## STUDENT PERFORMANCE REPORT

Irvington Union Free School District
Report to the Board of Education
February 2017

## Monitoring Student Growth

- Standardized test data is only one measure of student achievement and does not necessarily demonstrate growth
- State tests have limits to their value:
- Represents performance on a given day(s)
- Cohort sizes hinder direct comparisons
- Consistent changes in test models, scale and cut scores, \& curriculum standards
- The District utilizes multiple means of assessment to measure progress including:
- Teacher observation
- Regular, formative assessment
- Common unit assessments
- Teacher-made assessments
- Benchmark assessments, universal screener
- Student self-reflection
- Student choice/participation in electives
- Value of dispositional learning: $21^{\text {st }}$ Century Skills \& Habits of Mind
- Rich extracurricular opportunities such as arts, music, athletics, and clubs


## Executive Summary

## Irvington Schools continue to perform at very high levels

- 95\% of 2017 class received Regents Diplomas
- SAT scores - A new format was used in 2017 - the categories are:
- ERW (Evidenced-based Reading and Writing) $13 \%$ higher than US average
- Math 25\% higher
- Total $18 \%$ higher
- ACT score $32 \%$ higher than national average
- 21 AP Class offerings: $72 \%$ passing (vs average of $68 \%$ over last 4 years), $43 \%$ of all exam-takers received 4 or 5


## Irvington High School Scholar Athletes Recognized by Team

## NYS Scholar Athlete $=90$ or higher GPA

> 2002-03: 14 Teams Honored, 4 Teams with Top Student Averages in the Group
> 2003-04: 16 Teams Honored, 2 Teams with NYS Highest GPA, 4 League Champions
> 2004-05: 14 Teams Honored, 3 Teams with NYS Highest GPA, 2 League Champions
> 2005-06: 14 Teams Honored
> 2007-08: 20 recognized as NYS Scholar Athlete teams . Boys Bowling and Boys Soccer highest GPA in NYS for their sport
> 2008-09: 24 recognized as NYS Scholar Athlete teams. Boys and Girls Track teams highest GPA in NYS for their sport
> 2009-10: 22 recognized as NYS Scholar Athlete teams. Girls cross country, bowling and softball teams highest GPA in NYS for their sport
> 2010-11: 20 recognized as NYS Scholar Athlete teams. Three teams with highest average GPA in NYS for their sport
> 2011-12: 22 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams ( 90 or higher GPA). Two teams with highest average GPA in NYS for their sport
> 2012-13: 22 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams ( 90 or higher GPA). Two teams with highest average GPA in NYS for their sport
> 2013-14:21 out of 27 Varsity Teams Recognized as NYS Scholar Athlete teams ( 90 or higher GPA). Three teams with highest average GPA in NYS for their sport
> 2014-15: 16 varsity teams honored as NYS Scholar Athlete teams (above 90 avg.) and 1 team was a NYS Scholar Athlete Champion as highest GPA's in the state
> 2015-16: 6 varsity teams recognized as NY State Scholar Athlete Team Champions, highest GPA for their sport in the state; 14 varsity teams in all were recognized as State Scholar Athlete teams_with an average GPA of 90 or above.
> 2016-17: 227 varsity students achieved status as NY State Scholar Athletes with a average GPA of 90 or above during their sports season. 21 varsity teams were recognized by NY State as Scholar Athlete Teams. This means that $75 \%$ of the entire team roster had a 90 or better average. As a result of having 21 of 24 teams with a 90 average or better, NYSPHSAA recognized Irvington as a School of Excellence for having at least $75 \%$ of all varsity teams achieve Scholar Athlete Team status.

## Opportunities

- The District continues to use test data as one tool to inform our work
- Data is used to lead meaningful discussions to target cohort needs and inform curricula design
- The District has focused on deepening instruction and aligning curricula - this work will continue to enhance student achievement
- The District's focus on Professional Learning has had positive impacts on student growth
- Data usage continues to increase at all levels to help inform instruction


## Note:

State test data does not necessarily depict growth but demonstrates achievement on the particular test

## Executive Summary - Standardized Tests

- Irvington English Language Arts scores rank among the top 6 in our measured cohort of schools for grades 6-8; we continue to see improvement from our efforts in this area
- For Math standardized tests, our IMS $8^{\text {th }}$ grade scores are impacted by the cohort of students taking the advanced level course (Algebra) as they take the Algebra Regents instead
- Regents Scores (\% passing):

| Algebra I 96\% | English 94\% | Earth Science 93\% |
| :--- | :--- | :--- |
| Algebra II 96\% | Global History 97\% | Living Environment 96\% |
| Geometry 94\% | US History 95\% | Chemistry 98\% |

