STUDENT PERFORMANCE REPORT

Irvington Union Free School District

Presentation to the Board of Education

December 13, 2016

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
  - 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: 21st 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

- 97% of 2016 class received Regents Diplomas

- SAT scores:
  - Critical Reading 24% higher than US average
  - Math 23% higher
  - Writing 26% higher

- ACT score 28% higher than national average

- 20 AP Class offerings: 73% passing (vs average of 68% over last 4 years), 42% 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
- 2012-2013: 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 a average GPA of 90 or above.

Opportunities

- The District continues to use test data as one tool to inform our work
- Data can be used to lead meaningful discussions to target cohort needs and inform curricula design
- Over the past few years, the District has focused on deepening instruction and aligning curricula – this work will continue to enhance student achievement
- The continued focus on secondary ELA has had positive impacts. This work will continue for the foreseeable future.
- Ongoing focus in Mathematics will prove to be beneficial at all levels to support student learning
- Data can be used 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 8th 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 82%	English 90%	Earth Science 94%
Algebra II 94%	Global History 92%	Living Environment 95%
Geometry 96%	US History 95%	Chemistry 96%

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 our math learning sessions- pulled book 3 to look at student work along with state exemplars
- Interventionists target support using data
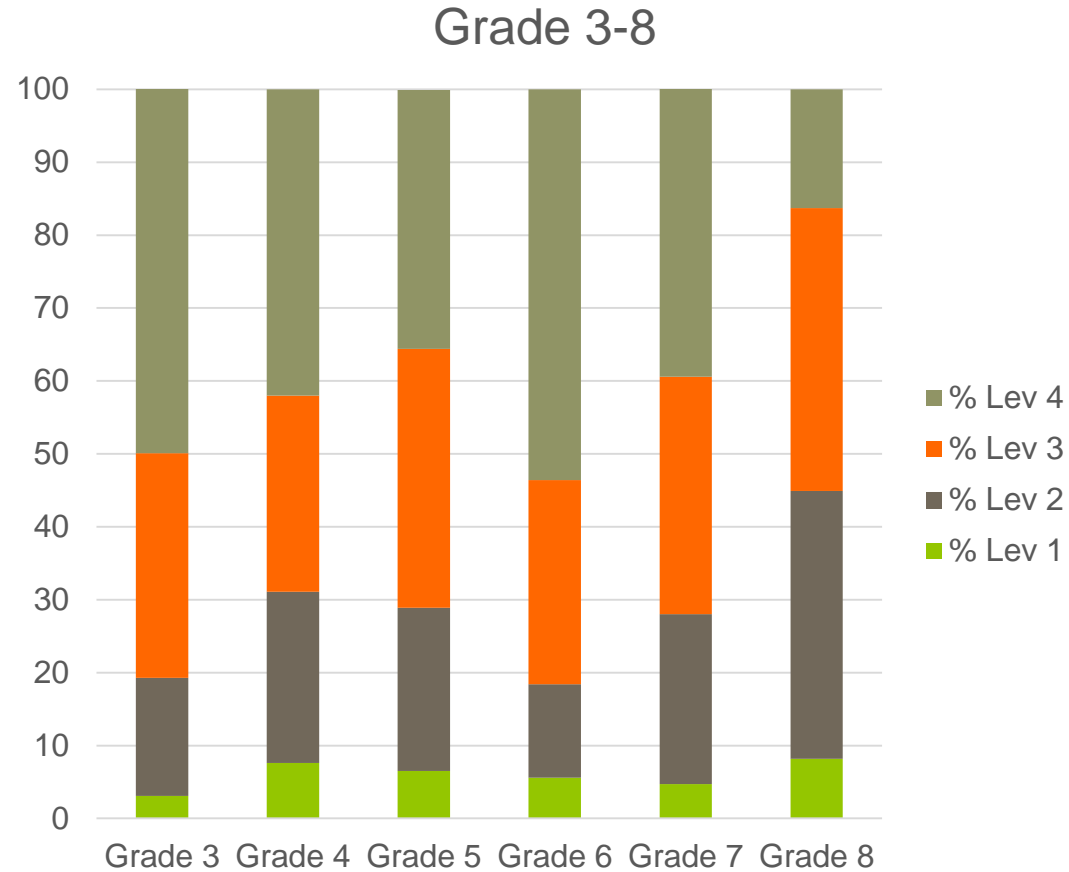- Team meeting time used to review data

New York State Tests
English Language Arts & Mathematics

2016 English Language Arts Scores

Grade 3-8

Common Core ELA
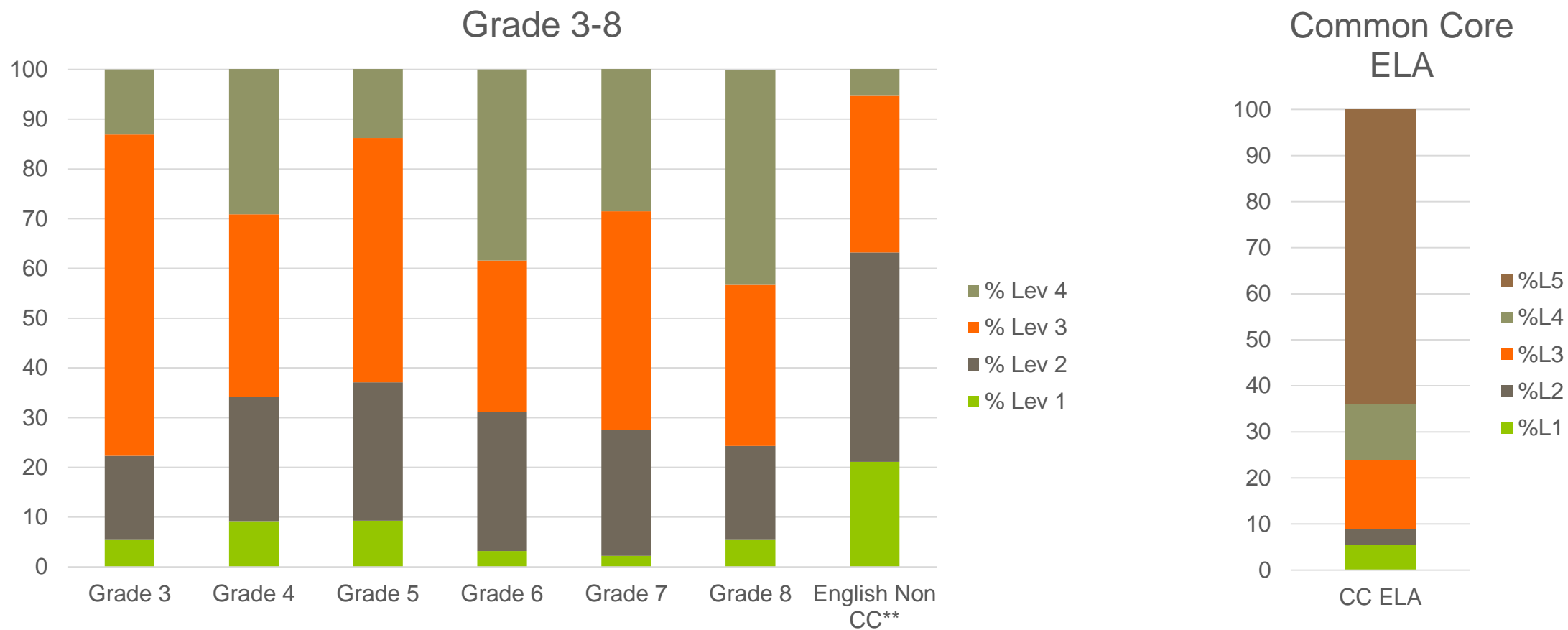
** only 19 students took this assessment

2016 Mathematics Scores

Grade 3-8

Common Core Math Tests

Algebra II/Trig.
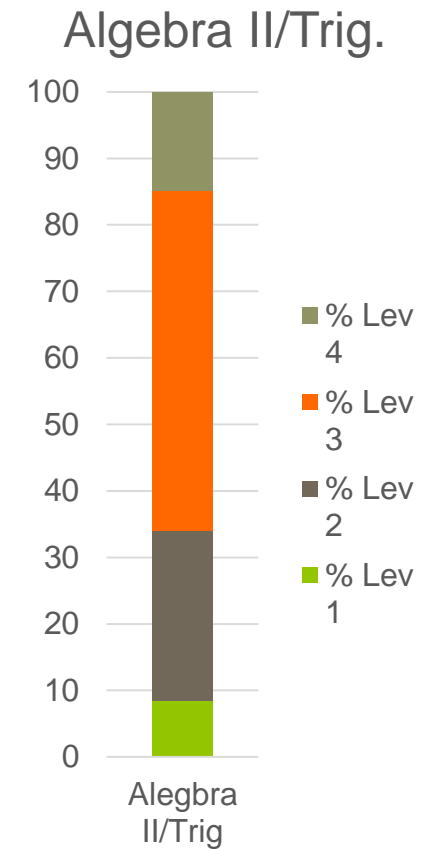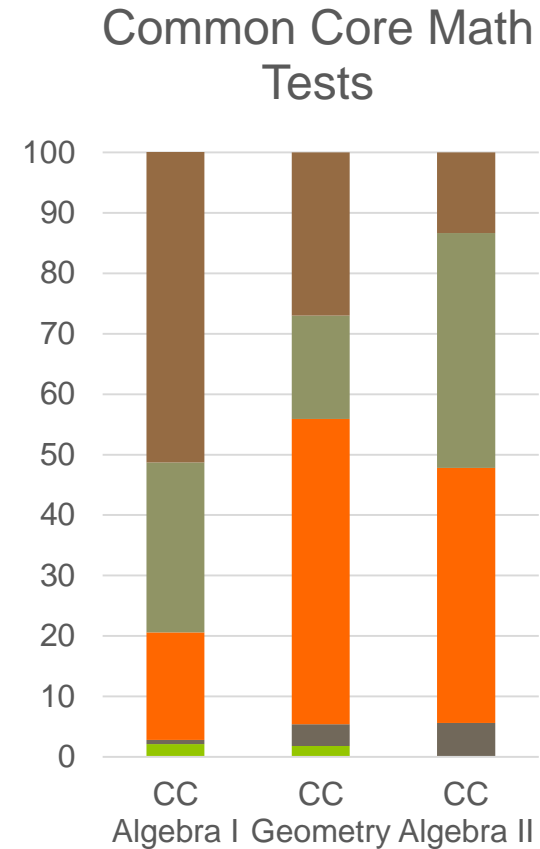
Comparative Data
Grade 3-8 Tests & Regents Exams

Comparison Data

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

- Ardsley
- Blind Brook
- Briarcliff Manor
- Bronxville
- Byram Hills
- Chappaqua
- Dobbs Ferry

- Edgemont
- Hastings-on-Hudson
- Irvington
- Pleasantville
- Rye Neck
- Scarsdale

Grade 3-8 Mathematics

2016 Math 3 - 4

Score Distribution vs Comparison Cohort
of Westchester Schools
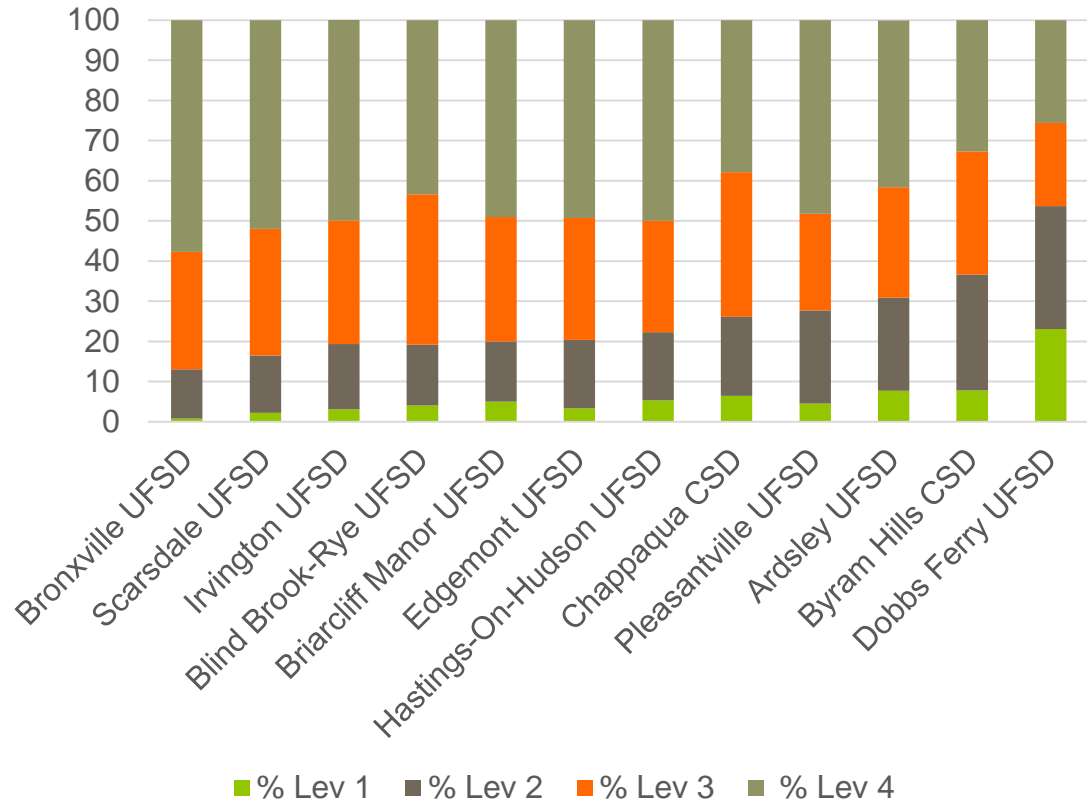
2016 Math 5 - 6

