
36-50%	Adequate Yearly Progress (AYP)/Meets
51-65%	High School Ready
66-75%	College Ready
76-89%	Advanced Placement (AP) Success
90-95%	State Honors
Above 95%	National Merit Scholar

Suggested Draft for Review/Consideration for Separate Reading and Math Tables with Anticipated 2019 Norms

Student Normative (Percentile) Performance on NWEA/MAP Growth Test in Reading or Mathematics	Performance Category or ‘Band’/’Slice’
0-20%	Intensive Risk
21-35%	At Risk
36-50%	High School Ready/In-Range of College Ready
51-65%	College Ready ACT-18-20
66-75%	College Ready ACT-22-24
76-89%	Advanced Placement (AP) College Success
90-95%	State Honors
Above 95%	National Merit Scholar

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