

2018 MCAS Analysis

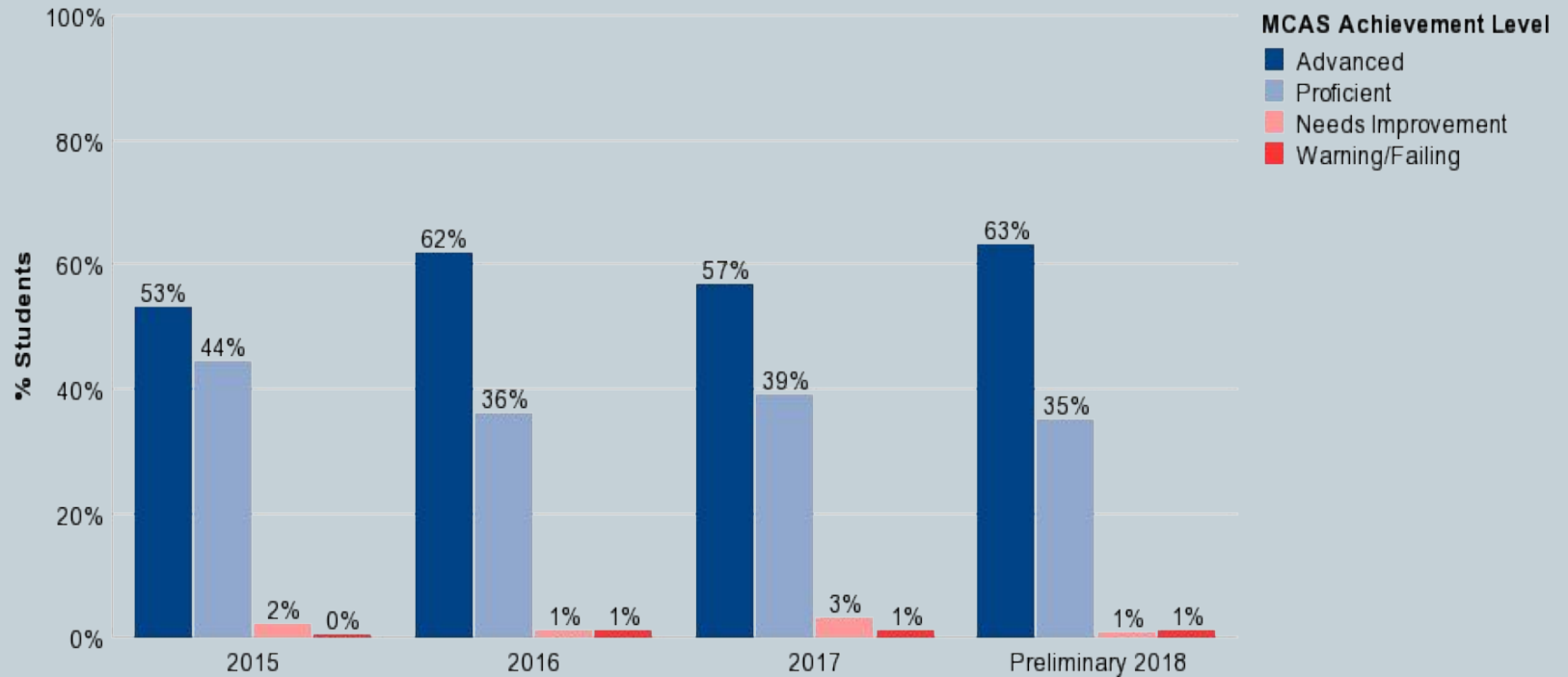


OLIVER AMES HIGH SCHOOL

ELA 2015-2018 at Oliver Ames HS



Grade 10 - ENGLISH LANGUAGE ARTS Percentage of Students by Achievement Level