Score Distribution vs Comparison Cohort
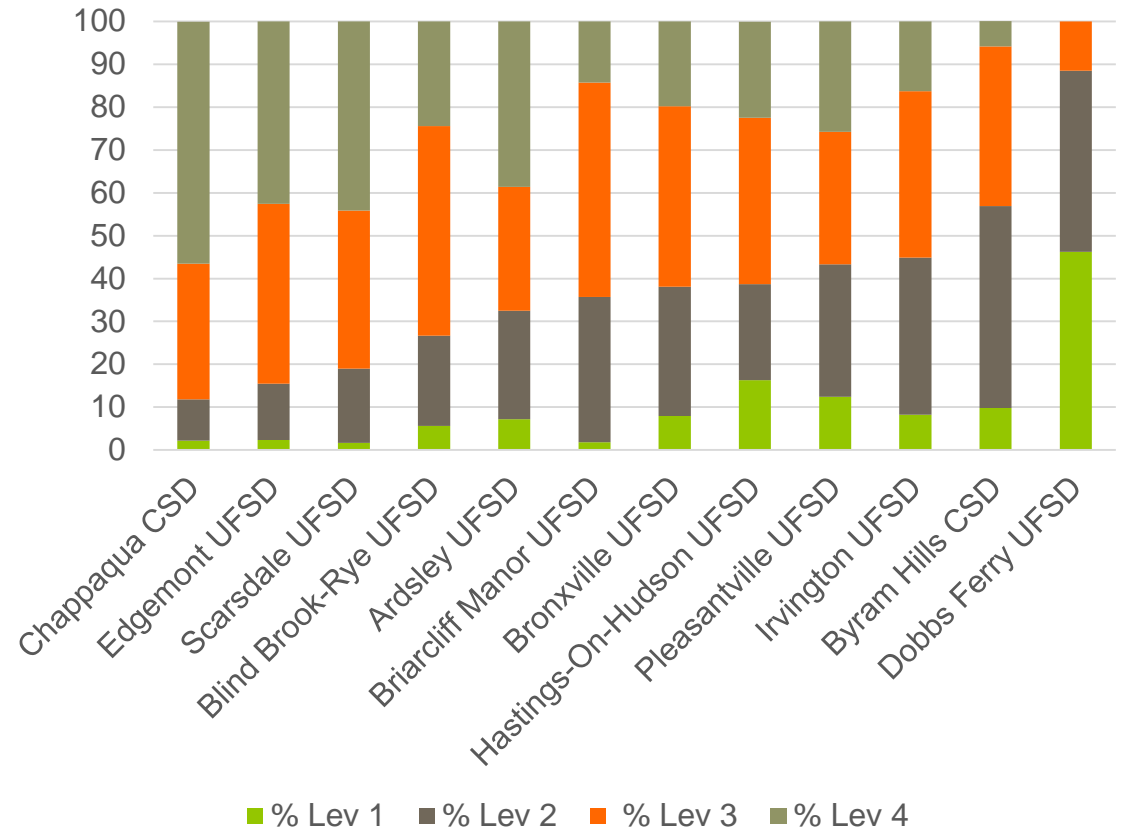of Westchester Schools
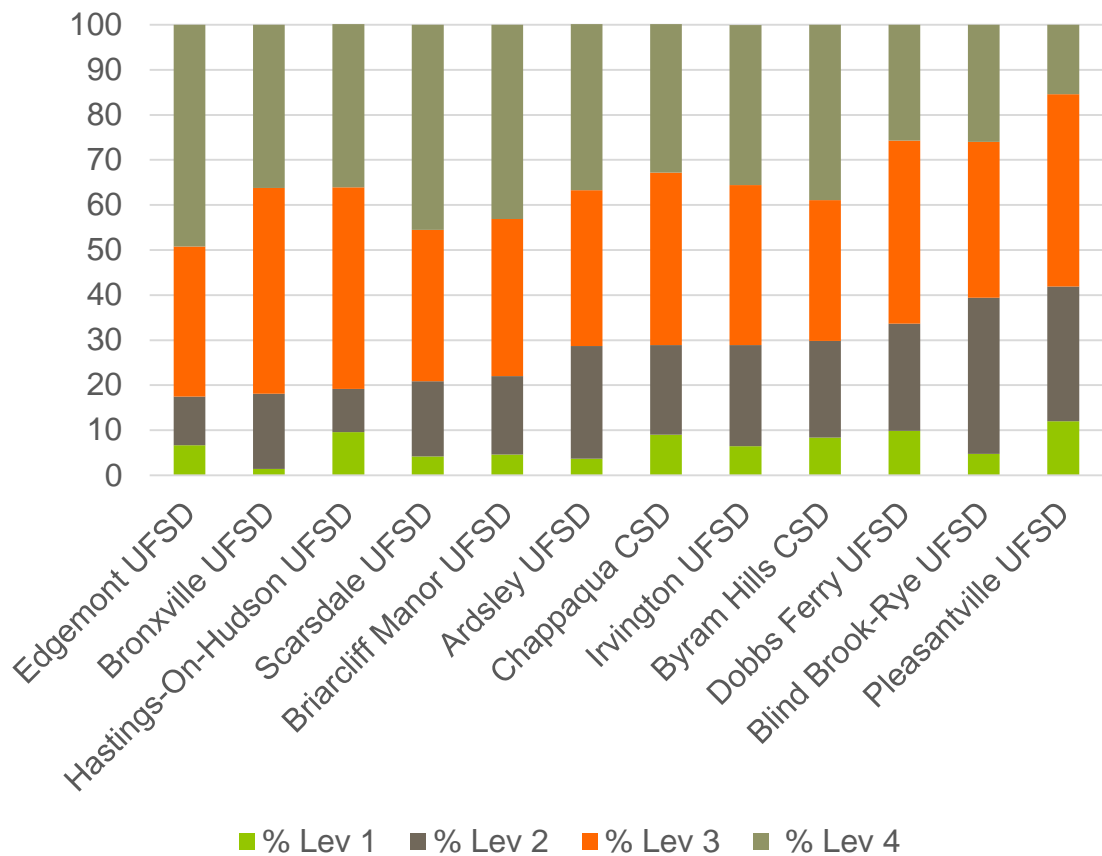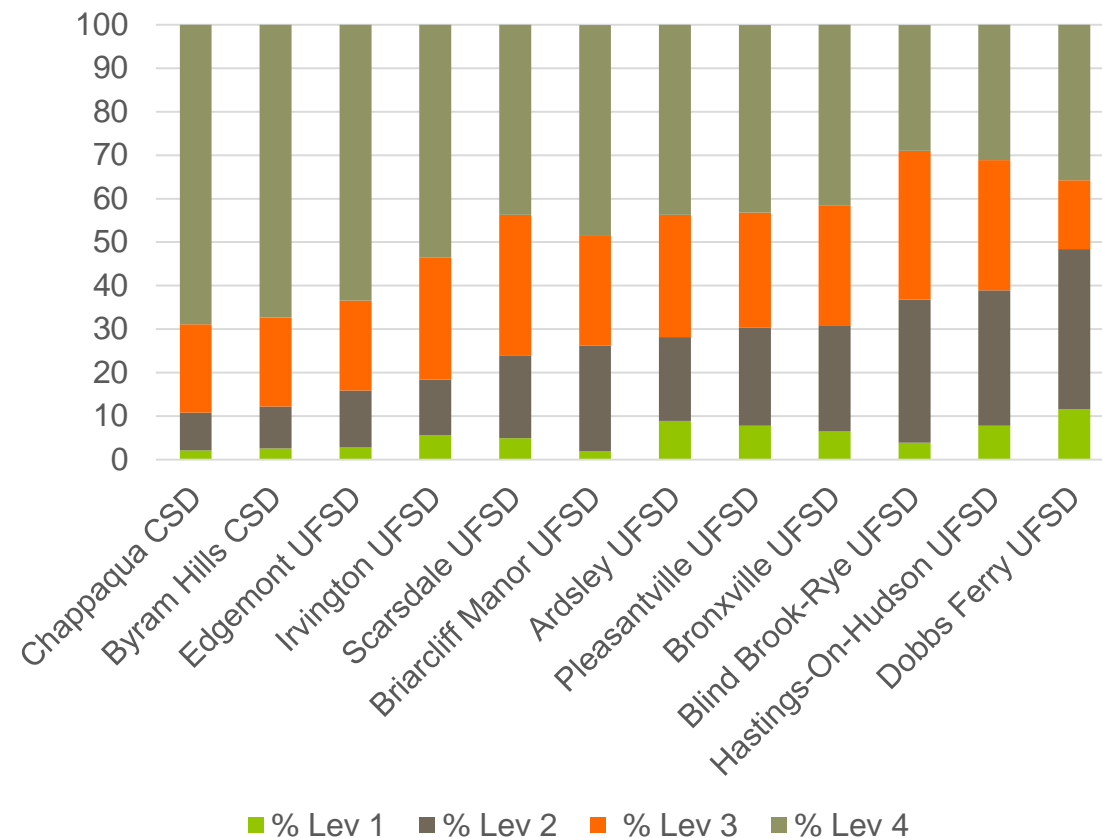
Grade 5

Grade 6

2016 Math 7 - 8

Score Distribution vs Comparison Cohort of Westchester Schools
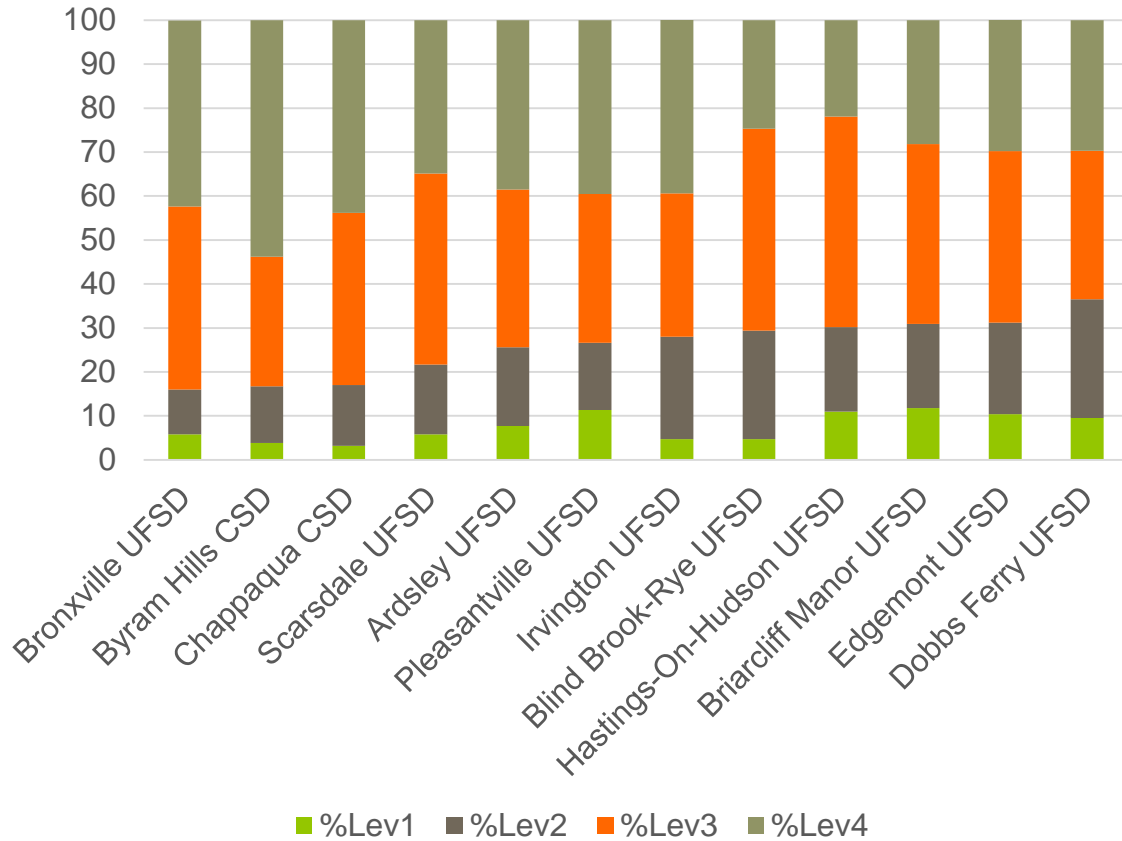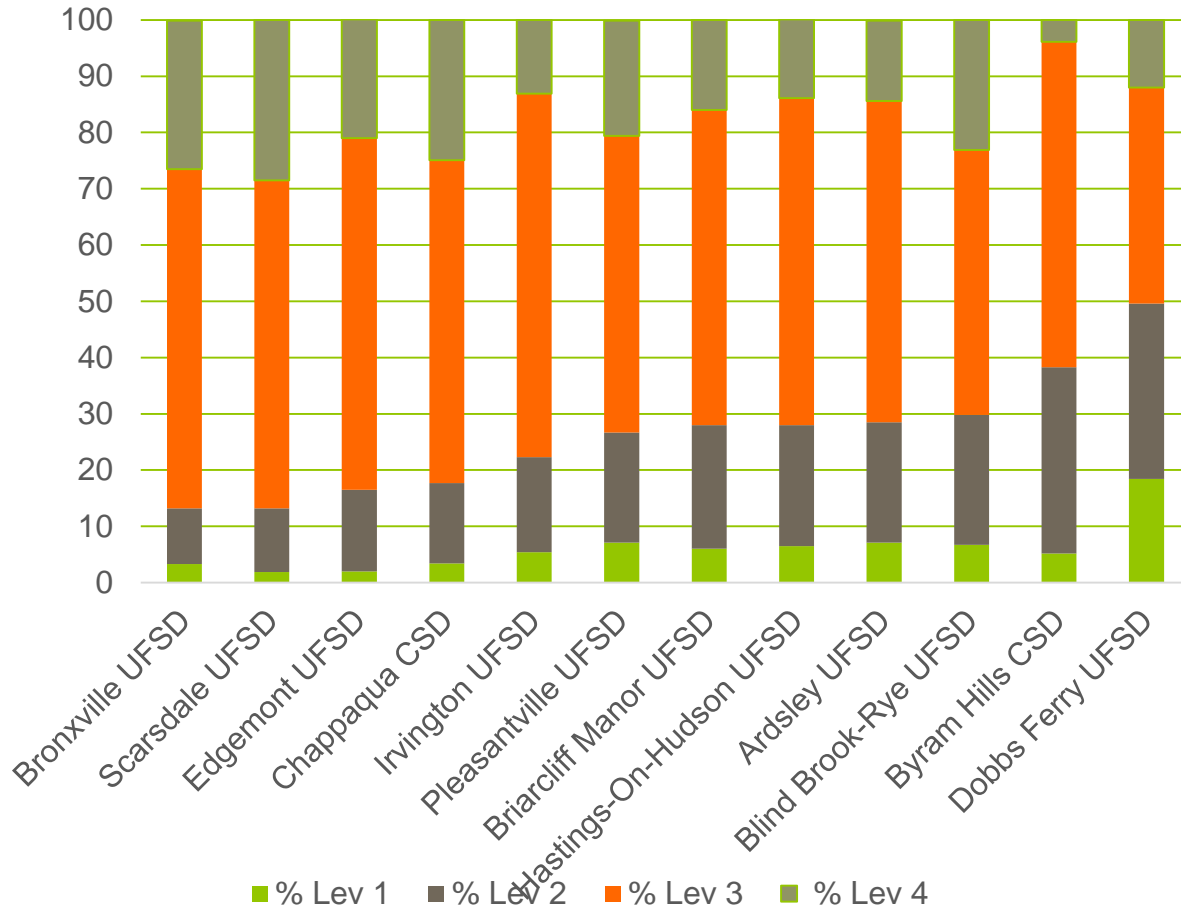

Grade 7

Grade 8

Grade 3-8 English Language Arts
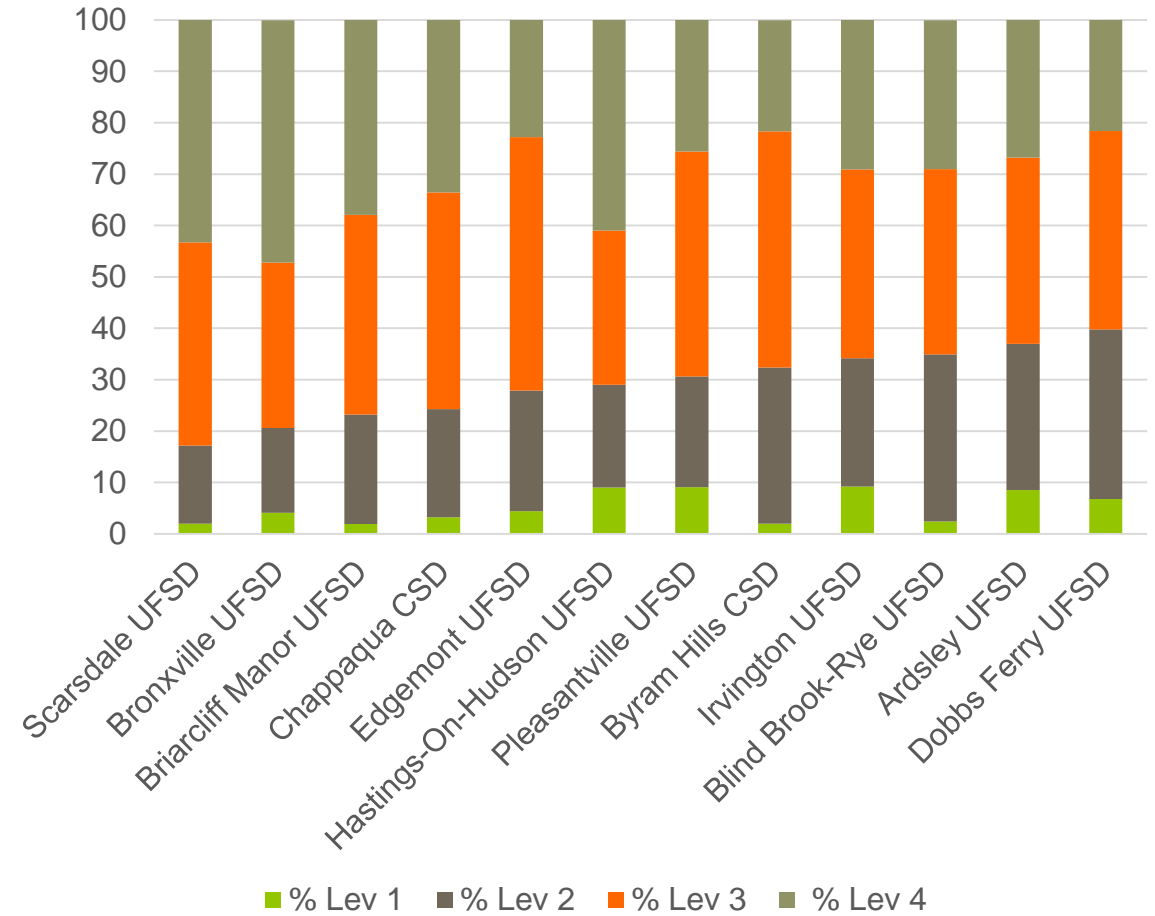
2016 ELA Grade 3 & 4

