Curriculum, Instruction, and Assessment Progress Summary

January 7, 2014

Academic Achievement Focus 2009-2014

- The Board defined student achievement as an area of distinct focus in 2007.
- The Board, Administrators, Teachers, Staff, and Community committed to improving academic performance with the 2008-2013 Five-Year Strategic Plan.
- We will continue to do so with the new 2013-2018 Five-Year Strategic Plan (see slides #13, #14, and #15).

Following the Strategic Plans, we have implemented the following changes:

- Enhanced our Administrative Structure
- Understanding by Design (UbD)
- Genesis (Student Information System)
- Analyze student data

As a result of these actions…

1. Curriculum, using Understanding by Design (UbD), district-wide.
   - All Core Curriculum Scope & Sequence documents are online and openly available to parents & students (over 100 documents) http://www.veronaschools.org/domain/18
2. Professional Learning has been revised (staff training) program based on the results we see in student performance & state mandates (UbD, SGOs, Marzano, PARCC …).
3. Changed course offerings, sequence and teacher assignments, as needed.
4. Implementing the Marzano model for staff evaluations pursuant to state mandates (consistent with the methods we already defined for Verona).
5. Grown the North Essex Professional Development Consortium (which we established)
   - Now includes Glen Ridge, West Caldwell, Montclair, West Essex, Cedar Grove & Fairfield (new partners) & Verona!

Our results over the years …

- *We have made steady and consistent progress where we have focused our attention (UbD, %PP, Specific Math/ELA Clusters).*
- *Our students and staff continue to meet the challenges of change and continue to perform very well in difficult circumstances.*
- *We will remain committed to continually improving, year after year, with a sound, sensible approach to change.*

NJ Report Card Data allows us to compare how we are performing alongside our DFG I peers (demographics being the most consistent predictor of academic performance).

- We gauge our success and areas of improvement against the DFG I average.
- With focus on specific clusters, we will reduce the gap between our students and our DFG I peers (students).
- However, we are focused on slightly different areas given our strengths, weaknesses, schedule of curriculum change, staff assignments, etc.

Important to note:

- ❑ Standardized tests comprise multiple clusters (sub-topics). We are targeting specific clusters for improvement as we go.
- ❑ We have certain grades/subjects where %PP is much higher than it should be – these are also areas of focus.
- ❑ We have targeted some grades/subjects where many %P can become %AP, given the range in scores

The Results – Elementary Math (Grades 3&4)

- *Our %PP is even lower (improving): Spring 2013: Verona 9.5% PP vs. DFG 9.3% PP*
- Strong Cluster: *Number & Operations in Base Ten and Geometry*
- Focus Cluster: *Number & Operations with Fractions*

ASK 3 Math	08-09		11-12			12-13	
Cluster	V	DFG	V	DFG	New Common Core Clusters	V	DFG
Number & Numerical Operations	13.7	15.3	13.7	14.8	Operations & Algebraic Thinking	8.7	9.1
Geometry & Measurement	8.1	8.7	7.6	8.0	Number & Operations in Base Ten	4.7	4.6
Patterns & Algebra	7.7	8.2	8.2	8.3	Number & Operations - Fractions	5.8	7.0
Data, Prob, Discrete Math	5.5	5.8	6.1	6.0	Measurement & Data	10.1	10.4
Problem Solving	17.2	18.9	12.4	13.1	Geometry	5.1	5.1
%PP	14.3%	8.6%	6.5%	5.5%	%PP	9.5%	9.3%

- *Our %PP is even lower (improving): Spring 2013: Verona 13.7% PP vs. DFG I 9.0% PP*
- Strong Cluster: *Geometry*
- Focus Cluster: *Number & Operations with Fractions*

ASK 4 Math	08-09		11-12			12-13	
Cluster	V	DFG	V	DFG	New Common Core Clusters	V	DFG
Number & Numerical Operations	14.1	15.5	14.1	15.4	Operations & Algebraic Thinking	6.6	7.2
Geometry & Measurement	6.6	7.1	7.3	8.1	Number & Operations in Base Ten	7.3	7.9
Patterns & Algebra	8.5	8.5	7.3	8.1	Number & Operations - Fractions	12.6	13.7
Data, Prob, Discrete Math	5.3	5.3	4.7	5.4	Measurement & Data	2.3	2.8
Problem Solving	15.3	16.5	14.1	14.8	Geometry	4.8	4.6
%PP	11%	9.90%	14.60%	6.10%	%PP	13.7%	9.0%

