

PSAT Data Analysis

New Mission High School 2013-2014

Overview

- October Exam - all students 9-11 grade
- Data received February
- Analysis to inform college readiness curriculum design
- Team's can use analysis to pinpoint skill areas in need of attention; adjust instruction

Considerations

- SAT changes - Spring 2016
- Research supporting ACT suitability
- PARCC alignment
- AP alignment
- CCSS, Rigor, DOK (previous year's focus)
- Making sense of it all and moving forward

Essential Questions

1. What do NMHS students, at each grade level, require to ensure they are prepared for post-collegiate success?
2. What are the best indicators for college success?
3. Where are NMHS students strong/weak compared to peers? How do we make sense of this?
4. How should we align curricula?
5. How can curriculum maps be integral in aligning teaching and learning to college-readiness standards?
6. What is the role of EDFS in this work?

Grade	Critical Reading: NM/ Peers (National)	Writing: NM/Peers (National)	Math: NM/Peers (National)
9	33.8/41.7 (40.3)	33.7/40.5 (39.3)	39.2/43.1 (41.2)
10	35.4/44.0 (42.8)	34.1/41.1 (40.6)	39.6/44.0 (42.8)
11	37.8/46.6 (46.6)	37.4/45.0 (45.3)	43.7/48.4 (47.8)

Overall Performance

% College Ready

Grade 9 - N/A

Grade 10 - 11.7% (Nation = 37.7%)

Grade 11 - 15.1% (Nation = 46%)

Terms

- **Best** - where students performed at or above their peers; where they performed best overall as a cohort
- **To Improve** - where students were both above and below peers; a recommended focus area where substantial acceleration is possible and students have prior/developing knowledge; also skills most frequently assessed
- **Worst** - where students omitted/answered incorrectly most often; where they performed most poorly; where a section is rated “most difficult”

Math

4 Content Areas

1. Numbers and Operations
2. Algebra and Functions (36% of all questions)
3. Geometry/Measurement
4. Data, Statistics, Probability

5 Skill Areas

1. Problem Solving (26% of all questions)
2. Representation
3. Reasoning
4. Connections
5. Communication

Grade	Best Performance	To Improve	Worst
9	Geometry/Measurement	Algebra/Functions; Numbers/Operations	Data, Statistics, and Probability
10	Algebra and Functions; Data, Statistics, and Probability	Geometry/Measurement	Numbers/Operations
11	Geometry/Measurement; Numbers/Operations	Algebra/Functions; Data, Statistics, and Probability	

Grade	Best Performance	To Improve	Worst
9	Communication	Problem Solving Representation Reasoning	Connections
10	Problem Solving Representation	Reasoning Connections	Communication
11	Representation	Problem Solving Connections Communication	Reasoning

Positives

- Algebra/Functions and Problem Solving are strong and most frequent
- Between 2-4 points below state/national averages
- Multiple skills in “To Improve” w/potential for real gains
- Best Practices?

Concerns

How do literacy issues impact scores?

Critical thinking across the curriculum?

Critical Reading

5 Skills; 48 Questions

1. Determining the Meaning of Words (31%)
2. Author's Craft
3. Reasoning and Inferencing
4. Organization and Ideas
5. Understanding Literary Elements

Grade	Best Performance	To Improve	Worst
9	<p>Author's craft</p> <p>Organization/Ideas</p>	<p>Determining the Meaning of Words</p> <p>Reasoning/Inferencing</p>	<p>Literary Elements</p>
10	<p>Reasoning/Inferencing</p>	<p>Determining the Meaning of Words</p> <p>Author's Craft</p> <p>Organization/Ideas</p>	<p>Literary Elements</p>
11	<p>Organization/Ideas</p>	<p>Determining the Meaning of Words</p> <p>Author's Craft</p> <p>Reasoning/Inferencing</p>	<p>Literary Elements</p>

Positives

Critical Skills - Inferencing, Organizing are
“best”

Determining Meaning of Words showing
potential

Concerns

- 6-9 pts below state/national averages
- Literary Elements weakest (!)
- Vocabulary in context is weak
- Omitting large portions of critical reading section
 - Lack of confidence; know-how; fatigue; disengagement?

Writing

5 Skills

1. Word Choice/Grammatical Relationships (44%)
2. Grammatical Structures to Modify/Compare
3. Phrases/Clauses
4. Correctly Formed Sentences
5. Order/Relationships of Sentences/Paragraphs

Grade	Best Performance	To Improve	Worst
9	<p>Grammatical Structures: Modify/Compare</p> <p>Phrases/Clauses</p>	<p>Correctly Formed Sentences</p> <p>Word Choice/Grammatical Relationships</p>	<p>Order/Relationships of Sentences/Paragraphs</p>
10	<p>Grammatical Structures: Modify/Compare</p> <p>Phrases/Clauses</p> <p>Correctly Formed Sentences</p>	<p>Word Choice/Grammatical Relationships</p>	<p>Order/Relationships of Sentences/Paragraphs</p>
11	<p>Word Choice/Grammatical Relationships</p>	<p>Grammatical Structures: Modify/Compare</p> <p>Phrases/Clauses</p> <p>Correctly Formed Sentences</p>	<p>Order/Relationships of Sentences/Paragraphs</p>

Positives

Common strengths and weaknesses allowing for collaborative solutions, assessments

Grammar is strong

Concerns

- 6-9 pts below national/state averages
- Common strengths and weaknesses between grades
- Weakness in “ordering of paragraphs/sentences” reflects overall writing challenges
- Omissions are high
 - Lack of confidence; know-how; fatigue; disengagement?

Test-taking issues

- Omissions - overall, higher rates than peers
 - Math: strategic or fatigue?; ELA: fatigue?
- Role of stamina, persistence, confidence in test performance
- Strategies, individualized analysis re: strengths/weaknesses
- School-wide approach in 9th grade?

Moving Forward - Short-Term

Content teams:

- Categorical analysis and questions types (see packet)

- Review items, where students are below peers, cycle of inquiry focusing on instruction

- Work on Best and To Improve areas where realistic short-term growth is possible

- Consider implications for curriculum development and alignment

- Consider skill-based rather than content-based curriculum

Moving Forward - ILT

Essential Questions:

To what extent does PSAT performance indicate success - one of many tools or *the* diagnostic?

How can mock exams impact teaching/learning? What is required to ensure they are as useful as possible?

What does a test-taking skill curriculum and how can we distribute responsibility and accountability?

How has the honors requirement mandate (timed/SAT-style assessments, HW, etc.) helped improve performance?

Student grouping data for individualized assistance

Moving Forward - Long-term

ILT:

- Whole-school literacy instruction in 9th and 10th grade?
- PARCC + SAT intersection (and new changes) re: curriculum
- Benchmarks/Objectives re: college readiness (how closely tied to assessments?); Backwards mapping/UBD; clusters' role
- ELA curriculum + close collaboration w/History

College Access:

- SAT-optional schools (portfolios, research requirements)
- SAT vs. ACT - whole-school “either or” or individualized; TOEFL for ELL's
- Student ownership, reflection, goal-setting (Advisory?)