



Date: Feb 19, 2019

From: Adam Larsen, Assistant Superintendent

To: Board of Education

Cc: Thomas Mahoney, Superintendent

Re: February 2019 Board Report

## Early Warning System Tri-Fold

In Spring 2016, the Freshman Team of teachers developed a data tool to support conversations with students who were at risk of being promoted at the end of the year. We called this project the Early Warning System (EWS) Tri-Fold, because the final version of the data presentation ended up in a tri-fold brochure that could easily be shared with students and parents. This project is now in its fourth year, so only few tweaks have been made from last year to this year as far as visuals.

What is very different this year is how we generated the brochures. After three years of exporting data, massaging it in Excel, exporting summary graphs, and finally drawing boxes manually on the paper, we finally migrated this project to a more automated process. We turned to an open-source data science tool called Jupyter Labs for this analysis. This tool allows us to tie directly into the PowerSchool database (where the student information resides) and extract the data straight into manipulatable dataframes. These dataframes can be summarized and reported on live and taken all the way to highlighting individual student records. A process that used to take a couple of hours can now be run in about 10 minutes without requiring any additional human intervention once the button is pressed. We are very excited about using Jupyter Labs for future projects that can benefit from streamlining the data pipelines.

This year, the factors that are displayed on the EWS Tri-Fold include:

- Attendance
- F grades
- Discipline Referrals
- Missing Assignments
- GPA
- MAP Reading
- MAP Mathematics

We are excited to use the Tri-Fold again to help students see and understand how discrepant they are from their peers in these key performance indicators. Examples from some of the class's most at-risk students are attached.

I will...  
 \_\_\_ begin scheduling regular counselor meetings  
 \_\_\_ try out a new activity \_\_\_\_\_  
 \_\_\_ use my planner daily  
 \_\_\_ stay after school \_\_\_\_\_  
 \_\_\_ clean out my backpack \_\_\_\_\_ a week  
 \_\_\_ complete my homework on time  
 \_\_\_ take advantage of assessment retakes  
 \_\_\_ come to school every day  
 \_\_\_ go to bed by \_\_\_\_\_  
 \_\_\_ limit time out of class  
 \_\_\_ eliminate classroom distractions  
 \_\_\_ utilize my study hall more efficiently  
 \_\_\_ limit my videogame use  
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Student Signature  
 I, \_\_\_\_\_ will meet the expectations described above.

Parent Signature  
 I, \_\_\_\_\_ will provide the supports necessary to help my student meet the expectations described above.

Need help? Try contacting a Teacher:

- 1(A) Integrated Sci 1 - Chem  
TEACHER NAME  
TEACHER EMAIL
- 2(A) Algebra I  
TEACHER NAME  
TEACHER EMAIL
- 3(A) Technology Ed  
TEACHER NAME  
TEACHER EMAIL
- 4(A) World History  
TEACHER NAME  
TEACHER EMAIL
- PHA(A) Study Hall  
TEACHER NAME  
TEACHER EMAIL
- 5(A) Study Skills  
TEACHER NAME  
TEACHER EMAIL
- 6(A) Strength/Cond 2nd sem  
TEACHER NAME  
TEACHER EMAIL
- 7(A) English Foundations 2  
TEACHER NAME  
TEACHER EMAIL



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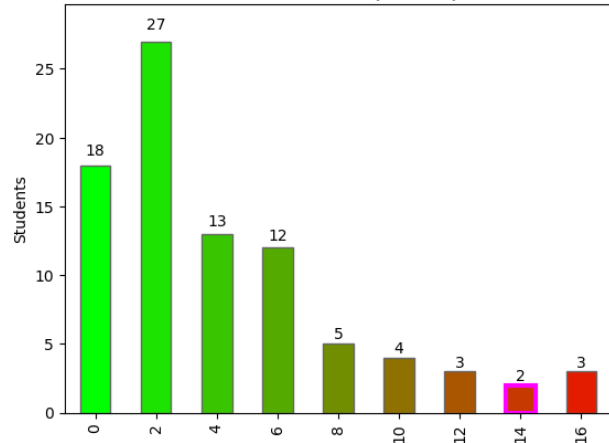
On-Track Conference

Student Name STUDENT DEMO  
 Home Phone STUDENT DEMO  
 Address STUDENT DEMO  
 STUDENT DEMO  
 Father STUDENT DEMO  
 Father phone STUDENT DEMO  
 Mother STUDENT DEMO  
 Mother phone STUDENT DEMO