Score Distribution vs Comparison Cohort of Westchester Schools
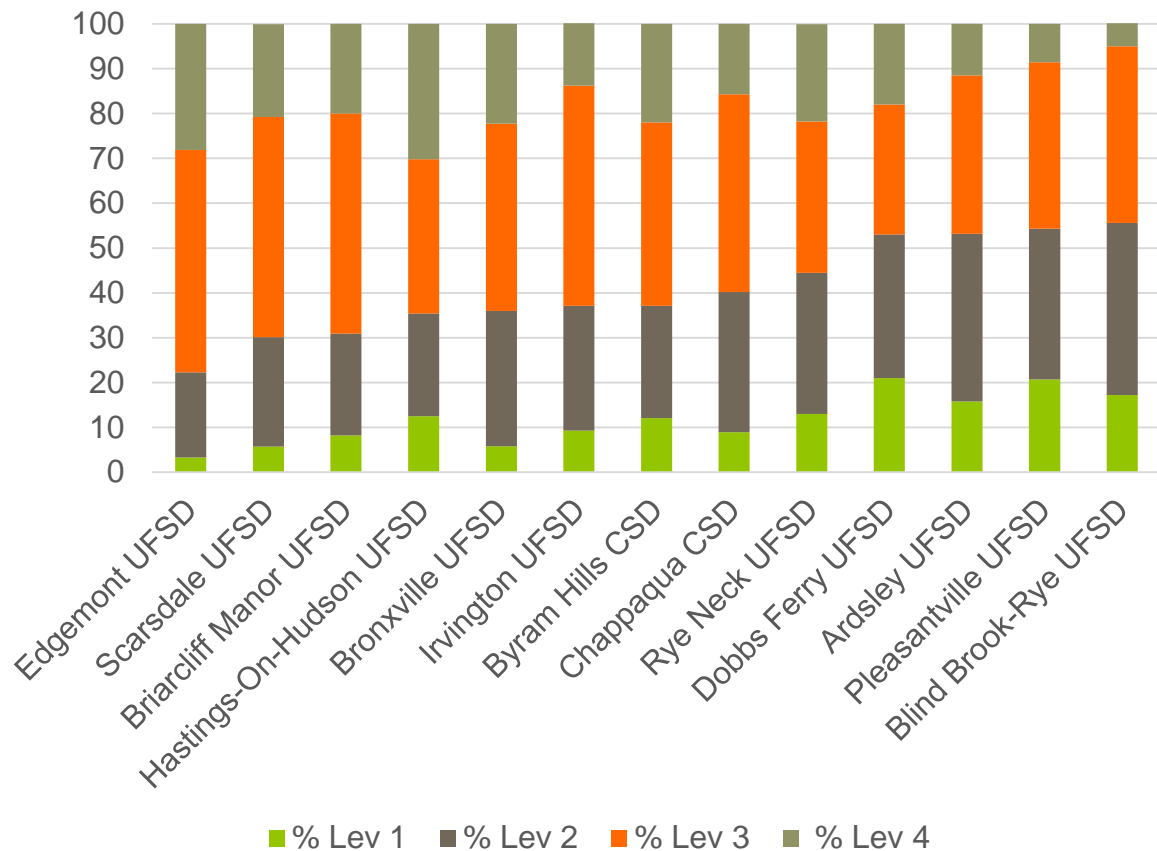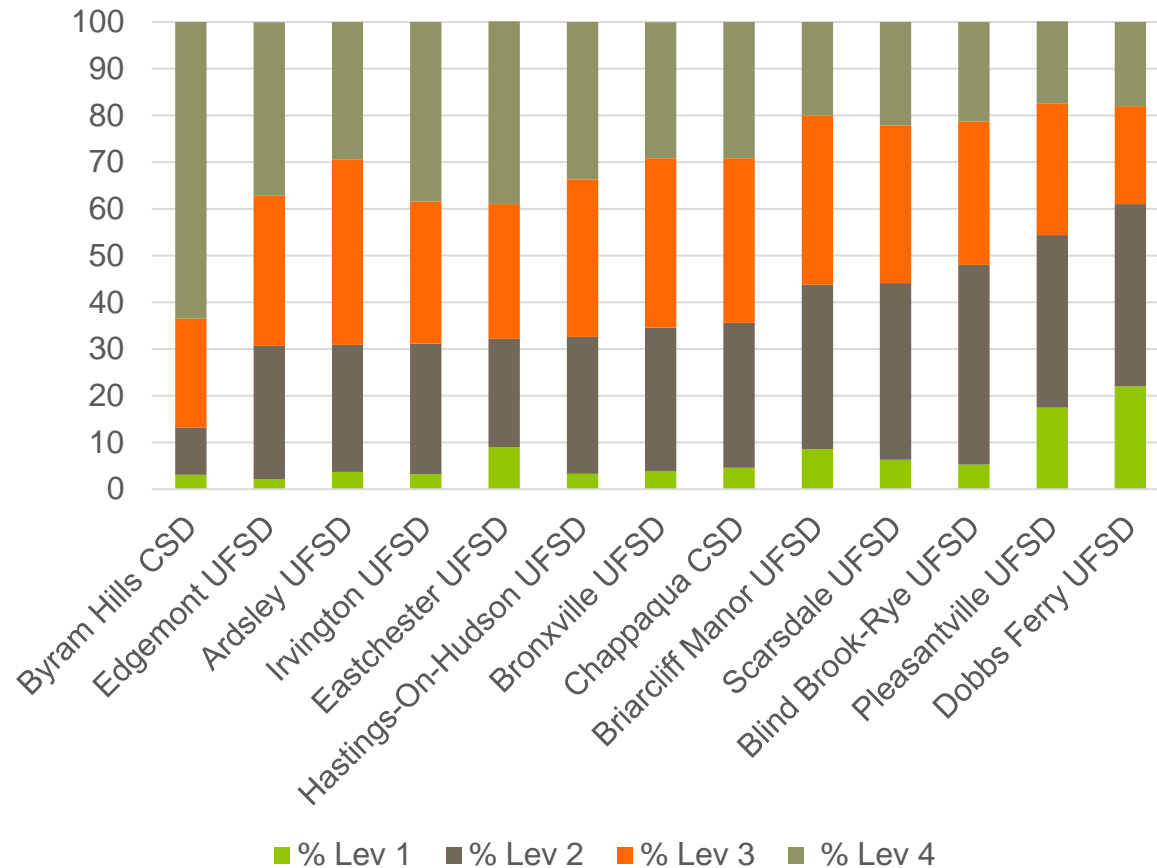

Grade 3

Grade 4

2016 ELA Grade 5 & 6

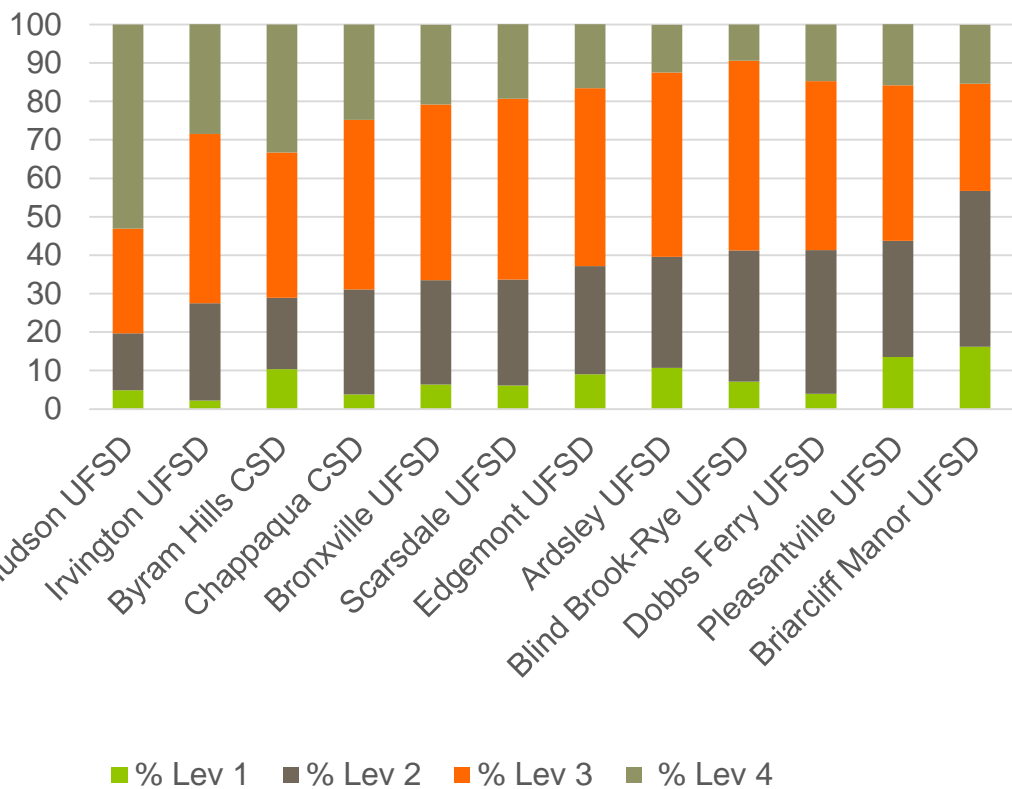Score Distribution vs Comparison Cohort of Westchester Schools
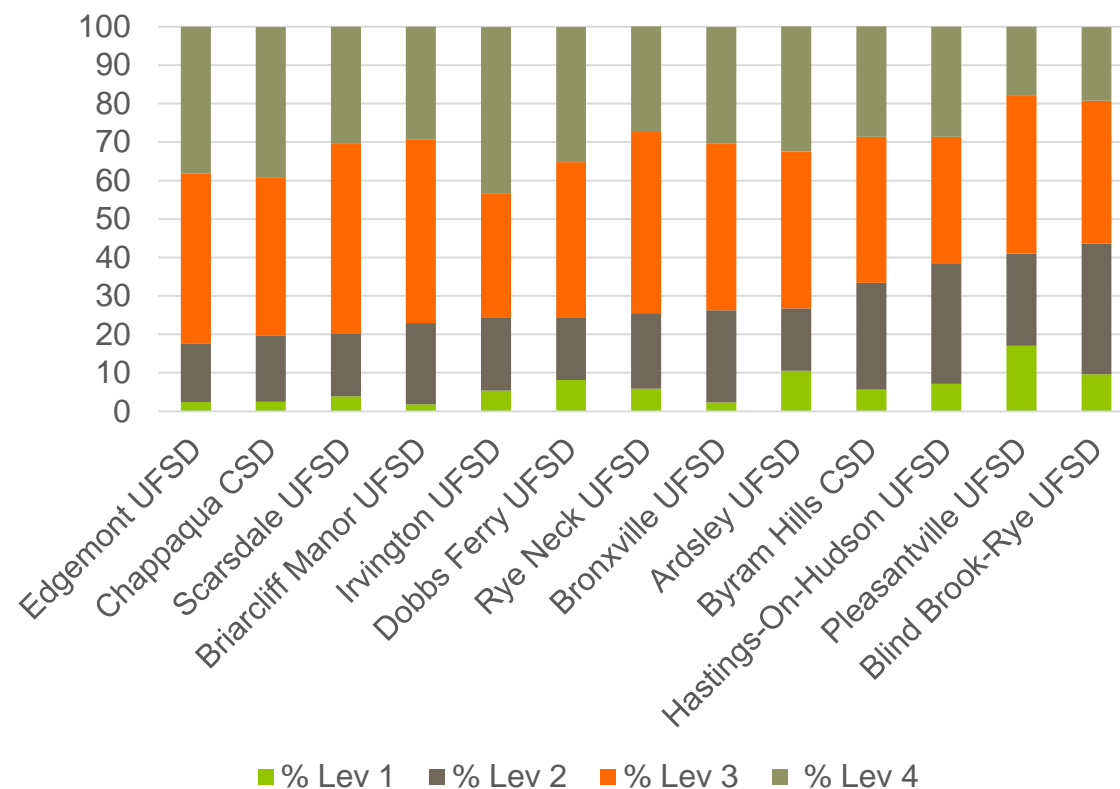

Grade 5

Grade 6

2016 ELA Grade 7 & 8

Score Distribution vs Comparison Cohort of Westchester Schools
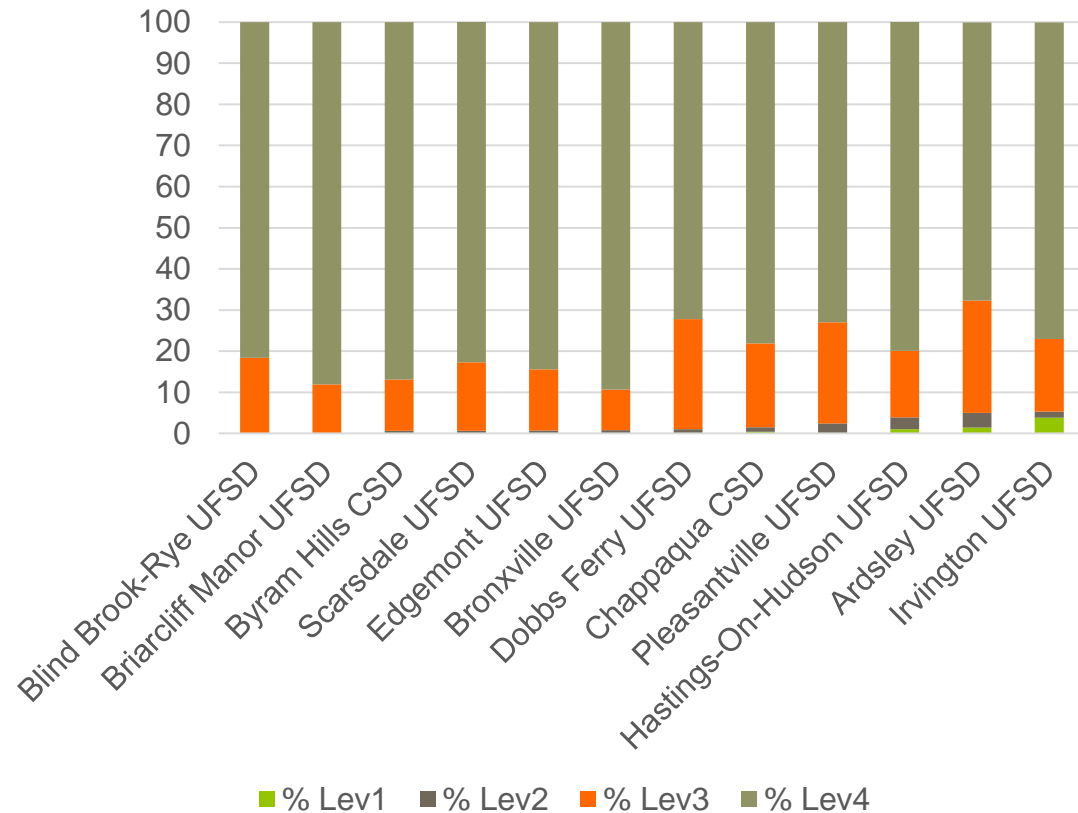