GRADE 10 - ENGLISH LANGUAGE ARTS ACHIEVEMENT

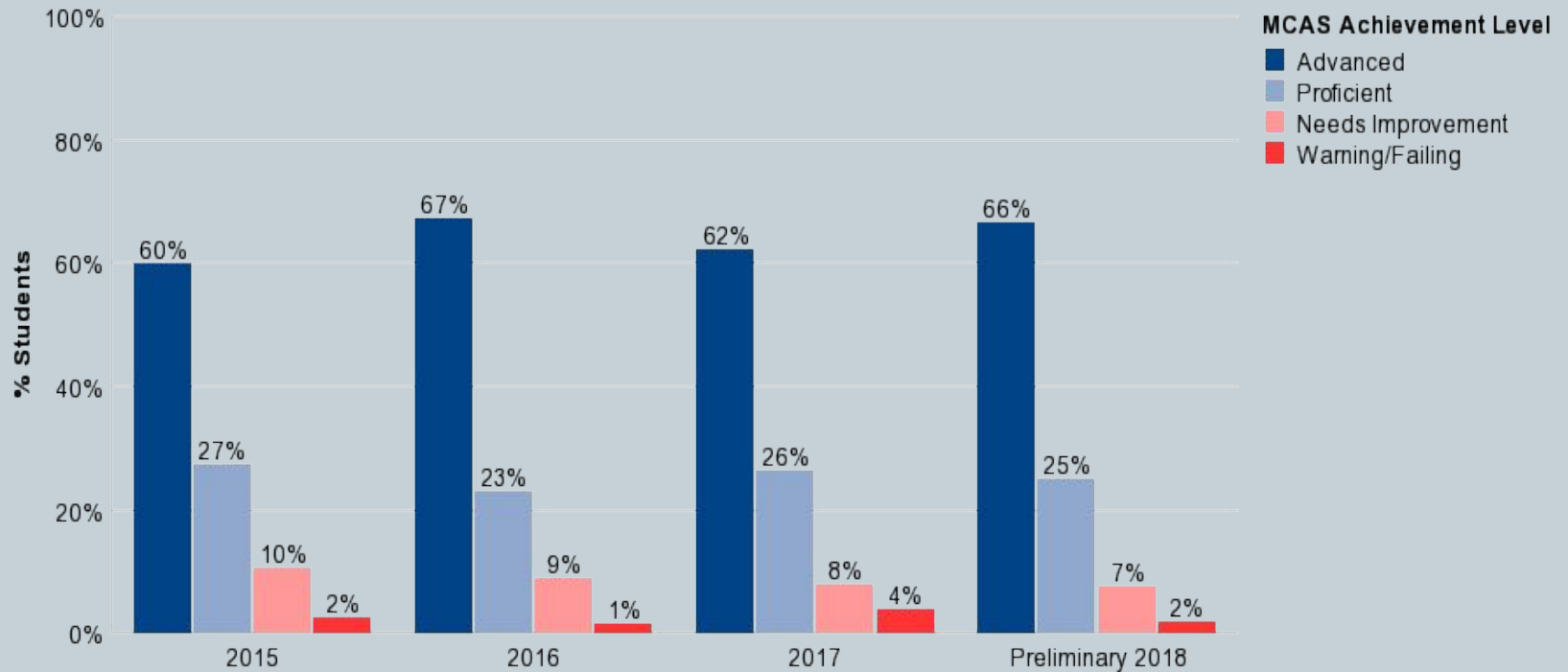


LEVEL	2015	2016	2017	2018
ADVANCED	53%	62%	57%	63%
PROFICIENT	44%	36%	39%	35%
NEEDS IMPROVEMENT	2%	1%	3%	1%
FAILING	0%	1%	1%	1%