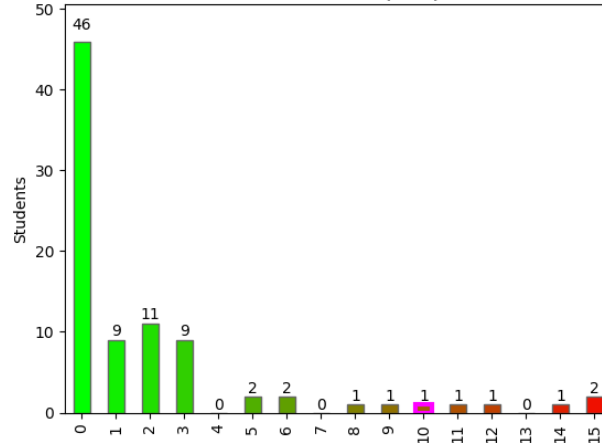
REPORT CARD

Course.....	T1	E1	S1
Algebra I.....	F	F	F
Civics.....	D-	F	F
Driver's Ed 1st 9wks.....	A	A	A
English 1.....	F	B-	D-
Integrated Sci 1 - Chem....	D-	F	F
Strength & Cond PE.....	B-	B-	B-
Study Hall.....			
Study Skills.....	P	P	P
Technology Ed.....	F	F	F

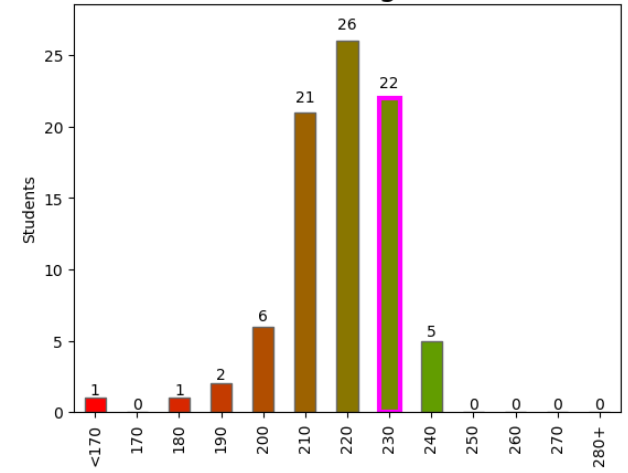
Absences (14.0)



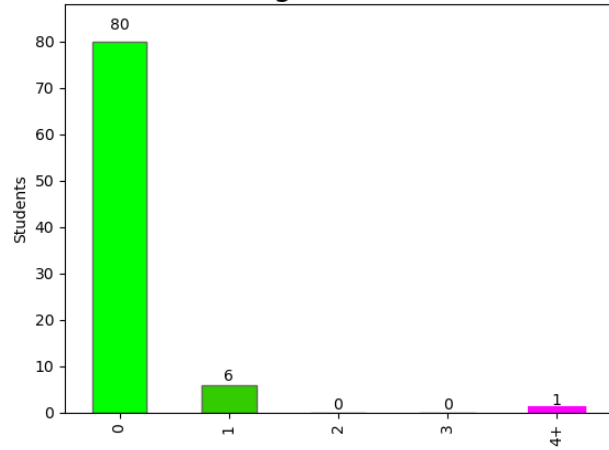
Referrals (10)



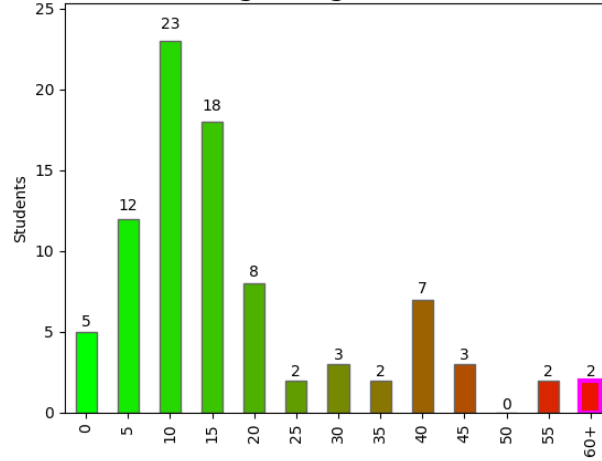
MAP - Reading (231.0)



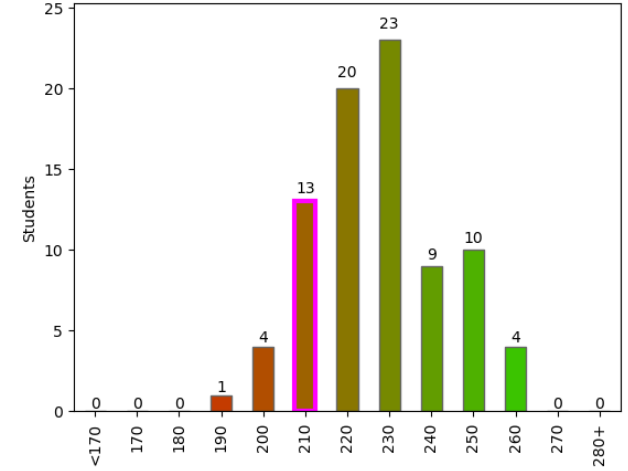
F grades (4)