The Results – Elementary ELA (Grades 3&4)

- *Our %PP is lower than our DFG I Peers in Grades 3&4: Grade 3 (15.8% vs. 17.2%) & Grade 4 (20% vs. 21.4%)*
- *Curricular Focus is on Writing and Reading Workshop*
- *Strong Cluster: Reading in Grades 3 & 4*
  - *Grade 3: Literature: 6.4 vs. 6.4* *Grade 4: Literature: 8.2 vs. 7.8*
  - *Grade 4: Informational Text: 12.7 vs. 12.4* *Grade 4: Informational Text: 15.5 vs. 15.4*

ASK 3 LAL	08-09		11-12		ASK 3 ELA	12-13	
Cluster	V	DFG	V	DFG	Common Core Standards	V	DFG
Writing	9.6	11.3	11.4	11.4	Writing	10.9	11
Reading	18.3	19.2	18.2	17.9	Reading	19.1	18.8
%PP	14.3%	14.7%	10.1%	11.7%	%PP	15.8%	17.2%

ASK 4 LAL	08-09		11-12		ASK 4 ELA	12-13	
Cluster	V	DFG	V	DFG	Common Core Standards	V	DFG
Writing	12	12.4	12.6	13	Writing	12.4	12.6
Reading	25	25.4	22.2	22.1	Reading	23.7	23.1
%PP	10.3%	13.7%	19.0%	16.6%	%PP	20.0%	21.4%

The Results – HBW Math (Grades 5-8)

- *Our %PP is lower than the DFG I Mean for ALL Four Grade Levels (look at %PP highlighted in green)!!*
- *Common Core State Standards will be tested in the spring for grades 6, 7, 8*
- *Focus Cluster: Number & Operations – Fractions in grade 5 and Implementing CCSS in grades 6-8*

ASK 5 Math	11-12		ASK 5 Math	12-13	
Cluster	V	DFG	New Common Core Clusters	V	DFG
Number & Numerical Operations	13.1	13.9	Operations & Algebraic Thinking	4.6	4.8
Geometry & Measurement	11.6	12.4	Number & Operations in Base Ten	8.8	8.8
Patterns & Algebra	6.6	6.8	Number & Operations - Fractions	8.3	9.1
Data, Prob, Discrete Math	4.5	5.4	Measurement & Data	10.3	10.4
Problem Solving	11.7	13.1	Geometry	5.0	5.1
%PP	6.0%	2.7%	%PP	6.7%	8.3%

ASK 6 Math	11-12		12-13	
Cluster	V	DFG	V	DFG
Number & Numerical Operations	10.2	10.4	8.7	9.1
Geometry & Measurement	9.4	9.8	9.2	9.3
Patterns & Algebra	11.3	11.6	11.0	11.3
Data, Prob, Discrete Math	6.7	6.6	5.5	5.8
Problem Solving	17.7	18.1	14.4	15.3
%PP	2.6%	3.8%	8.5%	9.7%

ASK 7 Math	11-12		12-13	
Cluster	V	DFG	V	DFG
Number & Numerical Operations	8.1	8.6	7.3	7.4
Geometry & Measurement	9.2	10.1	9.7	9.9
Patterns & Algebra	10.0	10.4	10.1	10.2
Data, Prob, Discrete Math	5.5	5.3	5.7	5.4
Problem Solving	16.9	17.7	18.1	18.3
%PP	14.8%	12.3%	18.6%	18.9%

ASK 8 Math	11-12		12-13	
Cluster	V	DFG	V	DFG
Number & Numerical Operations	8.8	9.8	8.3	8.8
Geometry & Measurement	10.6	10.8	9.6	9.6
Patterns & Algebra	8.0	9.6	9.9	10.5
Data, Prob, Discrete Math	6.2	5.9	5.6	5.3
Problem Solving	21.0	22.5	17.5	17.7
%PP	6.1%	6.6%	13.3%	15.1%

The Results – HBW ELA (Grades 5-8)