Grade 7
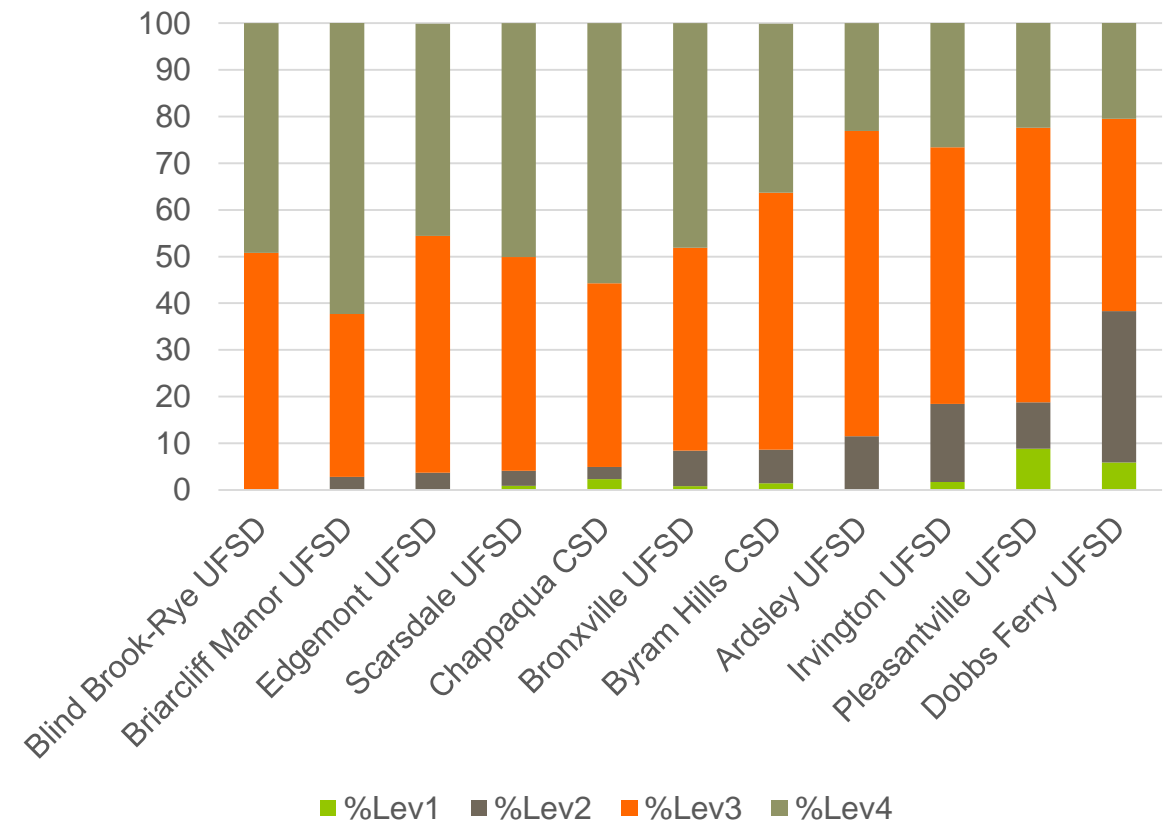
Grade 8

Grade 4 & 8 Science

2016 Grade 4 & 8 Science Scores

Score Distribution vs Comparison Cohort
of Westchester Schools

Science 4

Science 8

Executive Summary – Grade 3-8 Tests

- In many areas, there is evidence of continued growth in level 3-4 and decreases in level 1-2
- Longitudinal progress demonstrates consistent improvements in test achievement
- Use of RtI data supporting struggling learners
- Mean score average of MS ELA scores is the highest our regional cohort
  - Irvington   331
  - Byram Hills   331
  - Bronxville   325
  - Scarsdale   324
- 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: •**English Language Arts** (ELA) •Any **mathematics** exam (Algebra I, Geometry, *or* Algebra II/Trigonometry) •Any **social studies** exam (Global History and Geography *or* U.S. History and Government) •Any **science** exam (Living Environment, Chemistry, Earth Science, *or* Physics) •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: •**English Language Arts** (ELA) •Three **mathematics** exams (Algebra I, Geometry, *and* Algebra II/Trigonometry) •Any **social studies** exam (Global History and Geography *or* U.S. History and Government) •Two **science** exams (Living Environment *and* one of the following: Chemistry, Earth Science, or Physics) •Any **additional** Regents exam or assessment approved by the State for this purpose •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	150	146	97%

2016 Irvington Regents Results
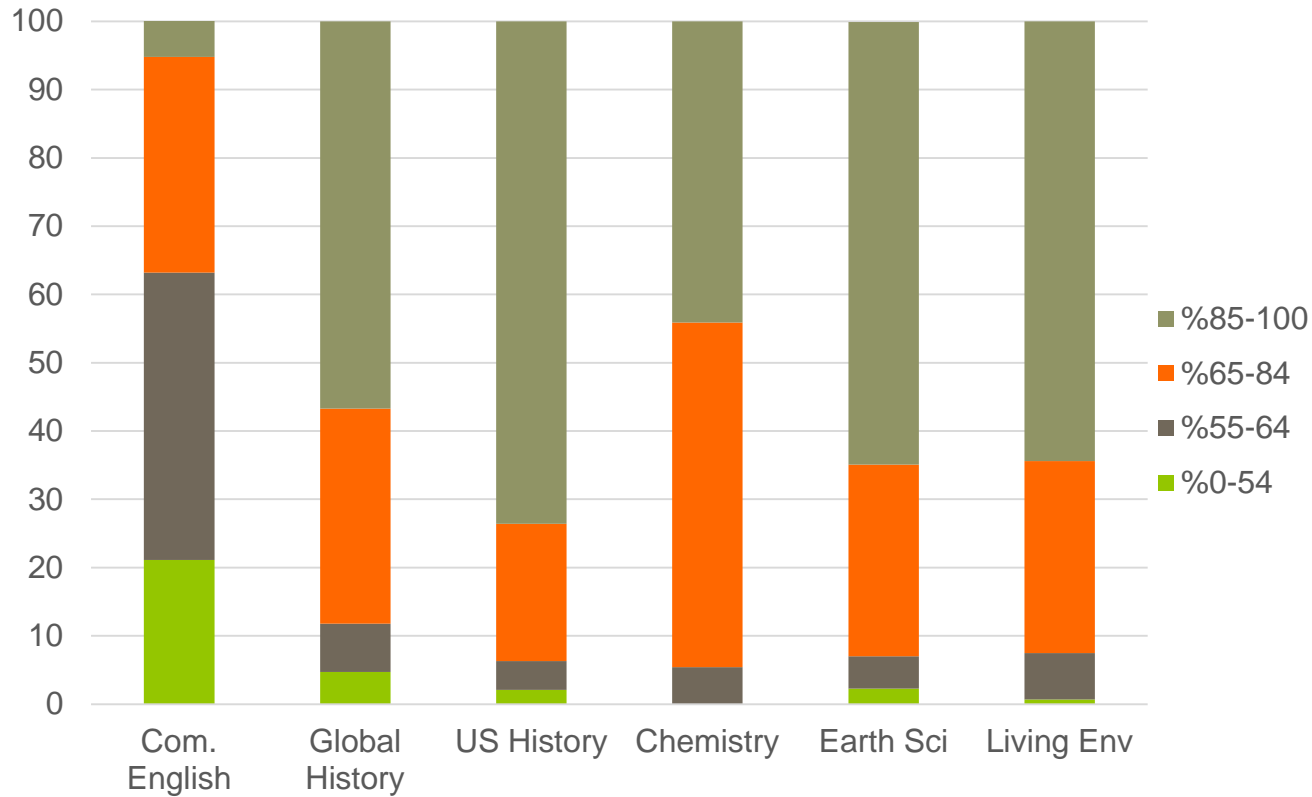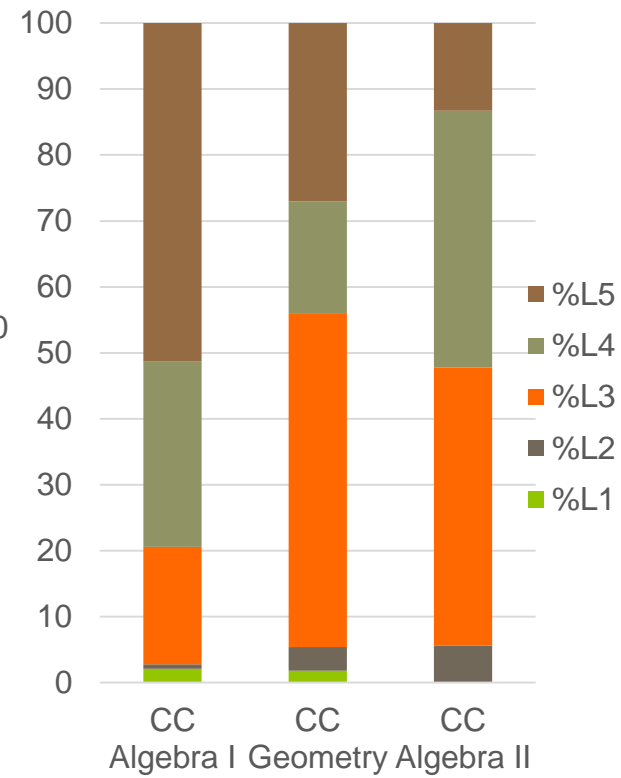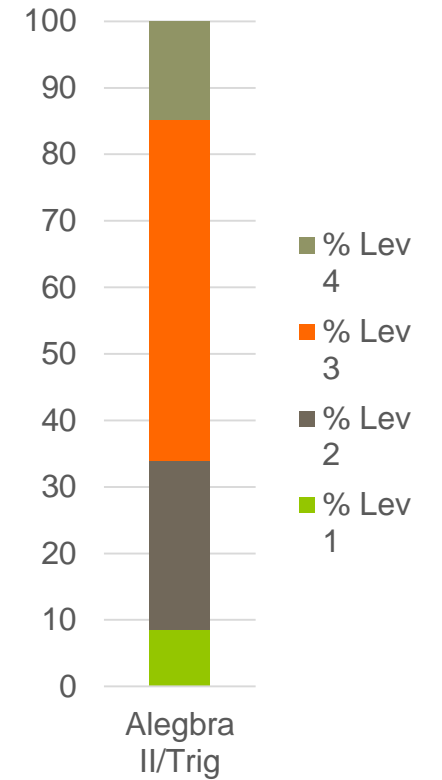
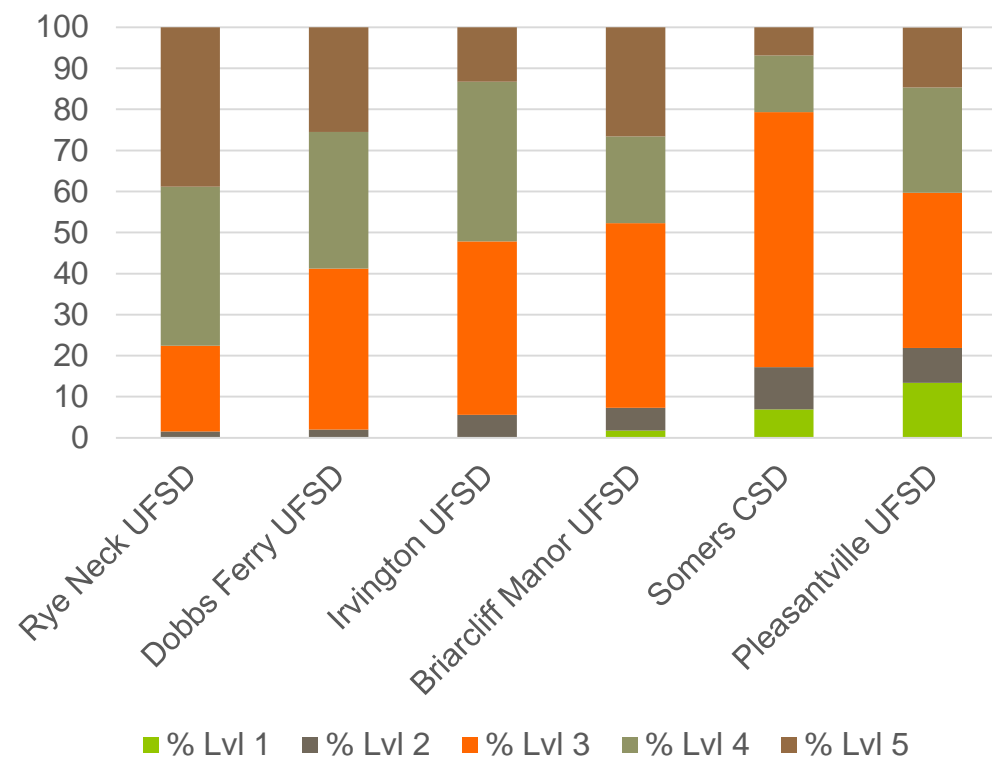# 2016 Common Core Algebra

Score Distribution vs Comparison Cohort of Westchester Schools

Algebra I
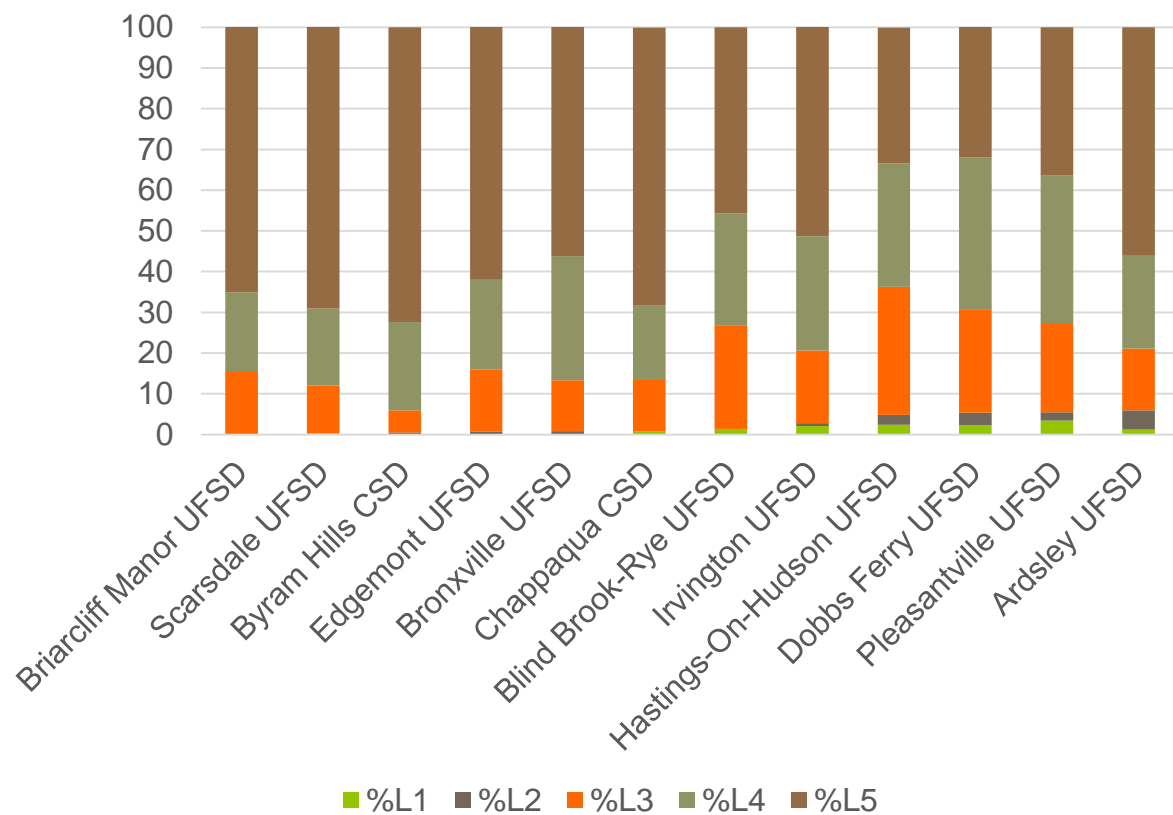
Algebra II

%L1   %L2   %L3   %L4   %L5

% Lvl 1   % Lvl 2   % Lvl 3   % Lvl 4   % Lvl 5
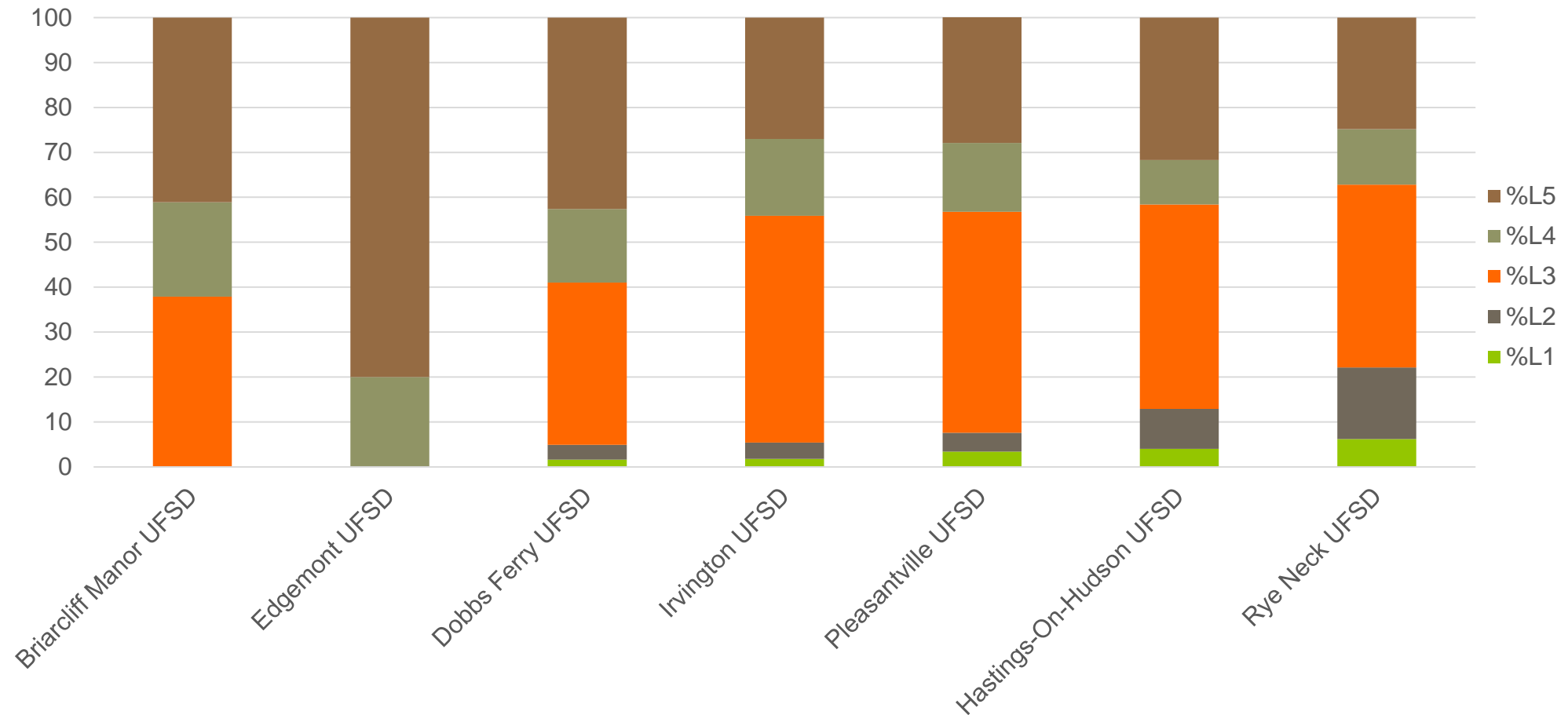
2016 Common Core Geometry