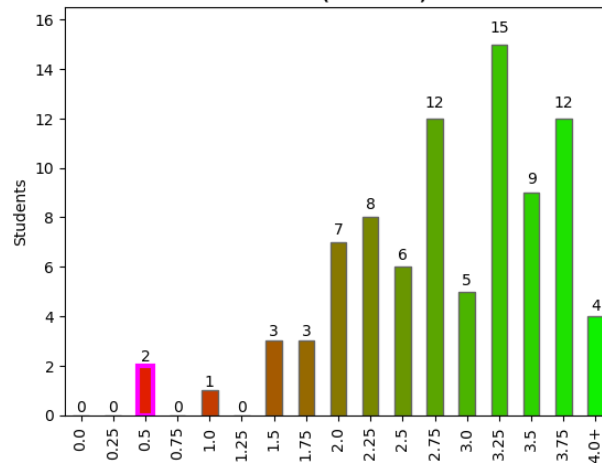
Missing Assignments (88)



MAP - Mathematics (213.0)



GPA (0.557)



I will...  
\_\_\_ begin scheduling regular counselor meetings  
\_\_\_ try out a new activity \_\_\_\_\_  
\_\_\_ use my planner daily  
\_\_\_ stay after school \_\_\_\_\_  
\_\_\_ clean out my backpack \_\_\_\_\_ a week  
\_\_\_ complete my homework on time  
\_\_\_ take advantage of assessment retakes  
\_\_\_ come to school every day  
\_\_\_ go to bed by \_\_\_\_\_  
\_\_\_ limit time out of class  
\_\_\_ eliminate classroom distractions  
\_\_\_ utilize my study hall more efficiently  
\_\_\_ limit my videogame use  
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\_\_\_\_\_

Student Signature  
I, \_\_\_\_\_ will meet the expectations described above.

Parent Signature  
I, \_\_\_\_\_ will provide the supports necessary to help my student meet the expectations described above.

Need help? Try contacting a Teacher:

- 1(A) Civics  
TEACHER NAME  
TEACHER EMAIL
- 2(A) Algebra I  
TEACHER NAME  
TEACHER EMAIL
- 3(A) Integrated Sci 1 - Chem  
TEACHER NAME  
TEACHER EMAIL
- 4(A) Technology Ed  
TEACHER NAME  
TEACHER EMAIL
- PHA(A) Study Hall  
TEACHER NAME  
TEACHER EMAIL
- 5(A) Driver's Ed 3rd 9 wks  
TEACHER NAME  
TEACHER EMAIL
- 5(A) Strength/Cond 2nd sem  
TEACHER NAME  
TEACHER EMAIL
- 6(A) English 1  
TEACHER NAME  
TEACHER EMAIL
- 7(A) OHS Bridge  
TEACHER NAME  
TEACHER EMAIL



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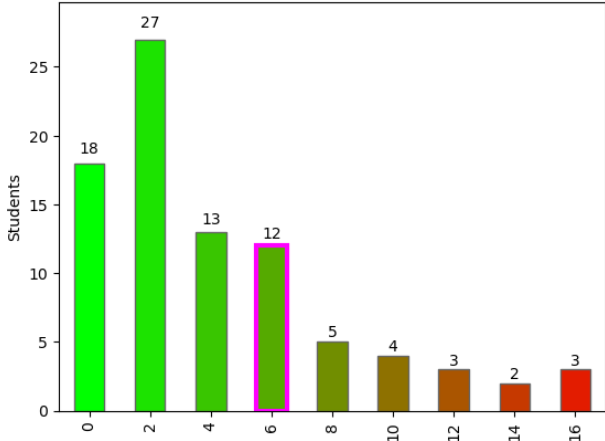
On-Track Conference

Student Name STUDENT DEMO  
Home Phone STUDENT DEMO  
Address STUDENT DEMO  
STUDENT DEMO  
Father STUDENT DEMO  
Father phone STUDENT DEMO  
Mother STUDENT DEMO  
Mother phone STUDENT DEMO

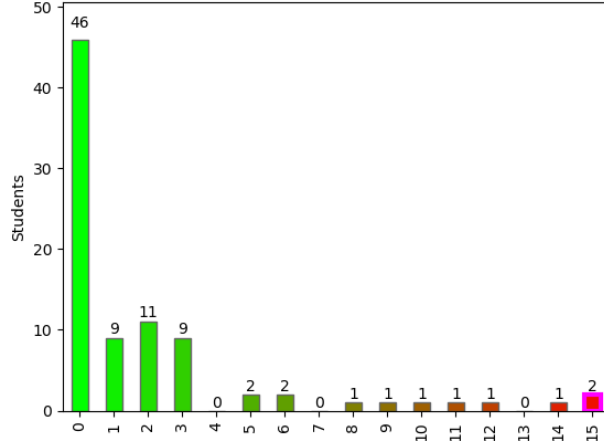
REPORT CARD

Course.....	T1	E1	S1
Algebra I.....	D-	C-	D
English 1.....	D	F	D-
Integrated Sci 1 - Chem....	D+	F	D-
OHS Bridge.....	P	P	P
Strength & Cond PE.....	D-	D+	D
Study Hall.....			
Technology Ed.....	D+	F	D
World History.....	C+	F	C-