- *Our %PP for 5th Grade has closed to a 0.4% gap (Verona 20.8% vs. DFG I Mean 20.4%)*
- *Reading Cluster has reduced significantly in both Grades 5 & 6*

ASK 5 ELA	08-09		11-12		12-13		
Cluster	V	DFG	V	DFG	CCSS	V	DFG
Writing	13	13.5	12.5	12.8	Writing	12.8	13.2
Reading	30.5	30.7	24.1	25.7	Reading	25.2	25.6
%PP	10.4%	6.6%	18.0%	12.5%	%PP	20.8%	20.4%

ASK 6 ELA	08-09		11-12		12-13		
Cluster	V	DFG	V	DFG	CCSS	V	DFG
Writing	9.6	9.7	11	11.4	Writing	11.1	11.2
Reading	35.6	36.9	33.8	34.6	Reading	33.6	34
%PP	11.40%	8.20%	11.20%	10.30%	%PP	19.4%	16.0%

- *Our %PP is lower than our DFG I Peers in* **both** *Grades 7 & 8: (9.9% vs. 15.4% & 6.4% vs. 6.5%)*
- *Both Writing & Reading Clusters are higher than DFG I Peers*

ASK 7 LAL	08-09		11-12		ASK 7 ELA	12-13	
Cluster	V	DFG	V	DFG	CCSS	V	DFG
Writing	11.3	11.2	11.4	11.8	Writing	12.3	11.8
Reading	35.6	36.1	34.2	34.8	Reading	33.5	33.3
%PP	5.70%	6.40%	12%	12%	%PP	9.9%	15.4%

ASK 8 LAL	08-09		11-12		ASK 8 ELA	12-13	
Cluster	V	DFG	V	DFG	CCSS	V	DFG
Writing	12	12	11.7	11.9	Writing	12.3	12.1
Reading	37.1	38.1	38.6	39	Reading	37.9	37.3
%PP	2.20%	1.50%	1.80%	1.50%	%PP	6.4%	6.5%

The Results – VHS (HSPA - 11th Grade)

- *LAL focus on improving %AP and %PP. Math focus on improving %PP.*
- *Focus on culture change on Advanced Placement participation & performance*
- *Focus on Dual-Enrollment, College Credit, & New Elective courses*

		2008		2009		2010		2011		2012		2013	
		Verona	DFG	Verona	DFG	Verona	DFG	Verona	DFG	Verona	DFG	Verona	DFG
LAL	%AP	11.7%	22.8%	19.9%	25.9%	14.7%	34.3%	23.5%	43.4%	29.3%	38.0%	38.7%	45.4%
	%PP	8.0%	6.2%	9.6%	5.6%	4.7%	3.8%	4.6%	3.5%	1.4%	2.7%	1.9%	2.6%
Math	%AP	30.7%	42.5%	27.9%	41.2%	26.7%	42.7%	27.5%	43.4%	30.6%	46.7%	39.6%	48.5%
	%PP	13.9%	10.0%	18.4%	11.5%	23.3%	10.8%	16.3%	11.1%	11.6%	8.9%	8.4%	8.6%

✓ HSPA LAL %PP has steadily declined to below DFG average, now 2 years in a row

✓ HSPA LAL %AP continues to close the gap to DFG Average.

- VHS increased 231% vs. DFG increase of 99% from 2008-2013

✓ HSPA Math %PP is at lowest level in 6 years and is now below the DFG Average

✓ HSPA Math %AP continues to close the gap to DFG Average.

- VHS increased 29% vs. DFG increase of 14% from 2008-2013

The Results – VHS (Advanced Placement)

We identified Advanced Placement participation and performance as an area for improvement in 2006. To achieve that, we have:

- Made it easier for students to enroll
- Changed the content, updated curriculum, conducted staff training, changed teaching assignments

✓ We have increased participation while maintaining performance as recognized by College Boards Award.
✓ We now have an enrollment of 186 in current school year.

	2006	2007	2008	2009	2010	2011	2012	2013	2014
% 3's or better	76%	66%	49%	59%	71%	64%	72%	64%	Aug 2014
# tests administered	70	119	225	145	170	183	271	368	427
Total # AP Students		77	108	82	75	89	127	171	186

The Results – VHS (Advanced Placement)

- AP Physics: Offered for the first time in 2011: 2 of 9 students earned a 3 or better. 2012: 10 of 13 students earned a 3 or better.
- AP Chemistry: In 5 years '06-'10 only 11 students earned a 3 or better. From 3 years since ('11-'13) 30 students earned a 3 or better.