Score Distribution vs Comparison Cohort of Westchester Schools

2016 Science Regents

Score Distribution vs Comparison Cohort of Westchester Schools

Living Environment

Earth Science

%85-100
%65-84
%55-64
%0-54

Chemistry Regents Comparison

Score Distribution vs Comparison Cohort of Westchester Schools

2016 History Regents

Score Distribution vs Comparison Cohort of Westchester Schools

US History

Global

Legend:
- %85-100
- %65-84
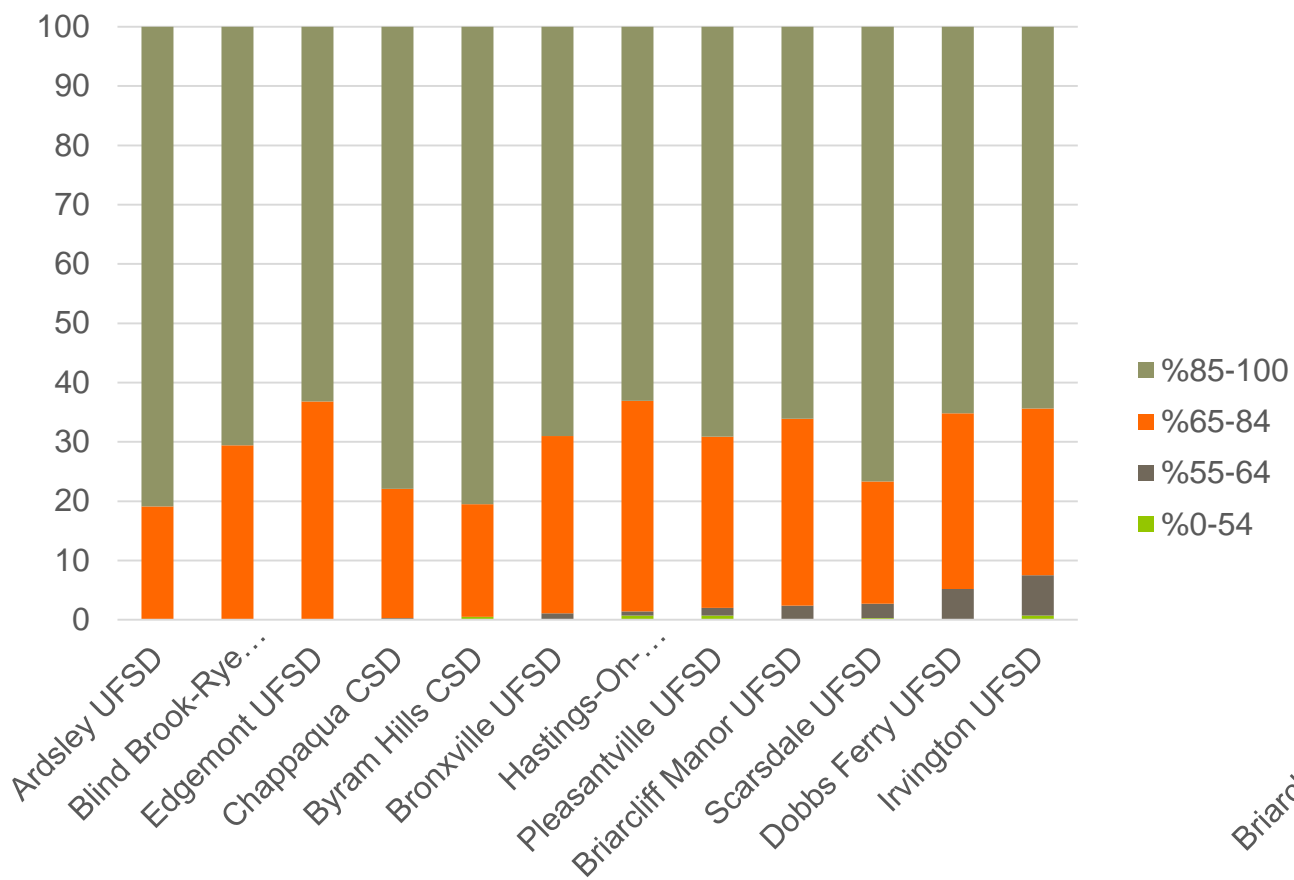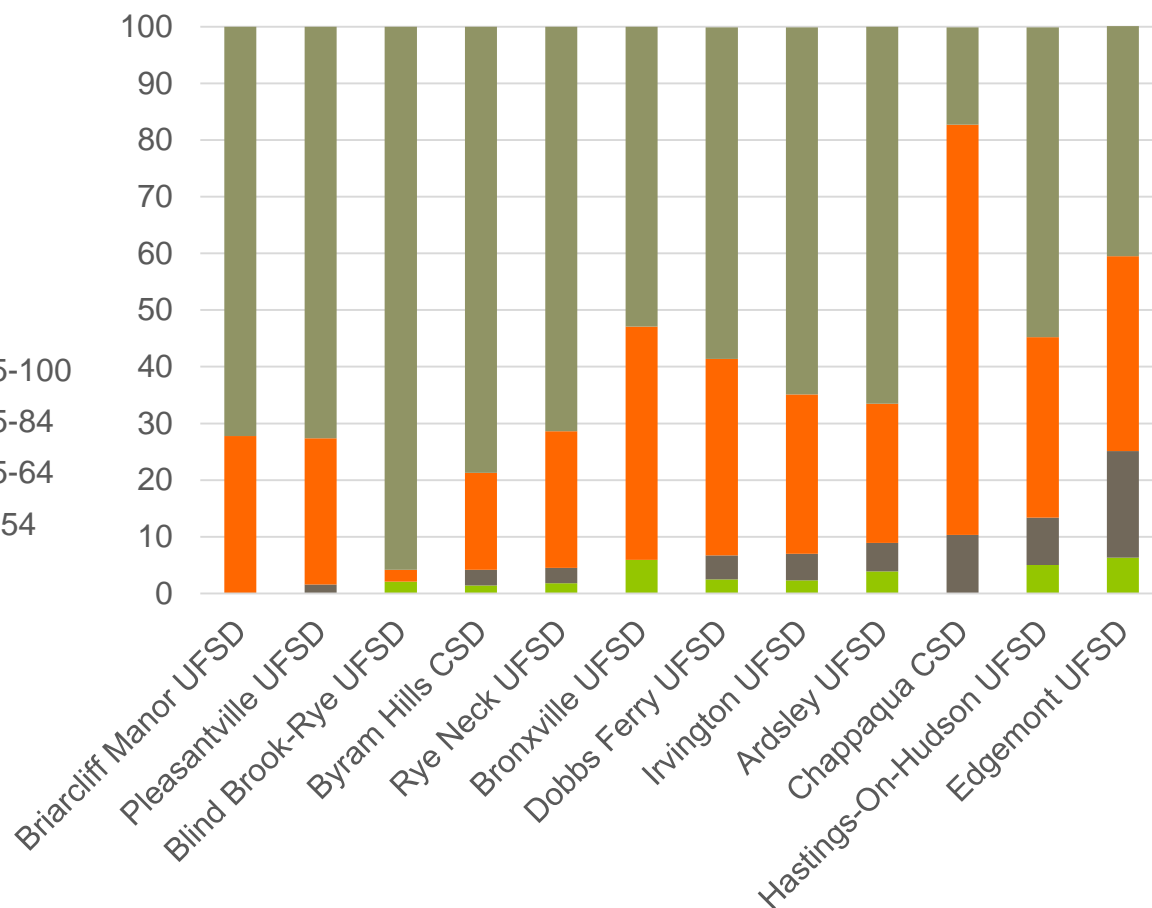- %55-64
- %0-54
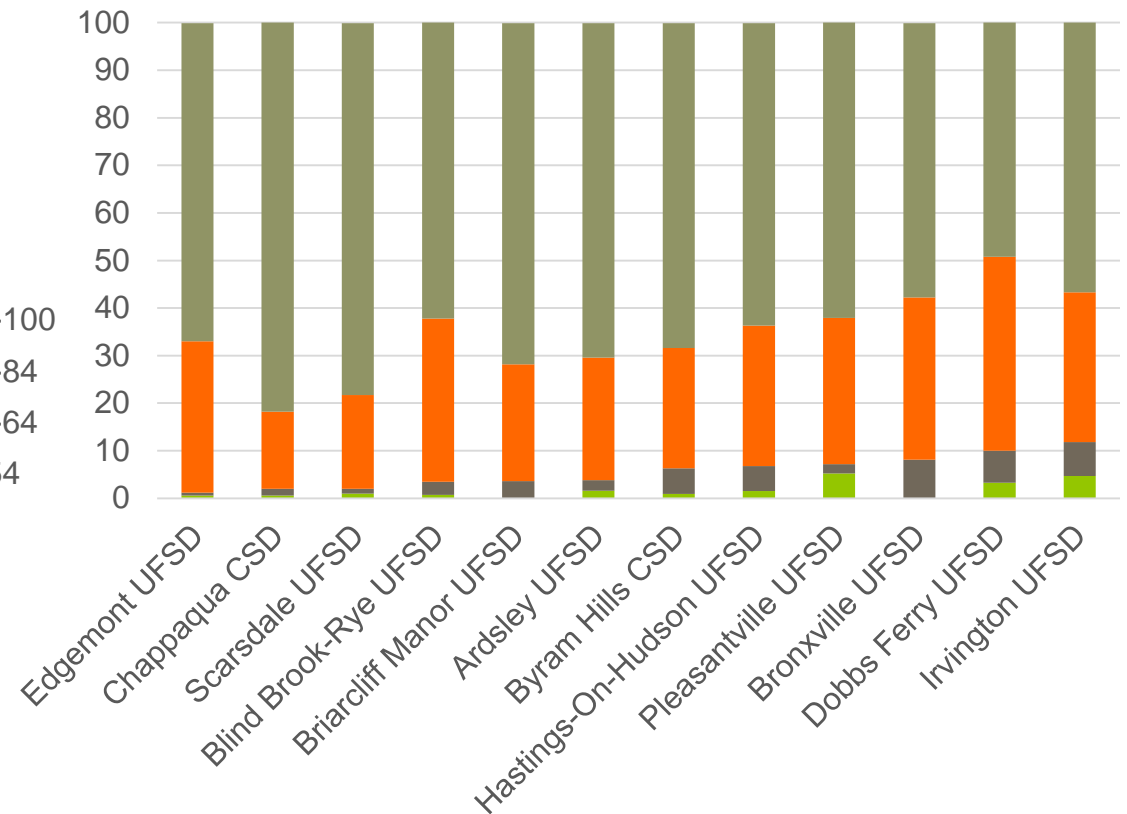
2016 Common Core ELA Comparison

Score Distribution vs Comparison Cohort of Westchester Schools
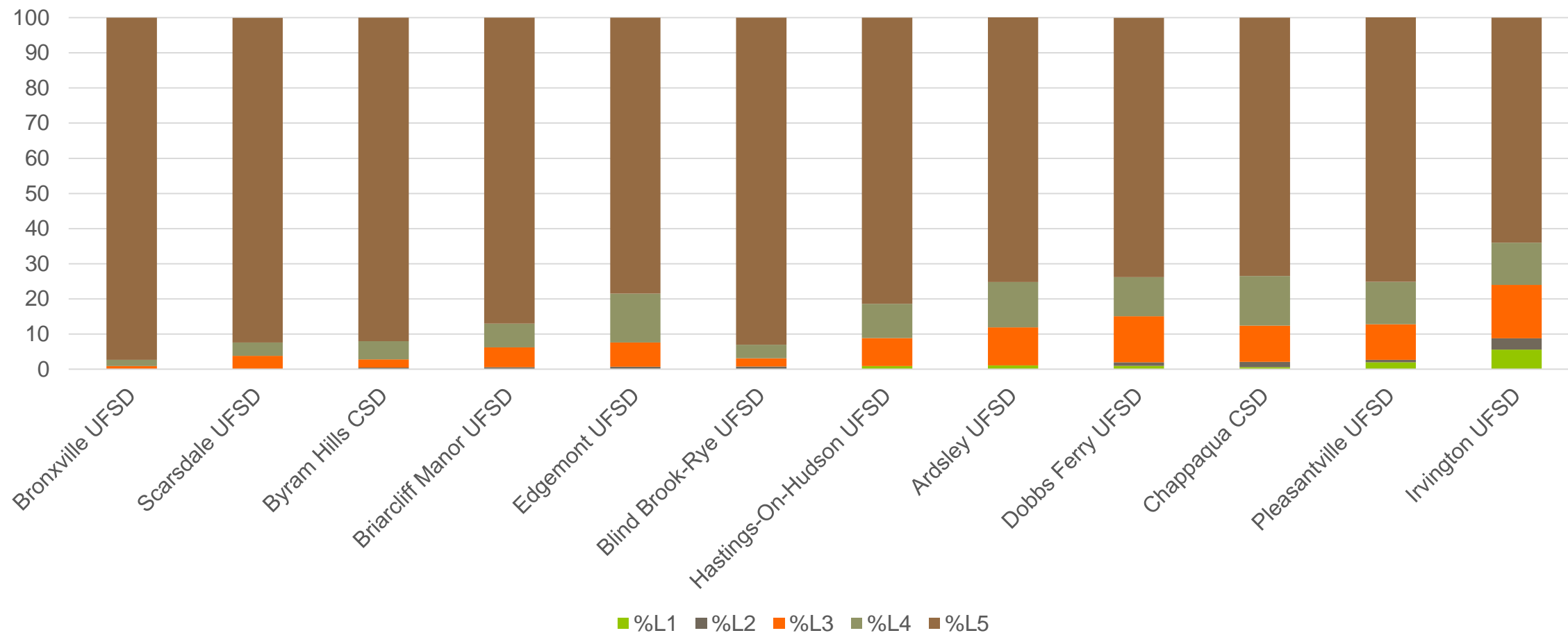
2016 English Regents