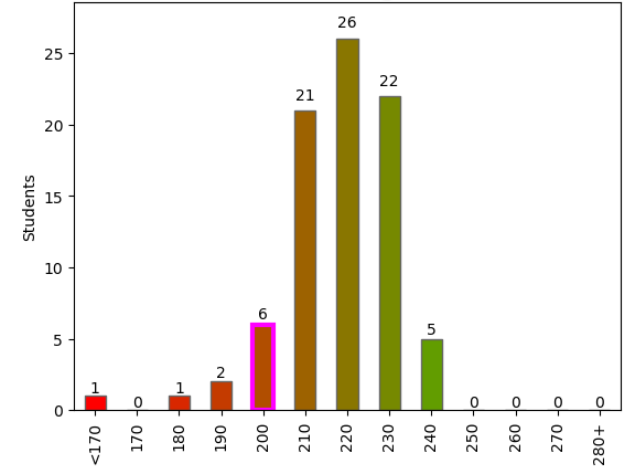
### Absences (6.5)



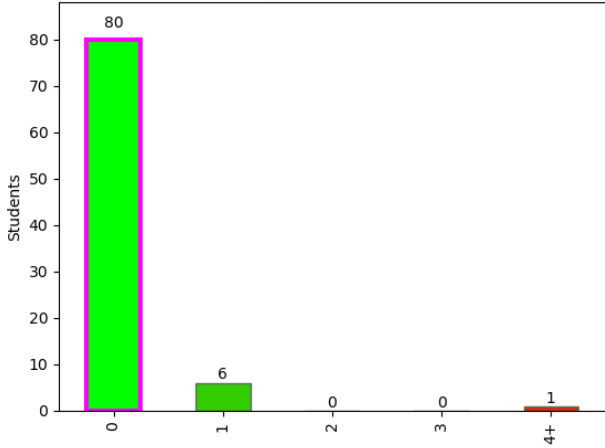
### Referrals (33)



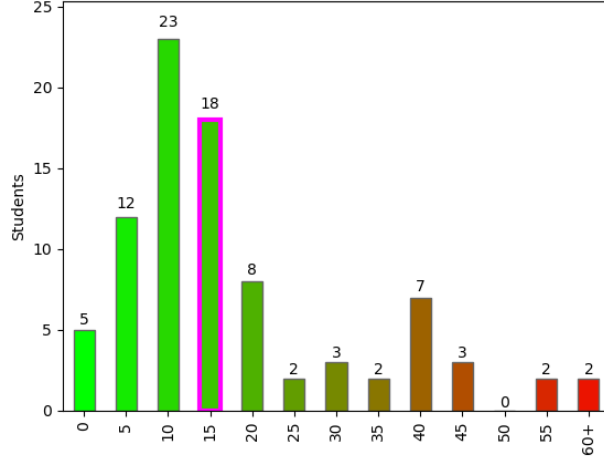
### MAP - Reading (209.0)



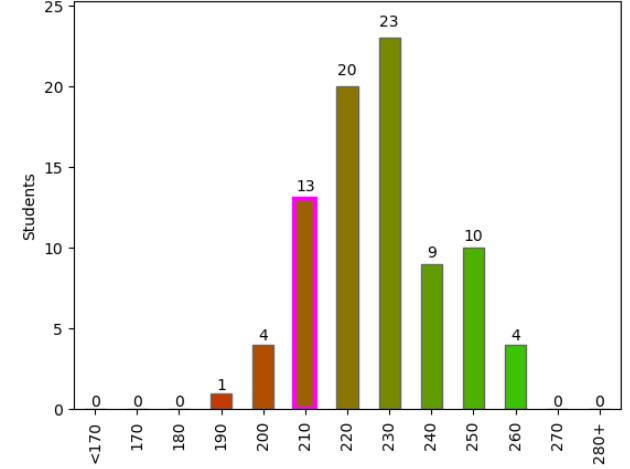
### F grades (0)



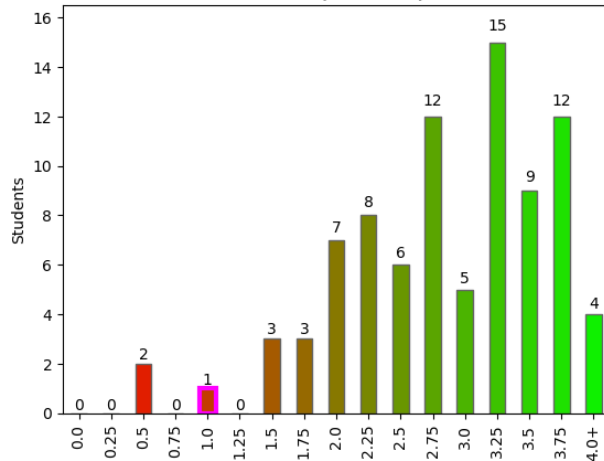
### Missing Assignments (19)



### MAP - Mathematics (210.0)



### GPA (1.002)



I will...  
\_\_\_ begin scheduling regular counselor meetings  
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\_\_\_ limit my videogame use  
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\_\_\_\_\_  
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Student Signature  
I, \_\_\_\_\_ will meet the expectations described above.

Parent Signature  
I, \_\_\_\_\_ will provide the supports necessary to help my student meet the expectations described above.