## Executive Summary - Standardized Tests

- Teachers utilize released questions to aid in the planning of instruction
- Use data reports to identify which standards posed challenges for individual students
- Informs small group and whole group instruction
- In math, use data at math learning sessions
- Interventionists target support using data
- Team meeting time used to review data


## New York State Tests <br> English Language Arts \& Mathematics

## 2017 English Language Arts Scores



2017 Irvington Regents Score Distribution


## 2017 Mathematics Scores




## Comparative Data

Grade 3-8 Tests \& Regents Exams

## Comparison Data

To better understand how Irvington students performed in context of comparative districts, the following slides include data for the following districts:

| - Ardsley | - Hastings-on-Hudson |
| :--- | :--- |
| - Blind Brook | - Irvington |
| - Briarcliff Manor | - Mamaroneck |
| - Croton-Harmon | - Pleasantville |
| - Dobbs Ferry | - Rye Neck |
| - Edgemont |  |

## Mathematics - Grade 3-8

## 2017 Math - Grades 3 \& 4

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 Math - Grades 5 \& 6

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 Math - Grades 7 \& 8

Score Distribution vs Comparison Cohort of Westchester Schools



## English Language Arts - Grade 3-8

## 2017 ELA - Grades 3 \& 4

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 ELA - Grades 5 \& 6

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 ELA - Grades 7 \& 8

Score Distribution vs Comparison Cohort of Westchester Schools



## Science - Grades 4 \& 8

## 2017 Science - Grades 4 \& 8

Score Distribution vs Comparison Cohort of Westchester Schools



## Executive Summary - Grade 3-8 Tests

- Longitudinal progress demonstrates consistent improvements in test achievement
- Use of RTL data supporting struggling learners
- Mean score average of MS ELA scores is the highest of our regional cohorts:
- Irvington 328
- Edgemont 326
- Ardsley 323
- Hastings 322
- Mamaroneck 322
- Expanded use of data may introduce additional insights into student needs and curricular enhancements

Regents Exams

## Executive Summary - Regents Exams

| Regents Diploma | Advanced Regents Diploma |
| :---: | :---: |
| Examination Requirements |  |
| A student must achieve a score of 65 or higher on five Regents exams: <br> - English Language Arts (ELA) <br> - Any mathematics exam (Algebra I, Geometry, or Algebra II/Trigonometry) <br> - Any social studies exam (Global History and Geography or U.S. History and Government) <br> - Any science exam ( Living Environment, Chemistry, Earth Science, or Physics) <br> - Any additional Regents exam or assessment approved by the State for this purpose | A student must achieve a score of 65 or higher on nine exams: <br> - English Language Arts (ELA) <br> - Three mathematics exams (Algebra I, Geometry, and Algebra II/Trigonometry) <br> - Any social studies exam (Global History and Geography or U.S. History and Government) <br> - Two science exams (Living Environment and one of the following: Chemistry, Earth Science, or Physics) <br> - Any additional Regents exam or assessment approved by the State for this purpose <br> - Any NYC Languages Other Than English(LOTE) exam |

## Irvington High School Regents Diplomas Awarded

| Year | Students | Graduates | Regents Diplomas |
| :---: | :---: | :---: | :---: |
| 2003 | 94 | 91 | $82 \%$ |
| 2004 | 124 | 123 | $95 \%$ |
| 2005 | 138 | 134 | $97 \%$ |
| 2006 | 122 | 119 | $96 \%$ |
| 2007 | 141 | 138 | $92 \%$ |
| 2008 | 157 | 145 | $93 \%$ |
| 2009 | 172 | 169 | $99 \%$ |
| 2010 | 149 | 146 | $95 \%$ |
| 2011 | 155 | 151 | $96 \%$ |
| 2012 | 142 | 142 | $96 \%$ |
| 2013 | 150 | 146 | $97 \%$ |
| 2014 | 148 | 146 | $95 \%$ |
| 2015 | 134 | 130 | $95 \%$ |
| 2016 | 130 | 146 | $97 \%$ |
| 2017 |  | 128 | $95 \%$ |