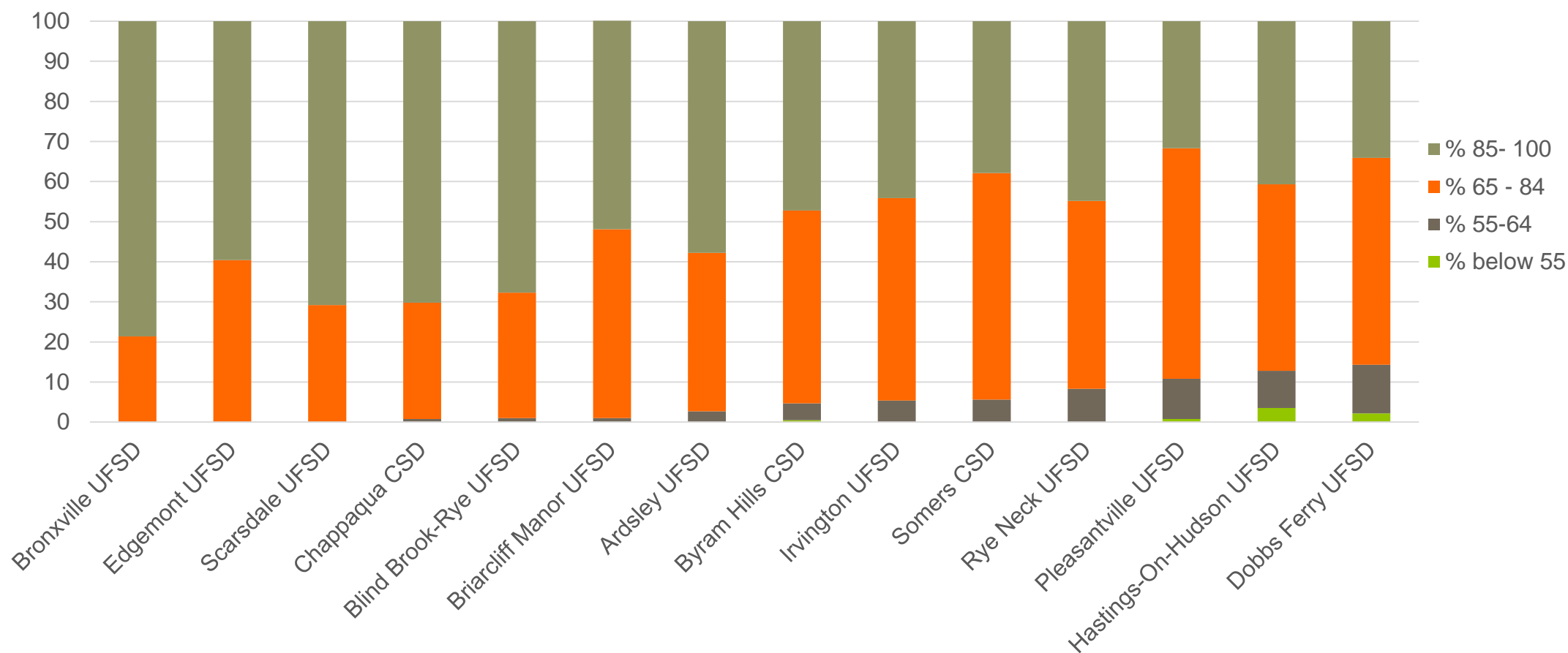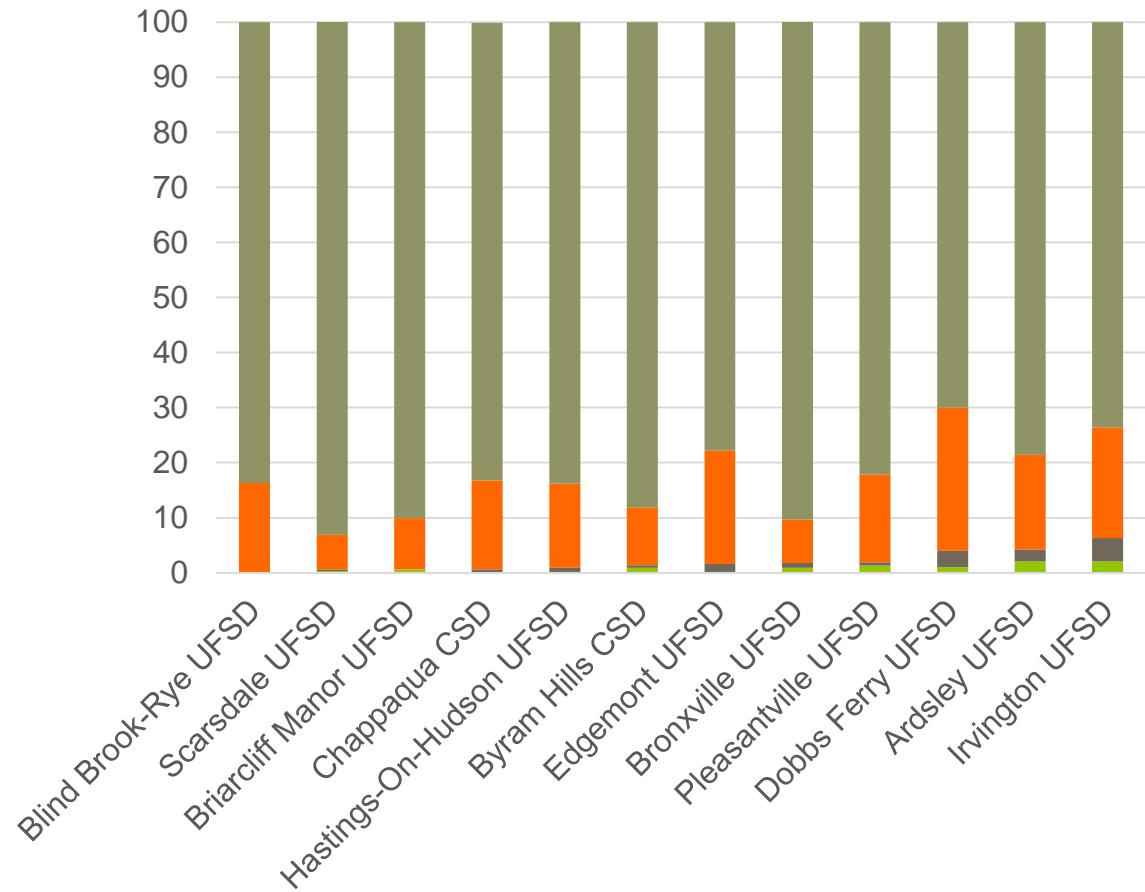Score Distribution vs Comparison Cohort of Westchester Schools
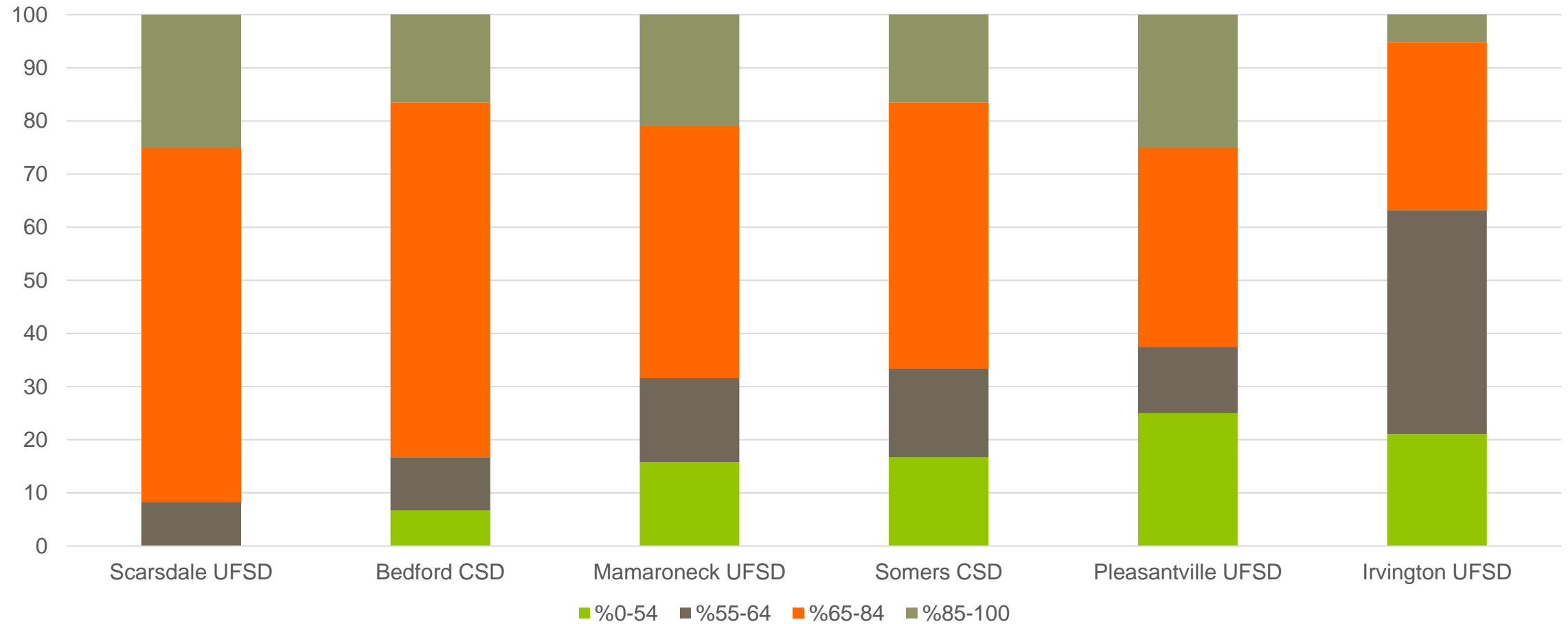
Executive Summary – Regents Exams

- Consideration of the value/need to continue to pursue the advanced Regents Diploma
  - Few colleges consider today aside from NYS public institutions
- Cohort results vary (for all schools) 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 73% passing (3+)
- Of the 558 taking the exams in 2016, 18% scored a 5, and 24% scored a 4

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

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	304
2011	612	500	336
2012	608	555	381
2013	594	590	368
2014	559	557	367
2015	530	526	405
2016	569	558	408

2016 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.

Exam Score Distribution by Class
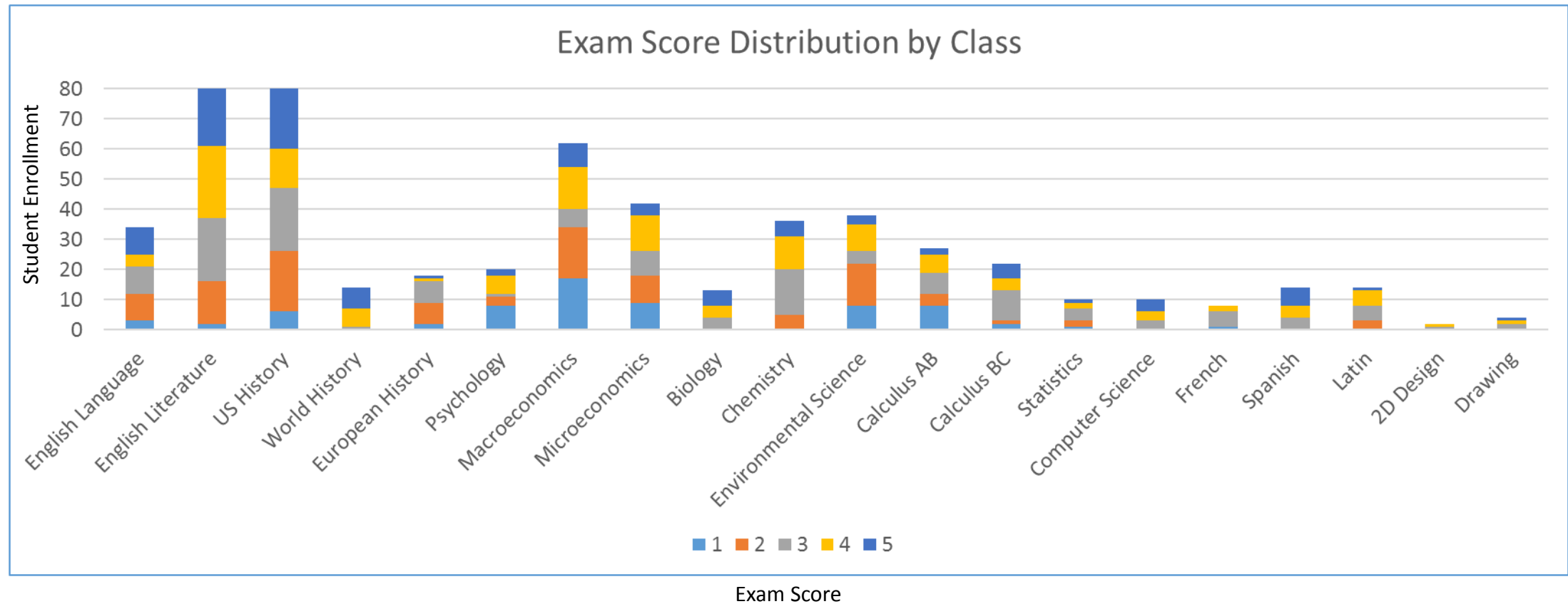
AP History

Average number of students taking exam annually:
World: 24
European: 18 (1st year)
US: 87
Macro: 60
Micro: 28
Psychology: 32

Percent Passing Exam
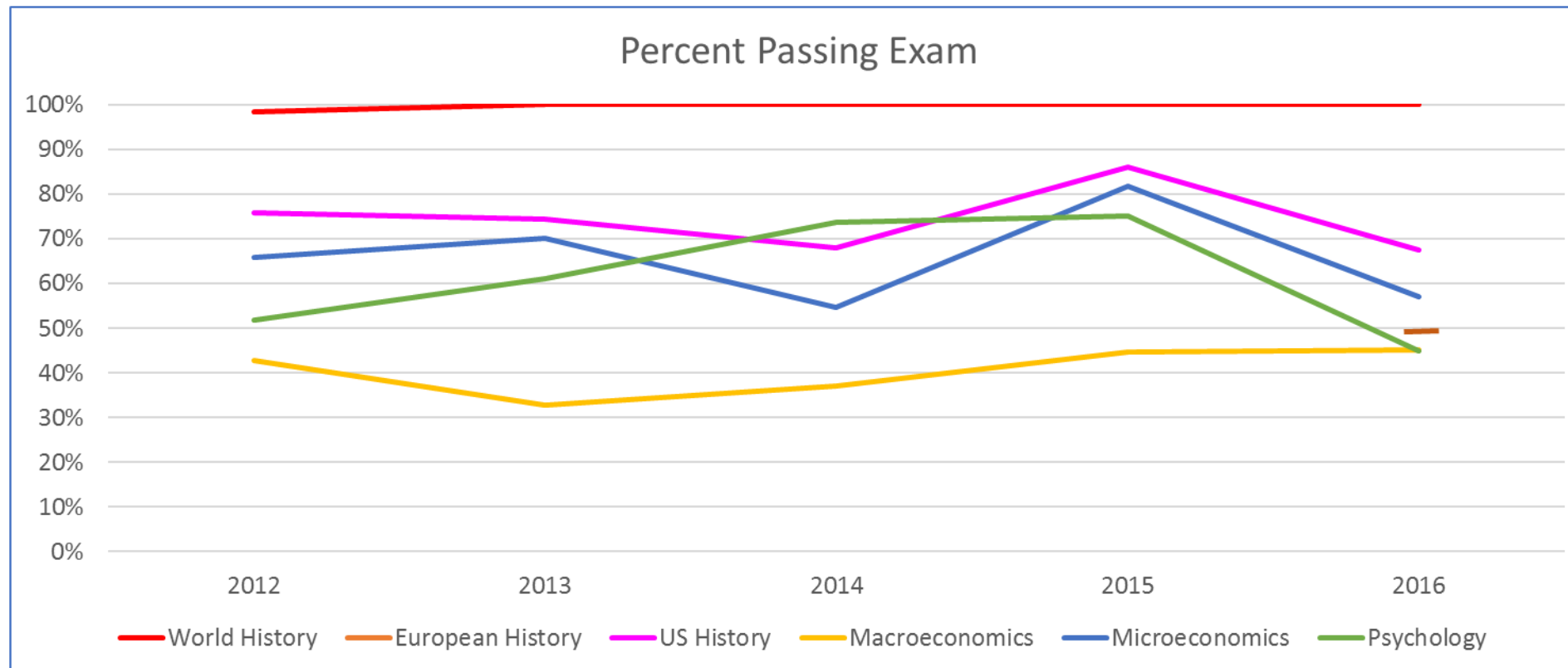
National Passing % 2016