AP Chemistry	2006	2007	2008	2009	2010	2011	2012	2013
Total Tests	11	22	30	4	10	6	13	15
# of 3's or better	1	5	3	0	2	3	**12**	**15**
% of 3's of better	9%	23%	10%	0%	20%	50%	**92%**	**100%**

- AP Language & Composition: This is one of our most impressive results. The number of students enrolled in the class have tripled since 2006; moreover, 95% of the students earned a 3 or better last spring.

AP Lang/Comp	2006	2007	2008	2009	2010	2011	2012	2013
Total Tests	13	18	18	15	16	10	36	43
# of 3's or better	10	14	13	12	15	9	**33**	**41**
% of 3's of better	78%	77%	72%	80%	94%	90%	**92%**	**95%**

The Results – College Board's 4th Annual AP District Honor Roll (2nd Year in a Row)

Verona Public School District Placed on the College Board's 4th Annual AP® District Honor Roll for Significant Gains in Advanced Placement® Access and Student Performance

- One of 477 school districts in the U.S. and Canada being honored by the College Board
  - For increasing access to AP® course work while (88 to 171 students)
  - Maintaining or increasing the percentage of students earning scores of 3 or higher on AP Exams (3%).

Total Students who took AP Exams, excluding Spanish Language			Annual Growth in the Number of AP Students (excluding those who only took Spanish Language) from 2011-2013	Percentage of AP Students who Scored 3+ on at least one AP Exam other than Spanish Language			Annual Growth in the Percentage of AP Students who Scored 3+ on at least one AP Exam other than Spanish Language
2011	2012	2013	*(171/88)^(1/2)-1*	2011	2012	2013	*(71%/67%)^(1/2)-1*
88	127	171	39%	67%	74%	71%	3%

Academic Achievement Focus 2013-14

Strategic Goal #4: Curriculum, Assessment, and Instruction

- Develop student scales (self–assessments)
- Curriculum Council:
  - Redesign to include representation from all stakeholders (K-12).
  - Create a tentative curriculum cycle '14-'18.
  - Analyze student performance (data)
- Implement EbD (STEM) in grades 3&4
- Continue to integrate literacy into subjects:
  - DBQ (Document Based Questions) in SS.
  - Research and develop DBQ (Data-Based Questions) in Science.

Academic Achievement Focus 2013-14

Strategic Goal #4: Curriculum, Assessment, and Instruction

- Survey HBW & VHS students about current electives, their success, and enrollment numbers to make decisions for future electives.

- Continue to look for alignment (stages 1, 2, and 3) within the UbD framework with emphasis on assessments (formative & summative) and transfer.

- Develop common assessments (i.e. SGOs/benchmarks).

Academic Achievement Focus 2013-14

Strategic Goal #5: Professional Learning

- Continue Professional Learning/Development with the DEAC committee (each school will be represented with ScIP).
- Continue collaborative efforts with North Essex Professional Development Consortium (NEPDC).
- Implement and provide support for all staff using the Marzano Model.
- Develop a comprehensive training schedule for Marzano Model, SGOs, Teacher Evaluation Regulations.
- Input student data into Genesis (NJASK, SAT, SGOs, HSPA) to make informed decisions.

Humanities

Second year of full implementation of reading workshop, grades 3-4

- Expanded Reading Workshop to K-2 for the 2013-2014 school year
- Interdisciplinary approach for certain RW units (Science or Social Studies related)
- Students are instructed at their individual reading levels (DRA)
- Promote small group instruction through Guided Reading.

Infusion of *Nonfiction* across all grade levels (K-12):

- Periodicals (e.g., NY Times Upfront, Scope, The Week)
- Newspapers (e.g., NY Times)
- Primary Sources (2013-2014 school year: Introduce primary sources starting in Grade Six.)

Humanities

Continued implementation of Writing Workshop, grades K-6

- Revised writing calendars with focus upon writing in the content areas (tie to research)

Document Based Questions (DBQ) - infuse literacy into Social Studies because DBQs require students to read primary sources and write an essay based upon a prompt incorporating the documents.