Need help? Try contacting a Teacher:

- 1(A) Spanish I  
TEACHER NAME  
TEACHER EMAIL
- 2(A) Algebra I  
TEACHER NAME  
TEACHER EMAIL
- 3(A) Integrated Sci 1 - Chem  
TEACHER NAME  
TEACHER EMAIL
- 4(A) Civics  
TEACHER NAME  
TEACHER EMAIL
- PHA(A) Study Hall  
TEACHER NAME  
TEACHER EMAIL
- 5(A) Strength/Cond 2nd sem  
TEACHER NAME  
TEACHER EMAIL
- 6(A) English 1  
TEACHER NAME  
TEACHER EMAIL
- 7(A) OHS Bridge  
TEACHER NAME  
TEACHER EMAIL



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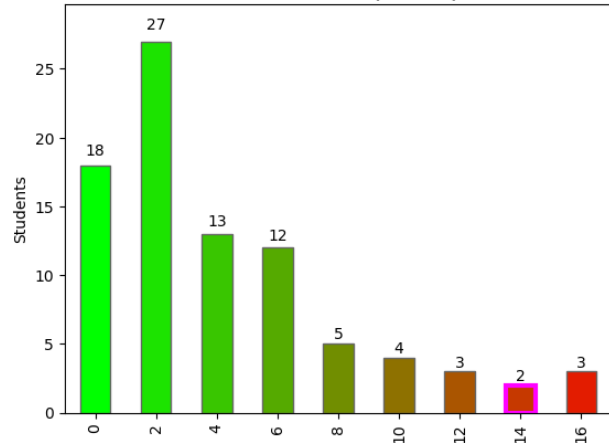
On-Track Conference

Student Name STUDENT DEMO  
Home Phone STUDENT DEMO  
Address STUDENT DEMO  
STUDENT DEMO  
Father STUDENT DEMO  
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Mother phone STUDENT DEMO

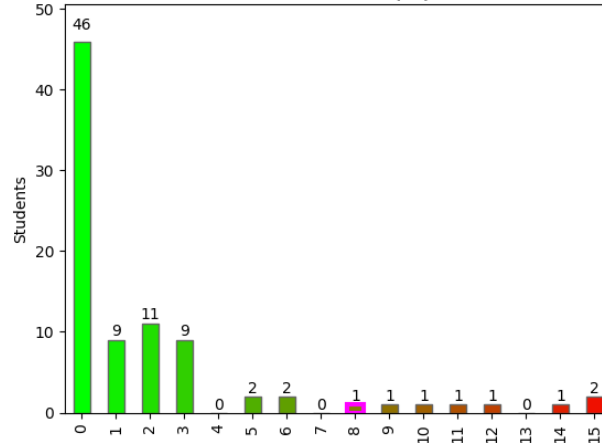
REPORT CARD

Course.....	T1	E1	S1
Algebra I.....	C	A	C+
Driver's Ed 1st 9wks.....	A-	B+	B+
English 1.....	--		F
Integrated Sci 1 - Chem....	C		C
OHS Bridge.....	P		P
Spanish I.....	B		C
Strength & Cond PE.....	A-	A-	A-
Study Hall.....			
World History.....	B-		B-

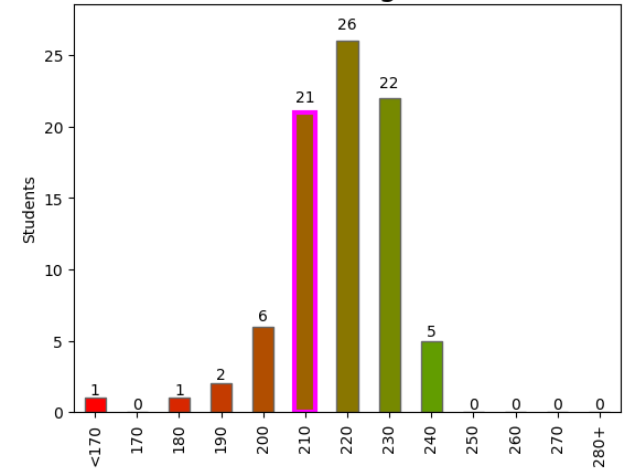
Absences (15.0)



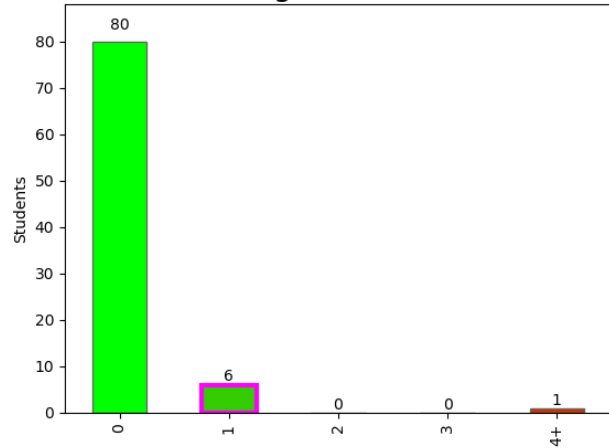
Referrals (8)