World: 51%
European: 53%
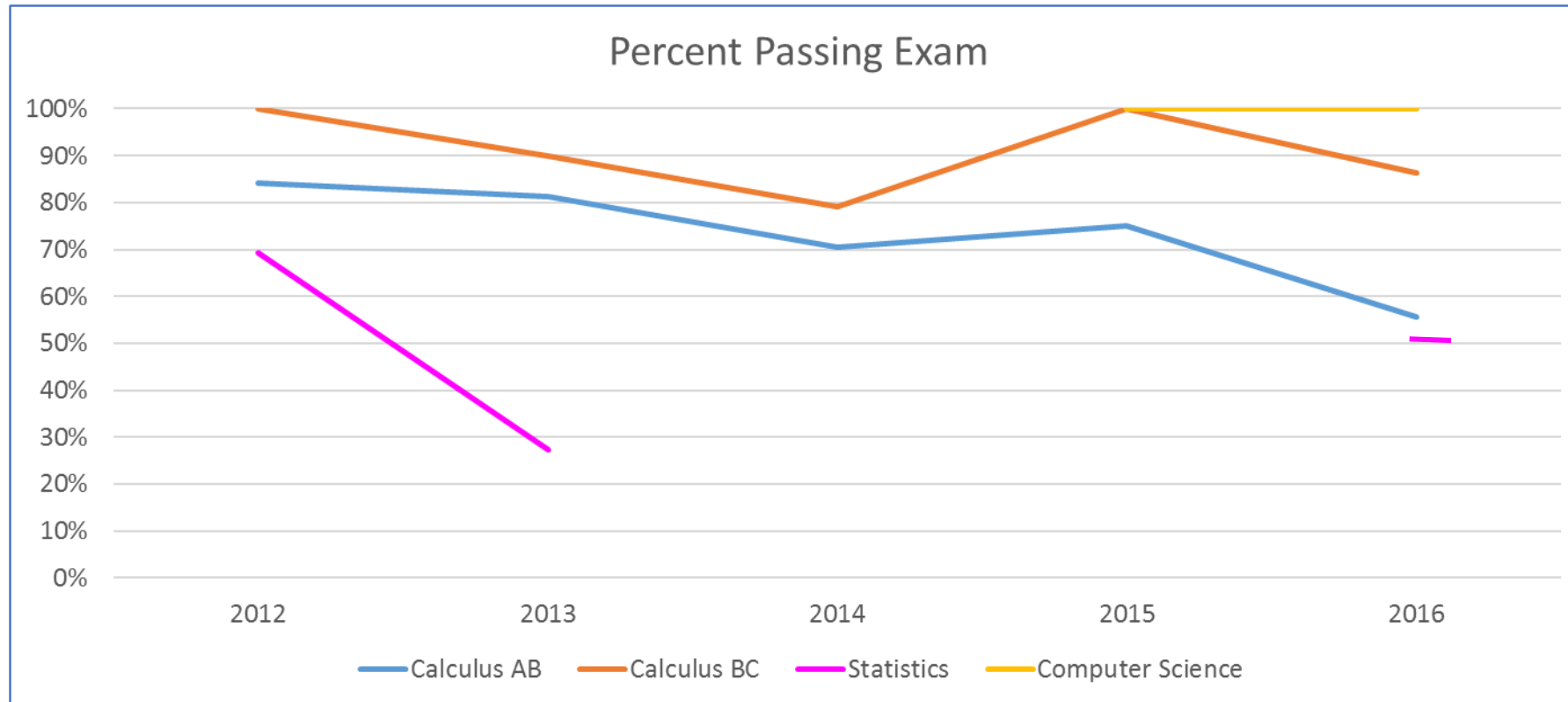**US: 52%**
Macro: 57%
Micro: 67%
Psych: 64%

Red box indicates performance below National average

AP Math

Average number of students taking exam annually:
Calc AB: 21
Calc BC: 20
Statistics: 16
Comp Sci (2 yrs): 6

National Passing % 2016

Calc AB: 59%
Calc BC: 82%
Stat: 60%
Comp Sci: 64%

Red box indicates performance below National average

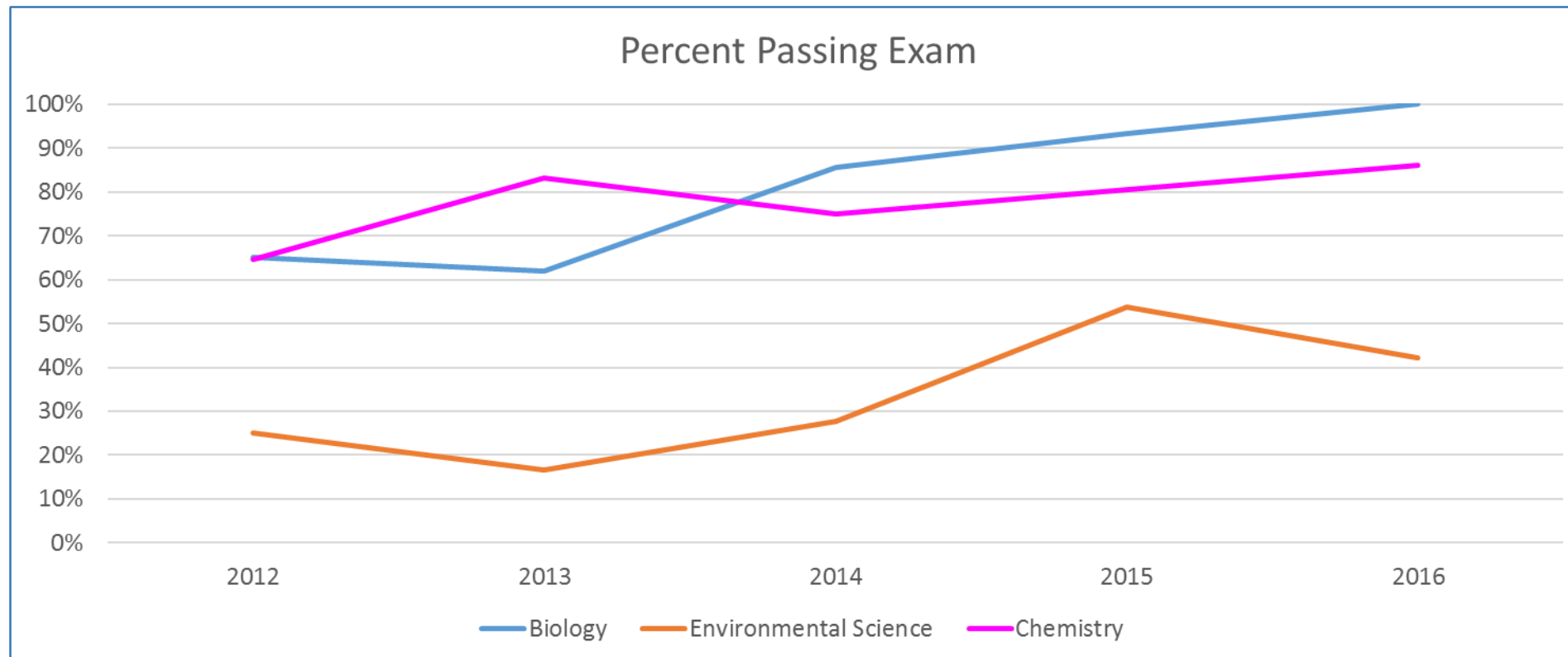# AP Science

Average number of students taking exam annually:
Biology: 21
Chemistry: 30
Environmental: 39

National Passing % 2016

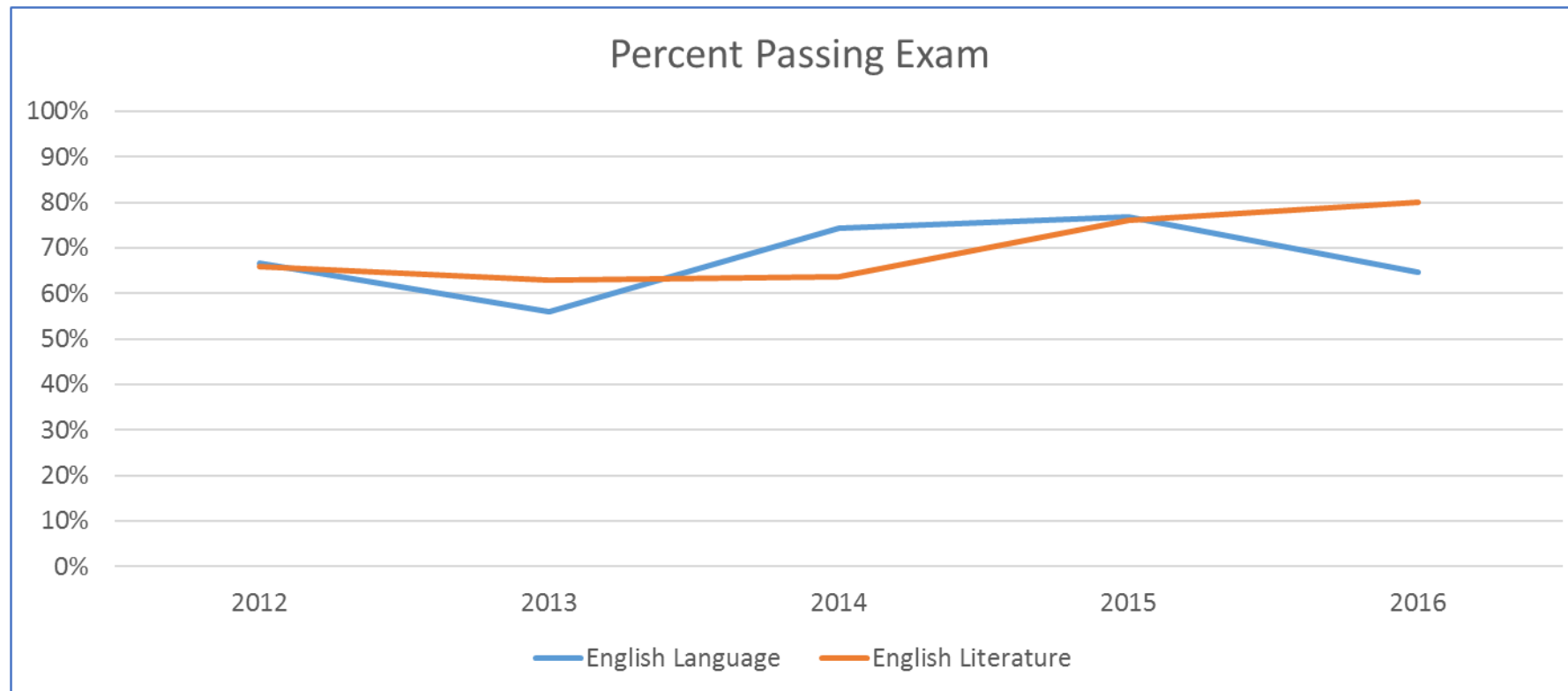**Bio: 61%**
Envir: 46%
Chem: 52%

Red box indicates performance below National average

AP English

Average number of students taking exam annually:
Language: 64
Literature: 57

National Passing % 2016

Lang: 55%
Lit: 55%

AP Foreign Language

Percent Passing Exam
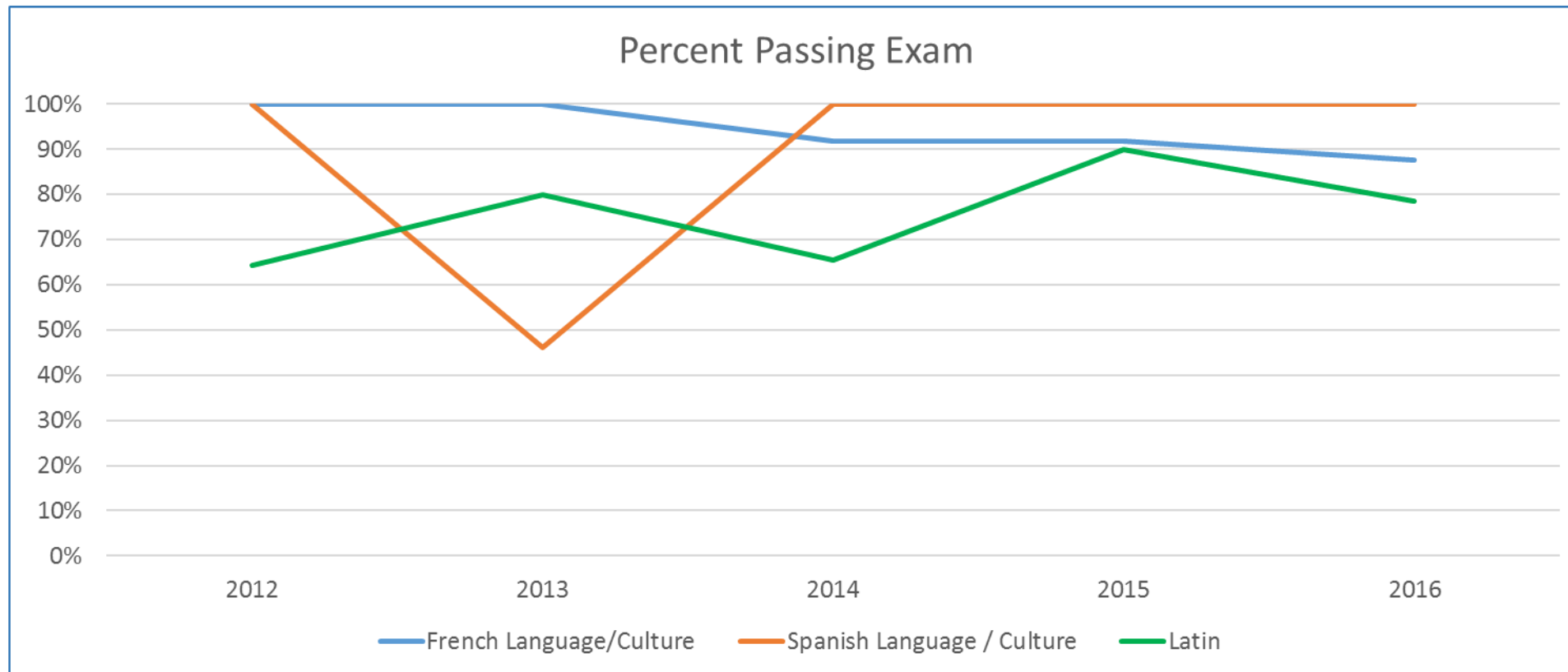
National Passing % 2016

French: 77%
Spanish: 89%
Latin: 66%

AP Art & Music

Average number of students taking exam annually:
2D Design: 2
Portfolio: 3
Music Theory: 6