Math 2015-2018 at Oliver Ames HS



Grade 10 - MATHEMATICS Percentage of Students by Achievement Level



GRADE 10 - MATHEMATICS ACHIEVEMENT

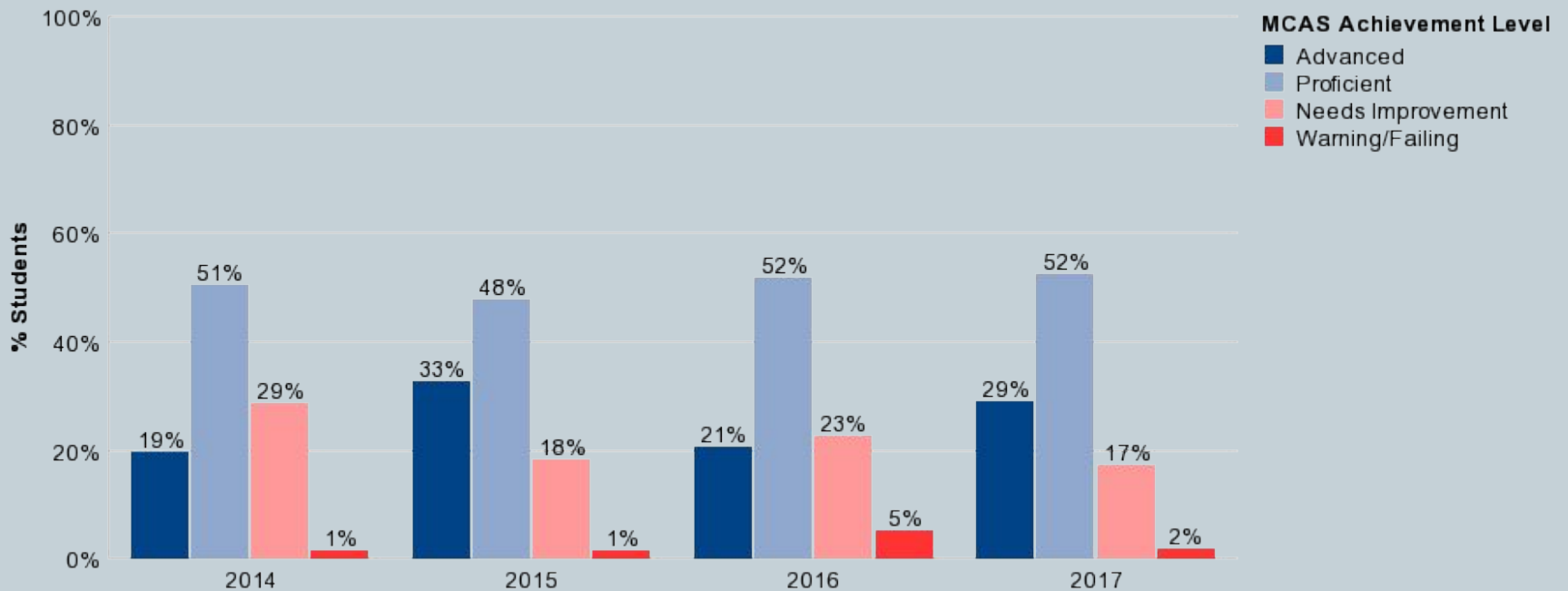


LEVEL	2015	2016	2017	2018
ADVANCED	60%	67%	62%	66%
PROFICIENT	27%	23%	26%	25%
NEEDS IMPROVEMENT	10%	9%	8%	7%
FAILING	2%	1%	4%	2%

Science/Technology 2014-2017 at OAHS



Grade 10 (Class of 2020=2017) - SCIENCE AND TECH/ENG. Percentage of Students by Achievement Level



GRADE 10 - SCIENCE AND TECH/ENG. ACHIEVEMENT (%)



LEVEL	2014 (Class of 2017)	2015 (Class of 2018)	2016 (Class of 2019)	2017 (Class of 2020)
ADVANCED	19%	33%	21%	29%
PROFICIENT	51%	48%	52%	52%
NEEDS IMPROVEMENT	29%	18%	23%	17%
FAILING	1%	1%	5%	2%

GRADE 10 - SCIENCE AND TECHNOLOGY/ENGINEERING COMMENT



- Gains in subgroup population percentages scoring proficient or higher as compared to prior years:

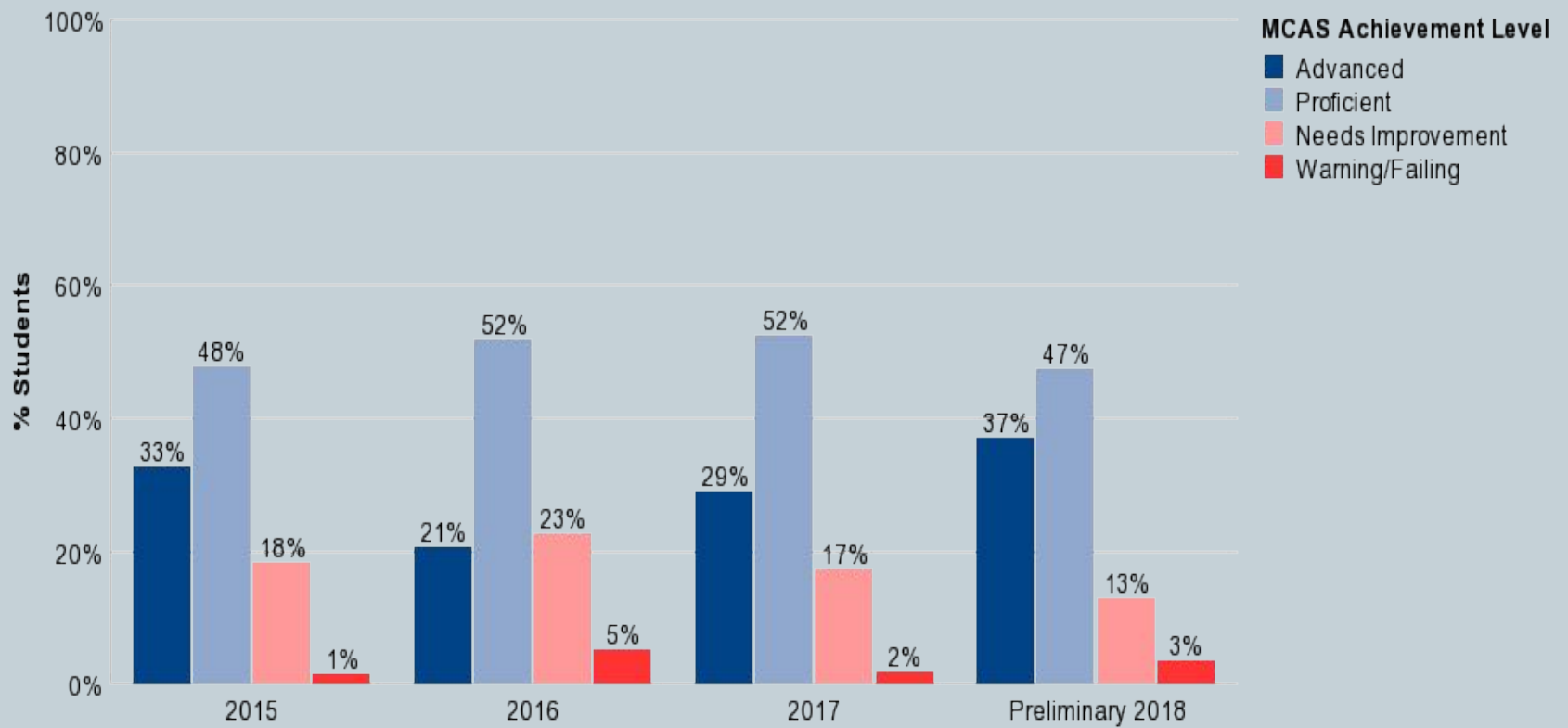
	2016	2017
Economically disadvantaged	53%	61%
Students w/disabilities	17%	44%
High Needs	36%	57%

- Focus on instructional strategies, common assessments and unit design and MCAS academy offering continue to show gains in the subsequent year (2018 test) for whole school, particularly in advanced category, 29% vs 37%

Science/Technology 2015-2018 at OAHS



2018 Science MCAS results



Strength- ELA, Math and Physics

- Improve performance of high needs students to increase the number of students scoring in the proficiency category and decrease the number of students in the needs improvement category (former weakness)