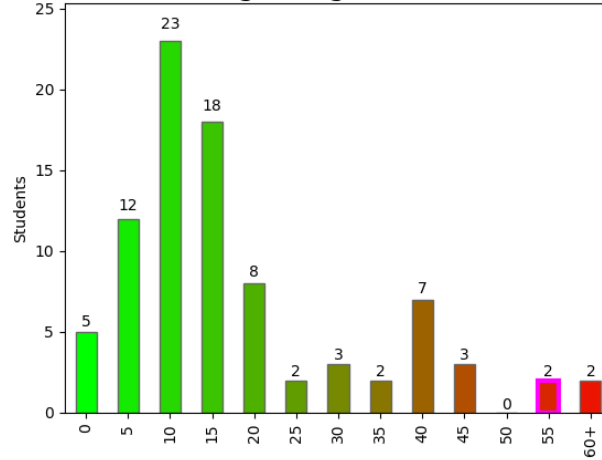
MAP - Reading (216.0)



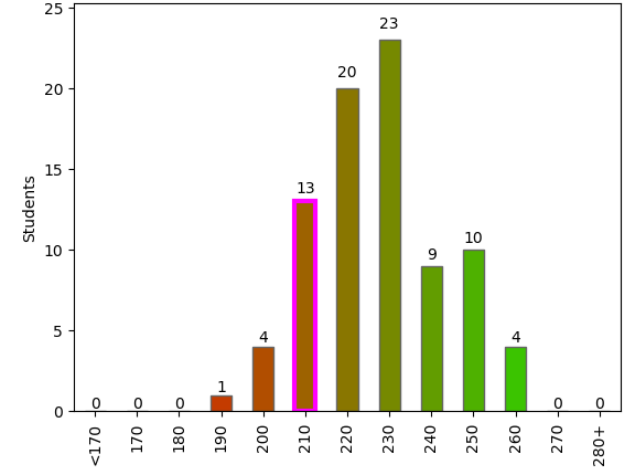
F grades (1)



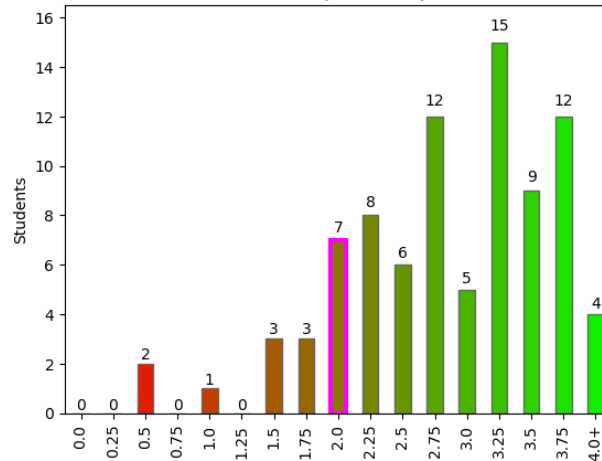
Missing Assignments (58)



MAP - Mathematics (216.0)



GPA (2.112)





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Academics | Activities | Service | Leadership

## Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP)

NWEA's Measures of Academic Progress (MAP) test has been used in the school district since the Spring 2008 testing season. This assessment is a form of computer-adaptive testing, where the test taker is presented a series of questions that is tailored to that particular student's academic level. If a student answers a question correctly, the computer will give the student a more difficult question. If the next question is answered incorrectly, the following question will be easier. The number of questions in the test bank is vast, and no two students take the same exact test. This approach offers a number of advantages over traditional testing, including reduced standard error of measurement, less time spent testing, and fewer questions required for each student. Because the assessment is taken on the computer, results are available immediately after a student completes the test. Reports on student progress are available the next day, and growth is tracked over time (season to season and year to year).

In Oregon, the introduction of the MAP assessment has been along the following schedule:

School Year	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
2007-2008						S	S						
2008-2009						F, S	F, S						
2009-2010				F, W, S	F, S	F, S	F, S	F, S	F, S				
2010-2011			S	F, W, S	F, W, S	F, S	F, S	F, S	F, S	F, S			
2011-2012			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S (SpEd)	F, W, S (SpEd)		
2012-2013			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S (SpEd/ELL)	F, W, S (SpEd/ELL)	F, W, S (SpEd/ELL)	F, W, S (SpEd/ELL)
2013-2014			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S (ELL)	F, W, S (ELL)	F, W, S (ELL)	F, W, S (ELL)
2014-2015			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S				
2015-2016			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S				
2016-2017			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S				
2017-2018			F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S	F, W, S				
2018-2019	F, W	F, W	F, W	F, W	F, W	F, W	F, W	F, W	F, W				

F=Fall, W=Winter, S=Spring

We added the MAP assessment for grades K and 1 this year to examine whether this is a better, more comprehensive fit for our younger students. Initial indications are that students were able to complete the assessment successfully and that it correlates with other assessments that take more time to administer, score, and report. We may be looking to trim back some assessments in Fall of 2019 to streamline these processes and leave more time for instruction.