## 2017 Irvington Regents Results




## 2017 Common Core Algebra

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 Common Core Geometry

Score Distribution vs Comparison Cohort of Westchester Schools


## 2017 Science Regents

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 Chemistry Regents

Score Distribution vs Comparison Cohort of Westchester Schools


## 2017 History Regents

Score Distribution vs Comparison Cohort of Westchester Schools



## 2017 Common Core ELA Comparison

Score Distribution vs Comparison Cohort of Westchester Schools


## Executive Summary - Regents Exams

- Consideration of the value/need to continue to pursue the advanced Regents Diploma
- Few colleges consider aside from NYS public institutions
- Cohort results vary, for all school districts, due to numerous factors
- Cohort size and course selection of electives impacts participation
- Departments can utilize data to inform instruction and reflect on past experiences


## Advanced Placement (AP) Exams

## Executive Summary - Advanced Placement

- IHS maintains open-enrollment for AP courses which increased access for all students
- The addition of numerous electives has impacted student enrollment in AP courses
- Overall, Irvington students performed well, with $78 \%$ passing (3+) at least one exam
- Of the 527 taking the exams in 2017, $18 \%$ resulted in a 5 , and $26 \%$ resulted in a 4 and $28 \%$ resulted in a 3, for overall passingof $72 \%$


## Number of AP Courses Offered

| Year | \# of Courses |
| :---: | :---: |
| 2003 | 15 |
| 2004 | 15 |
| 2005 | 18 |
| 2006 | 17 |
| 2007 | 19 |
| 2008 | 18 |
| 2009 | 17 |
| 2010 | 17 |
| 2011 | 17 |
| 2012 | 19 |
| 2013 | 19 |
| 2014 | 17 |
| 2015 | 18 |
| 2016 | 20 |
| 2017 | 21 |

## AP Exam - Participation and Passing Rates

| Year | Enrollment | \# Taking | \# Passing |
| :---: | :---: | :---: | :---: |
| 2003 | 480 | 231 | 160 |
| 2004 | 530 | 394 | 296 |
| 2005 | 550 | 416 | 291 |
| 2006 | 597 | 384 | 272 |
| 2007 | 600 | 410 | 266 |
| 2008 | 608 | 457 | 289 |
| 2009 | 611 | 536 | 329 |
| 2010 | 607 | 524 | 302 |
| 2011 | 612 | 505 | 344 |
| 2012 | 608 | 554 | 381 |
| 2013 | 594 | 589 | 368 |
| 2014 | 559 | 530 | 525 |
| 2015 | 569 | 540 | 527 |
| 2017 | 5 | 505 |  |

## 2017 AP Exam Scores

Enrollment in AP classes varies significantly by program, which impacts score distribution. We continue to review programs to identify areas for improvement as well as to find new course opportunities.


Note: AP Physics 1 was offered for the first time in the 2016-17 school year.
AP Computer Science is offered in alternating years - it was offered in the 2015-16 school year and will be offered again during the 2017-18 school year. AP Music Theory is offered in alternating years - it was offered in the 2016-17 school year and will not be offered again until the 2018-19 school year.

## AP History



Average number of students taking exam annually:

World: 25
European: 14
US: 81
Macro: 56
Micro: 28
Psychology: 34


Red box indicates performance below National average

## AP Math



## Average number of students

 taking exam annually:Calc AB: 23
Calc BC: 21
Statistics: 13
Comp Sci: (not offered in 2017)

## National Passing <br> \% 2017

## Calc AB: 58\%

Calc BC: 81\%
Stat: 54\%

Red box indicates performance below National average

## AP Science



Average number of students
taking exam annually:
Biology: 20
Chemistry: 32
Environmental: 40
National Passing
\% 2017
Bio: 64\%
Envir: 49\%
Chem: 53\%

## AP English

| AP English |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100\% |  |  |  |  |  |
| 90\% |  |  |  |  |  |
| 80\% |  |  |  |  |  |
| 70\% |  |  |  |  |  |
| 60\% |  |  |  |  |  |
| 50\% |  |  |  |  |  |
| 40\% |  |  |  |  |  |
| 30\% |  |  |  |  |  |
| 20\% |  |  |  |  |  |
| 10\% |  |  |  |  |  |
| 0\% |  |  |  |  |  |
|  | 2013 | 2014 | 2015 | 2016 | 2017 |
|  | English | and Con |  | teratur | osition |

Average number of students
taking exam annually:
Language: 60
Literature: 57

National Passing \% 2017

Lang: 55\%
Lit: 53\%

## AP World Language



Average number of students taking exam annually:

French: 10
Spanish: 13
Latin: 16

## National Passing \% 2017

French: 75\%
Spanish: 88\%
Latin: 63\%

## AP Art \& Music



## Average number of students taking exam annually: <br> 2D Design: 2 <br> Portfolio: 3 <br> Music Theory: 7 <br> National Passing <br> \% 2016

2D: 85\%
Portfolio: 85\%
Music Th: 61\%

Red box indicates performance below National average

## Executive Summary - AP Exams

- Consideration of how to gain more/deeper data on AP exams \& courses to better understand shifts in scores
- Future contemplation of correlation between course experiences and AP test scores
- Departments can utilize data to inform instruction and reflect on past experiences


## HISTORICAL DATA

The following slides depict examples of the class of 2020 \& 2021 as they progressed through the Irvington Schools

## Grades 3-8 Mathematics - Levels 3 \& 4

Math - Proficient \& Advanced

| Year | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $76 \%$ | $90 \%$ | $91 \%$ | $93 \%$ | $96 \%$ | $90 \%$ |
| 2012 | $85 \%$ | $87 \%$ | $94 \%$ | $88 \%$ | $90 \%$ | $95 \%$ |
| 2013 | $61 \%$ | $66 \%$ | $62 \%$ | $68 \%$ | $60 \%$ | $68 \%$ |
| 2014 | $67 \%$ | $76 \%$ | $75 \%$ | $73 \%$ | $71 \%$ | $61 \%$ |
| 2015 | $63 \%$ | $73 \%$ | $76 \%$ | $73 \%$ | $64 \%$ | $62 \%$ |
| 2016 | $81 \%$ | $69 \%$ | $72 \%$ | $82 \%$ | $73 \%$ | $55 \%$ |
| 2017 | $77 \%$ | $80 \%$ | $71 \%$ | $76 \%$ | $75 \%$ | $56 \%$ |

2013 \& 2014 represent new cut scores and scale scoring for Grades 3-8

## Grades 3-8 English Language Arts - Levels 3 \& 4

| ELA - Proficient \& Advanced |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 |
| 2011 | $82 \%$ | $90 \%$ | $79 \%$ | $83 \%$ | $81 \%$ | $79 \%$ |
| 2012 | $86 \%$ | $84 \%$ | $88 \%$ | $77 \%$ | $78 \%$ | $80 \%$ |
| 2013 | $55 \%$ | $74 \%$ | $62 \%$ | $74 \%$ | $50 \%$ | $56 \%$ |
| 2014 | $63 \%$ | $64 \%$ | $67 \%$ | $60 \%$ | $63 \%$ | $57 \%$ |
| 2015 | $52 \%$ | $68 \%$ | $63 \%$ | $66 \%$ | $59 \%$ | $76 \%$ |
| 2016 | $78 \%$ | $66 \%$ | $63 \%$ | $68 \%$ | $73 \%$ | $75 \%$ |
| 2017 | $66 \%$ | $74 \%$ | $64 \%$ | $69 \%$ | $82 \%$ | $73 \%$ |

2013 \& 2014 represent new cut scores and scale scoring for Grades 3-8

## Historical View: Class of 2021 Performance Grades 3-8



## Historical View: Class of 2021 Performance Grades 3-8



## Historical View: Class of 2021 - ELA Performance



## Historical View: Class of 2021 - Math Performance



This chart follows the performance of the class of 2021 through 5 years - vs a cohort of comparison schools' 2021 classes
Critical note: in 2014 IUFSD $8^{\text {th }}$ graders taking Algebra stopped taking the $8^{\text {th }}$ grade NYS test. Thus, the data does not accurately reflect the $8^{\text {th }}$ grade achievement Not sure if this applies

## Summary Notes

- Again, test data gives the District a window into how students perform on a specific test on a specific date(s)
- Information can be useful, but is also limited due to numerous factors such as the consistent changes in testing models, shifts in cut scores, and alterations in state curriculum standards
- District remains committed to developing a local assessment program that is largely performance-based and seeks to have students demonstrate deep thinking skills and complex application of skills and knowledge


## Final Thoughts

- Continue to develop and expand local common assessments
- Evolution towards more 'authentic' assessment of student learning
- Project-based learning/assessment
- Capstone Projects
- Data will continue to be viewed as one aspect of measuring student achievement
- District to consider expansion of data use
- Summer-based data review with a 'data team'
- Explore supplemental support to analyze available data

Discussion