- Administered on a quarterly basis in all required classes (Grade 7-11)
- A common rubric was developed by teachers to grade the DBQs.

STEM

First year of Implementation of EbD STEM program in Elementary

- UbD style STEM curriculum in progress as "Verona model"
- Emphasis: Science, Engineering, and Math Practices with a collaborative approach
- Integrating elementary technology teachers into STEM program beginning Jan 2014
- Planning phase for expanding EbD to HBW for 14-15

STEM

Next Generation Science Standards

- Final Draft Published April/May 2013
- Recommended for adoption by State Committee June 2013
- Decision for adoption/implementation to be made by State BOE/ NJDOE by June 2014
- Verona Science Curriculum will require rewrite/revision from K-12 (5 year cycle …)
- Includes Engineering standards

STEM

- **Revised curricula for:**
  - **Sixth Grade Above Math:** Aligned fractions w/ Customary measurement, Aligned Decimals w/Metric measurement
  - **Geometry:** Units are more uniform in duration, Topics are merged, aligned, and sequenced in more meaningful ways

STEM

STEM in VHS

- New VHS Math Course Implemented for 2013-14: Discrete Math
  - Option for non-calculus students.
  - Topics include: Voting and Apportionment, Finance, Statistics, Game Theory, Graph Theory
  - Curriculum Written Summer 2013
- Anticipated VHS Science Course Offerings for 2014-15
  - AP Environmental: Full year
  - Human Anatomy and Physiology: 1 Semester elective

College Acceptances - 2013

Bloomsburg University	Hampshire College	Polytechnic Institute of NYU	University of Colorado at Boulder
Boston College	High Point University	Post University	University of Connecticut
Boston University	Hobart & William Smith College	Providence College	University of Delaware
Brandeis University	Hofstra University	Quinnipiac University	University of Findlay
Bryant University	HoHoKus School of Trade	Radford University	University of Hartford
Cabrini College	Indiana University Bloomington	Ramapo College	University of Iowa
Caldwell College	Iona College	Rensselaer Polytechnic Institute	University of Maryland
California University of Pa.	Ithaca College	Rhode Island College	University of Massachusetts
Catholic University of America	James Madison University	Richard Stockton College of NJ	University of Miami
Centenary College	John Carroll University	Rider University	University of Minnesota
Champlain College	Johnson & Wales University	Rochester Institute of Technology	University of Mississippi
Clarion University of Pa.	Kean University	Roger Williams University	University of New Hampshire
Clark University	Kenyon College	Rowan University	University of New Haven
Clarkson University	Keystone College	Rutgers University	University of N. Carolina/Charlotte
Clemson University	King's College	Sacred Heart University	University of Pacific
Coastal Carolina University	Kingsborough Comm. College	Saint Anselm College	University of Pittsburgh
Colgate University	La Salle University	College of St. Elizabeth	University of Rhode Island
Colorado State University	Lafayette College	Saint Joseph's University	University of Rochester
County College of Morris	Lehigh University	Saint Michael's College	University of San Francisco
CUNY-Macaulay Honors College	LIU Post	Saint Peter's University	University of the Sciences
Delaware State University	Loyola University	College of Saint Rose	University of Scranton
Curry College	Lynchburg College	Salisbury University	University of South Carolina
Dominican College of Blauvelt	Manchester University	Salve Regina University	University of Vermont
Drew University	Marist College	San Diego Miramar College	University of Washington
Durham University	Marshall University	San Diego State University	Virginia Commonwealth University
East Carolina University	Marywood University	Seton Hall University	Wagner College
East Stroudsburg University	McGill University	Shippensburg University of Pa.	Wentworth Inst. of Technology
E Connecticut State University	Messiah College	Siena College	West Chester University
Elizabethtown College	Miami University, Oxford	Simmons College	West Virginia University
Elon University	Michigan State University	Slippery Rock University of Pa.	Western New England University
Emmanuel College	Monmouth University	St. John's University	Wilkes University
Essex County College	Montclair State University	St. Lawrence University	William Paterson University
Fairfield University	Moravian College	Stony Brook University	Wilmington University
Fairleigh Dickinson University	Muhlenberg College	SUNY College-Albany & New Paltz	Worcester Polytechnic University
Fashion Institute of Technology	New England College	Susquehanna University	York College of Pennsylvania