The Winter 2019 testing window was recently completed, and 2112 individual test events were recorded. Many personnel are involved in the testing window, including principals, teachers, aides, and tech staff, and all deserve recognition for their efforts.

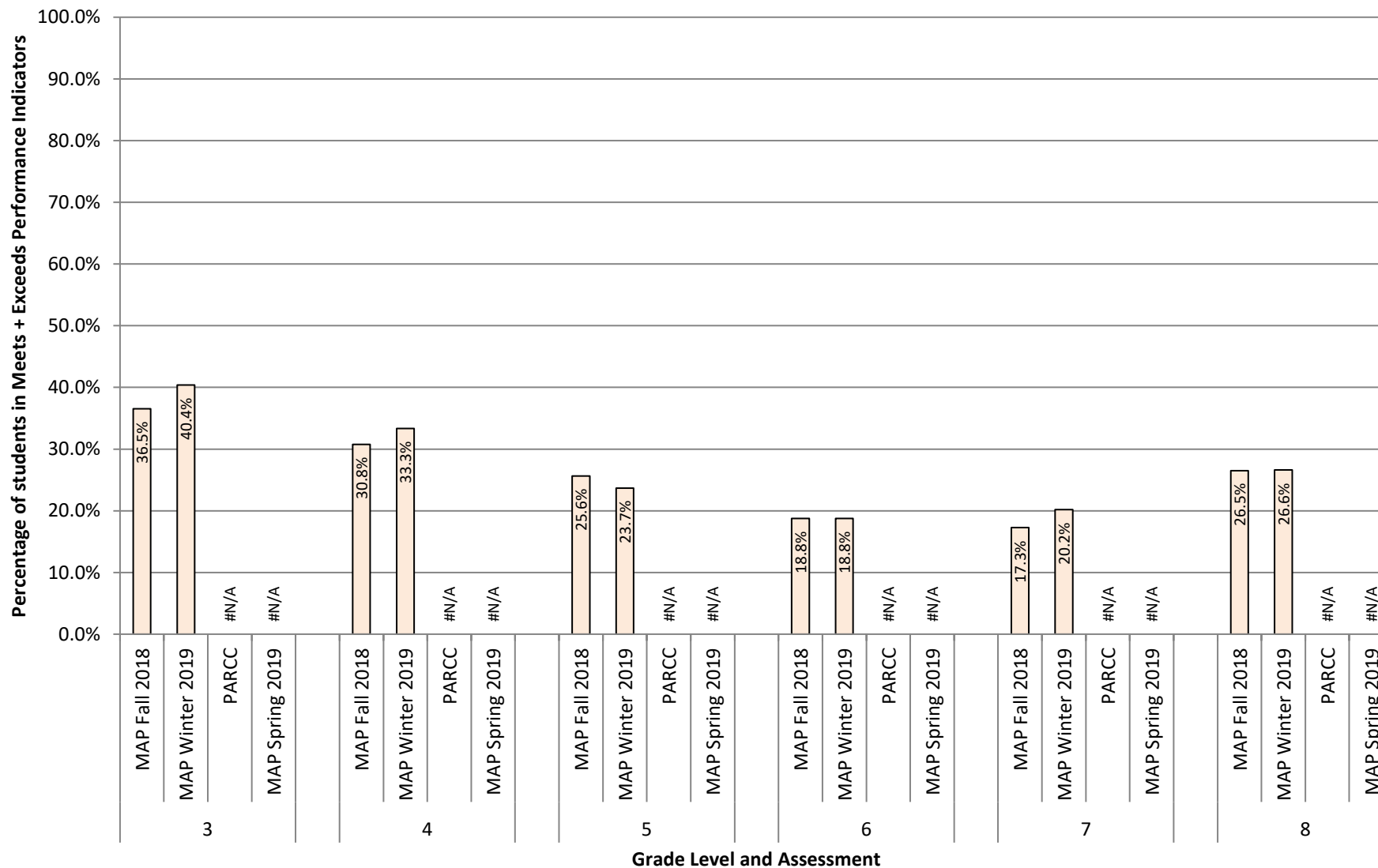


## Predicting the 2019 Illinois Assessment of Readiness

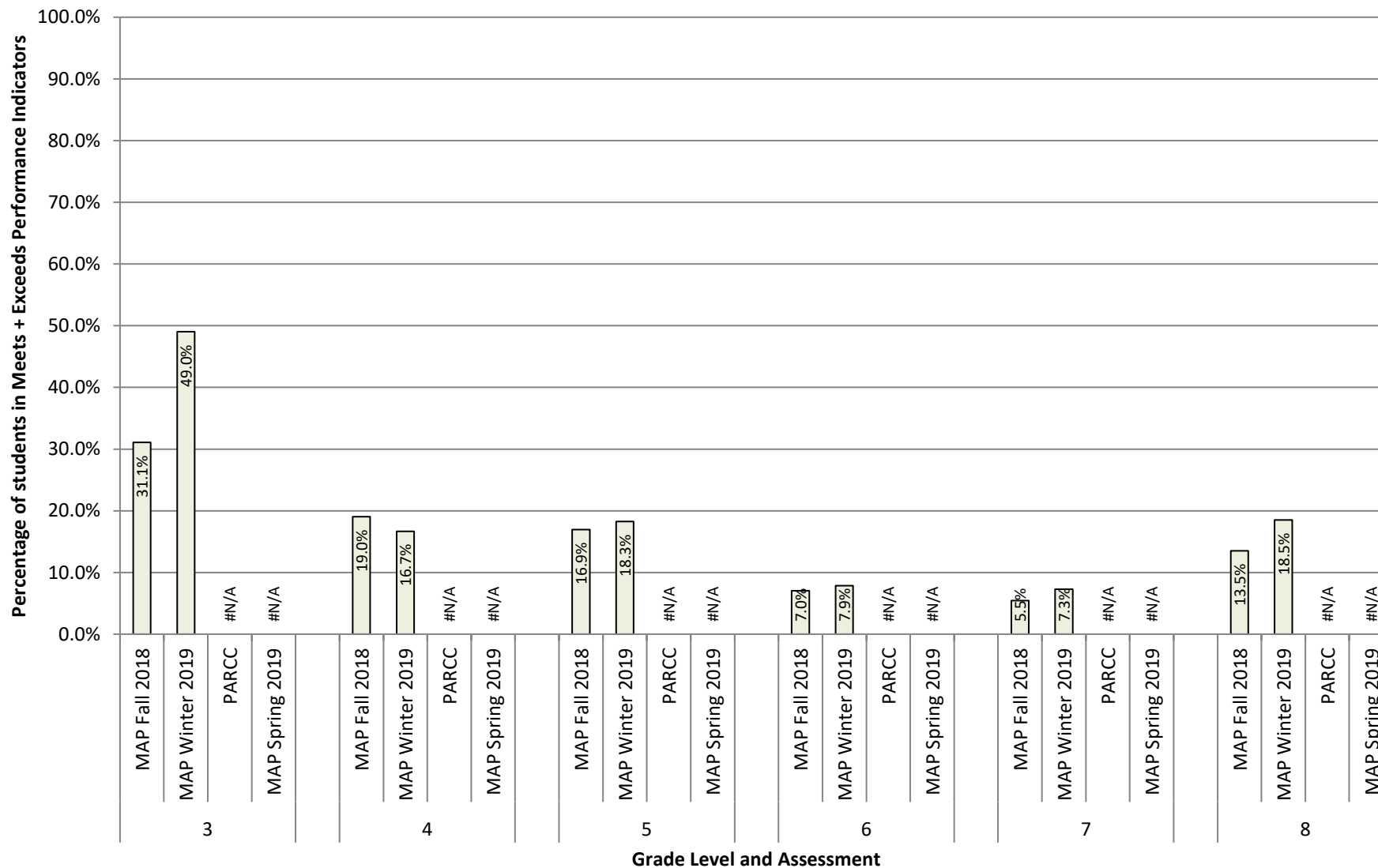
NWEA released updated MAP-PARCC correlate cutscores in November of 2016. These cutscores allow school districts to make predictions about which students are expected to meet and not meet expectations when they take the PARCC each spring. This analysis is useful both for 1) program evaluation, determining 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.

A summary of expected performance in Reading and Mathematics follows. We run these predictions every testing term, but we are again in a state of flux as the Illinois State Board of Education is rolling out a new standardized test in the spring of 2019. It is unclear how different the achievement expectations will be between the PARCC and the new IAR (Illinois Assessment of Readiness) test. Our assumption is that they will be similar, but any changes in those cutscores would render the following predictions inaccurate.