Percent Passing Exam
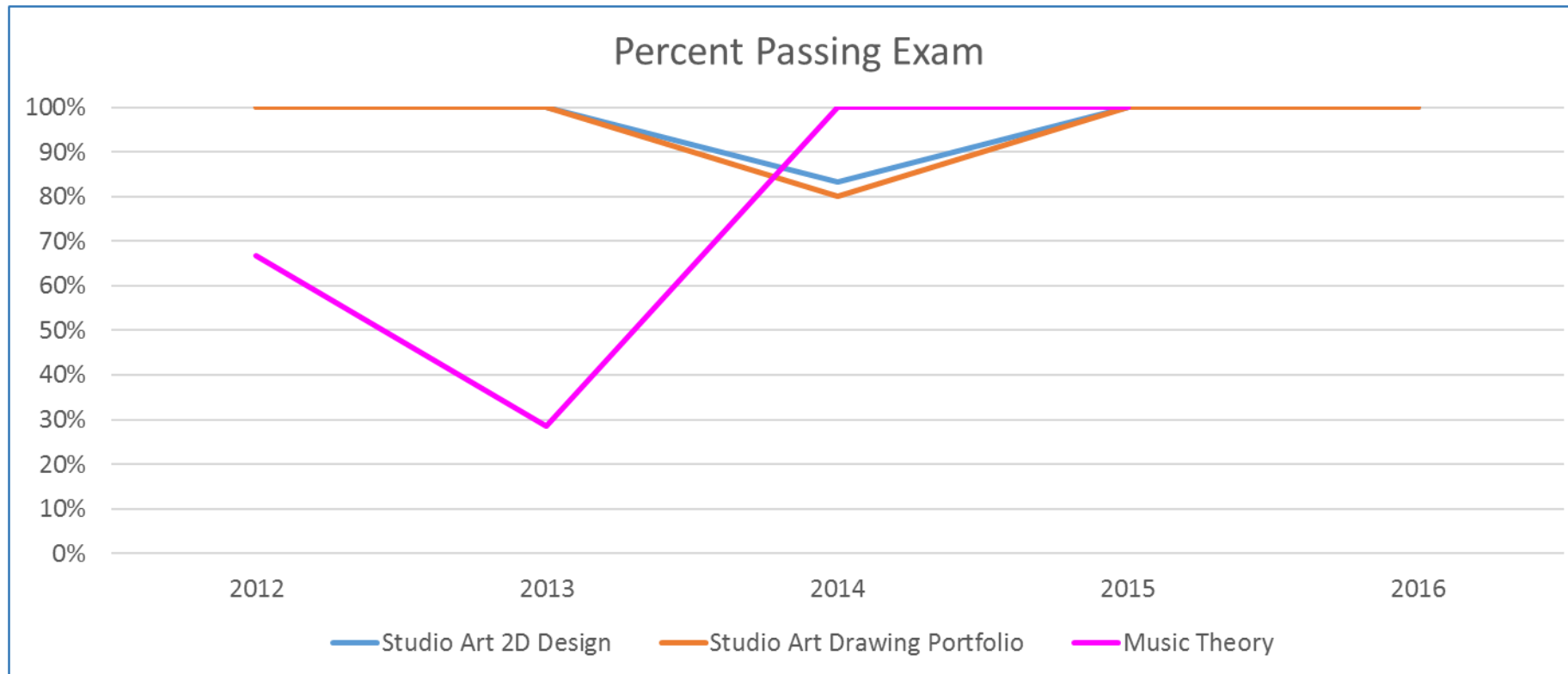
National Passing % 2016

2D: 82%
Portfolio: 83%
Music Th: 60%

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 2019 & 2020 as they progressed through the Irvington Schools

Grades 3-8 Mathematics Levels 3 & 4

Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
2012	85%	87%	95%	89%	90%	94%
2013	61%	66%	62%	68%	60%	68%
2014	67%	77%	72%	72%	71%	60%
2015	62%	73%	75%	74%	65%	62%
2016	81%	69%	71%	82%	72%	55%

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

Grades 3-8 English Language Arts Levels 3 & 4

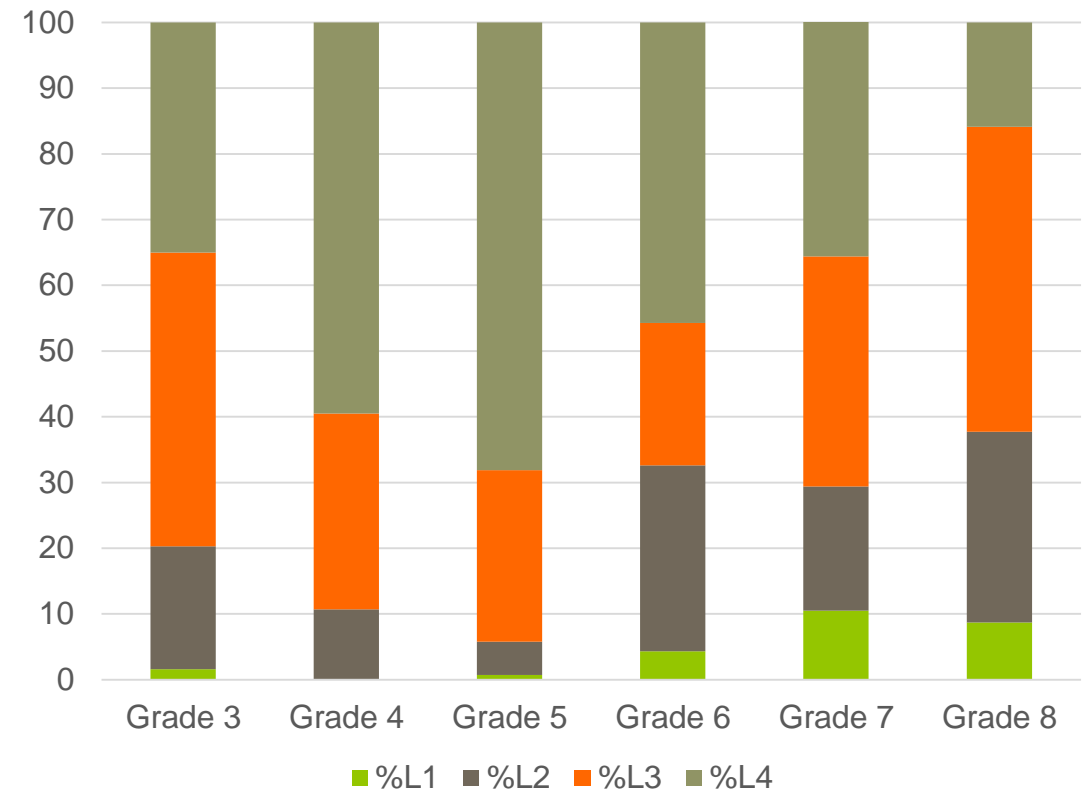| Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
2012	86%	85%	88%	77%	79%	79%
2013	55%	74%	62%	74%	50%	56%
2014	63%	64%	65%	60%	64%	59%
2015	52%	67%	63%	66%	59%	75%
2016	78%	66%	63%	69%	73%	76%

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

Historical View: Class of 2019 Performance Grades 3-8
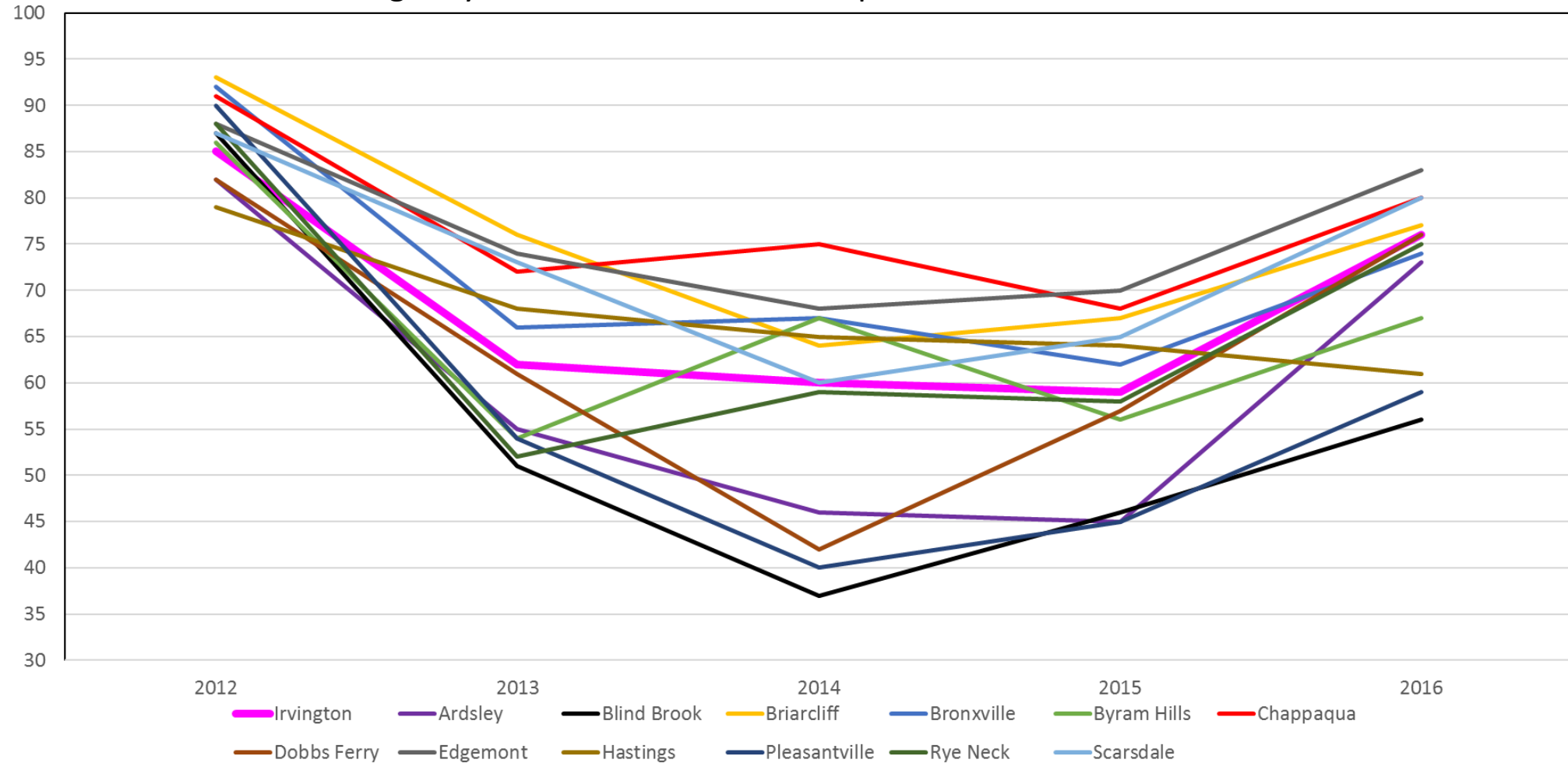

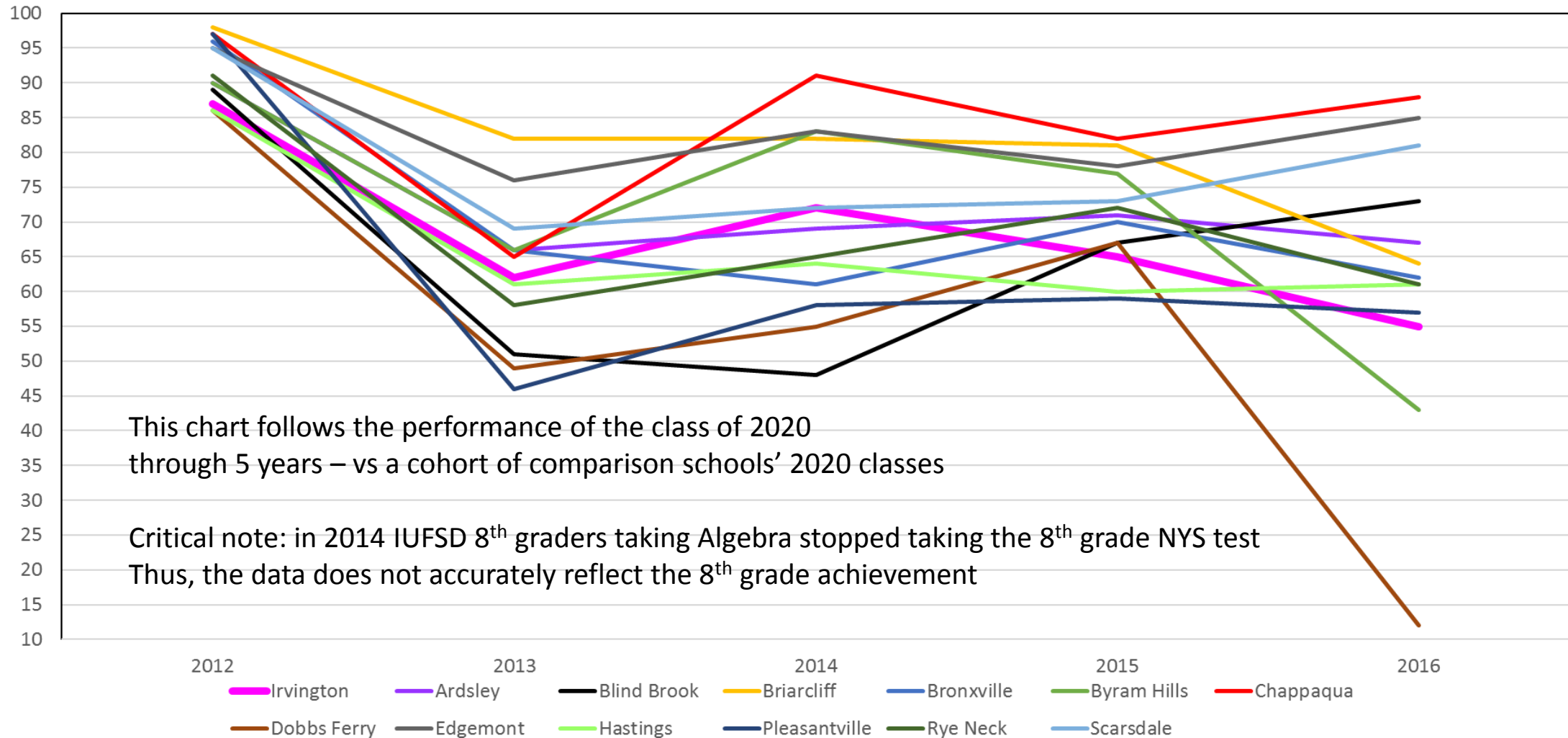ELA Score Distribution
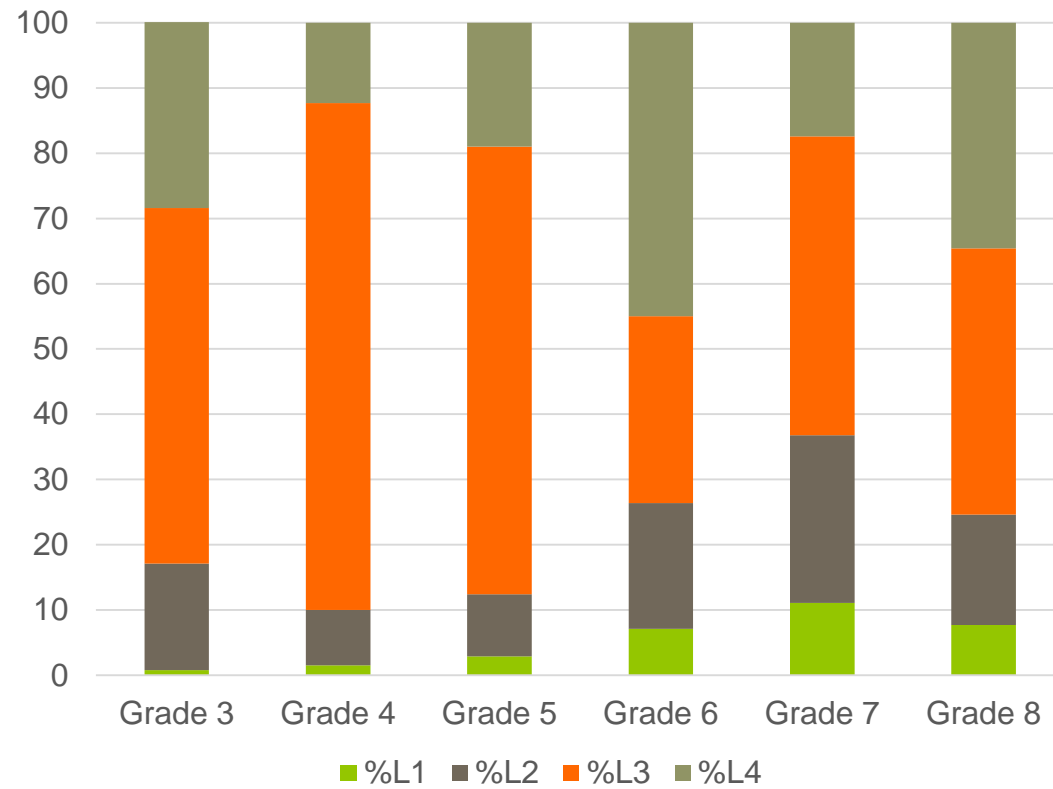
Math Score Distribution

Historical View: Class of 2020 – ELA Performance

This chart follows the performance of the class of 2020
through 5 years – vs a cohort of comparison schools' 2020 classes

Historical View: Class of 2020 – Math Performance

This chart follows the performance of the class of 2020
through 5 years – vs a cohort of comparison schools' 2020 classes

Critical note: in 2014 IUFSD 8th graders taking Algebra stopped taking the 8th grade NYS test
Thus, the data does not accurately reflect the 8th grade achievement

Summary Notes

- Again, test data gives the District a window into how students perform on a specific test on a specific date
- 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