High Neds Adv/Prof	2017	2018
ELA	86	93
Math	62	79
Physics	36	57

Strengths



- **Improvements in ELA:**
 - From grade 8 to grade 10 (same student cohort):
 - Increase of 6% in Adv/P
 - Decrease of 6% in NI/W
 - 96% or more of students consistently score in the Adv/P

Strengths



- **Improvements in Math:**
 - From grade 8 to grade 10 (same student cohort):
 - Increase of 16% in Adv/P
 - Decrease of 16% in NI/W
 - 87% or more of the students consistently score in the Adv/P

Strengths



- Improvements in STE (Science Technology Engineering):
 - From grade 8 to grade 9 (same student cohort):
 - Increase of 14% in Adv/P
 - Decrease of 14% in NI/W
 - 70% or more of the students consistently score in the Adv/P

Strengths



ELA/Math/Science: Student performance is consistently above state average in the A/P categories

Subject	OAHS	State
ELA	A-63% P-35% NI-1% F-1%	A-51% P-40% NI-6% F-3%
Math	A-66% P-25% NI-7% F-2%	A-51% P-27% NI-14%F-8%
Science	A-29% P52% NI-17%F-2%	A-30% P-42% NI-18%F-9%

Strengths-Internal Factors



- MCAS analysis is done annually by Principal and Department Heads with general results of strengths and weaknesses.
- Department Heads work within their departments to identify more specific strengths and weaknesses that are then shared with entire faculty along with suggestions for instructional and assessment adjustments to help improve noted weaknesses.
- OA continues to offer MCAS Math and English classes in addition to the 10 grade Math and English classes.

Strengths-Internal Factors



- Every department along with academic support teachers collaborates to implement strategies into their lessons to help students improve their skills.
- Detailed analysis within Math, English and Science departments is conducted using Teacher Reports during common planning time, and plans are developed to focus and correct weaknesses to be used throughout the year in preparation for the next test administration.

Weaknesses- ELA, Math and Physics

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- Continue to focus on improving performance of high needs students to increase the number of students scoring in the proficiency category and decrease the number of students in the needs improvement category.
- ELA focus on integration of knowledge and ideas with close reading
- Math grade 10 geometry classes continue to incorporate additional practice and application of algebraic problem solving
- Science open response questions receive low scores for some questions.

Opportunities



- MCAS ELA and Math courses offered as part of student schedule
- MCAS courses semester-based
- Target: students scoring in needs improvement and warning categories (grade 8 MCAS)

Opportunities (cont)



Physics

- A Physics MCAS remediation program is offered in April/May and it will continue to expand focus on and access to Google classroom lessons for at risk students
- Physics instructors work closely with resource teachers to provide instruction and direction
- The standard level class focuses on core MCAS concepts and skills
- Instructors share strategies to address weak topics and improve free response performance

Physics Opportunities (cont)



- Continue emphasis on improvement of scores for the high needs population which has accomplished significant gains.
- The 2018 test results demonstrate that the focus on content skills, test taking strategies and unit design and assessment continue to improve scores.

Threats



- Time for more collaboration amongst teachers regarding data analysis
- More resources for high need students that are in need of support in grade 9 (MCAS Math, ELA and Science)
- The achievement gap and foundational skills of high needs students are a continual point of focus.

Recommendations



- Continue to offer a Physics remediation program prior to the test
- Continuation of Principal, ELA, Math and Science Departments, Academic Support Teachers working together and meeting to develop and use instructional and assessment resources, identify at risk students and provide interventions and work to improve motivation.

Recommendations



- Increase MCAS Math and ELA offerings to grade 9 students based on grade 8 performance (Warning and NI) - This increased Math and ELA time concentrated on the unique needs of each student should continue to help us raise the growth of our high needs students. We currently offer four MCAS Classes (two MCAS math semester classes and two MCAS ELA semester classes) and if we extended to grade 9 we would need four more classes.