## 2019 PARCC Reading with Fall, Winter, and Spring Predictions from MAP



## 2019 PARCC Mathematics with Fall, Winter, and Spring Predictions from MAP





## 2019 Illinois Assessment of Readiness (IAR)

In 2018, the Illinois State Board of Education awarded the contract for a new standardized test to the Data Recognition Corporation (DRC). We are already familiar with the DRC because they publish the state assessment for English Learners (ELs). However, Pearson, the vendor that had supplied the PARCC since its inception, filed a protest against the awarding of this contract. After several months, an agreement was reached that Pearson would provide at least one administration of this new spring assessment. This is good news for us, as it implies that the new IAR will run on the Pearson Access Next (PAN) platform for at least the 2019 assessment. Our test proctors are already familiar with PAN, so our training burden should be minimal. We should have to make very few changes to our technology configuration to prepare for this, and we already know that PAN will run on our student devices. Testing that used to take many, many weeks on paper and in computer labs can now be performed in a matter of days, including makeups. For some perspective, consider that NWEA MAP testing used to take two full weeks, plus a week for makeup tests. With almost all students having their own devices, MAP was completely finished within a week.

We will continue to provide updates about the rollout of the Illinois Assessment of Readiness as more details become available.

Respectfully Submitted,

A handwritten signature in blue ink that reads 'Adam P. Larsen'.

Adam P. Larsen  
Assistant Superintendent  
Oregon CUSD #220