December 7, 2015 Staples High School

WESTPORT BOARD OF EDUCATION

*AGENDA

(Agenda Subject to Modification in Accordance with Law)

PUBLIC CALL TO ORDER:
6:30 p.m., Staples High School, Room 333, Pupil Services Conference Room

ANTICIPATED EXECUTIVE SESSION: Personnel Matter

RESUME PUBLIC SESSION

PLEDGE OF ALLEGIANCE: Staples High School, Cafeteria B (Room 301), 7:00 p.m.

ANNOUNCEMENTS FROM BOARD AND ADMINISTRATION

MINUTES: October 25, November 9, November 23, 2015

PUBLIC QUESTIONS/COMMENTS ON NON-AGENDA ITEMS (15 MINUTES)

DISCUSSION:

1. NESDEC Enrollment Projections	(Encl.)	Don Kennedy
2. 2016-17 Preliminary Budget Discussions with Board of Finance		
3. Expansion of Literacy Coaches at BMS, CMS, SHS	(Encl.)	Mr. D'Amico
4. Senior Demonstration or "Capstone" Requirement: Extending Portfolio Assessments	(Encl.)	Mr. D'Amico
5. Next Generation Science Standards (NGSS)	(Encl.)	Dr. Scheetz Mr. Alfano
6. Professional Development for Staff : Use of AEDs	(Encl.)	Mr. Rizzo Ms. Levasseur

DISCUSSION/ACTION:

1. Five Year Capital Projects Ranked/Time Line for Implementation of Capital Projects: 2016-17	(Encl.)	Mr. Longo
2. Acceptance of Gifts	(Encl.)	Dr. Landon

ADJOURNMENT

*A 2/3 vote is required to go to executive session, to add a topic to the agenda of a regular meeting, or to start a new topic after 10:30 p.m.
The meeting can also be viewed on cable TV on channel 78; AT&T channel 99 and by video stream @www.westport.k12.ct.us

PUBLIC PARTICIPATION WELCOME USING THE FOLLOWING GUIDELINES:

- Comment on non-agenda topics will occur during the first 15 minutes *except* when staff or guest presentations are scheduled.
- Board will not engage in dialogue on non-agenda items.
- Public may speak as agenda topics come up for discussion or information.
- Speakers on non-agenda items are limited to 2 minutes each, except by prior arrangement with chair.
- Speakers on agenda items are limited to 3 minutes each, except by prior arrangement with chair.
- Speakers must give name and use microphone.
- Responses to questions may be deferred if answers not immediately available.
- Public comment is normally not invited for topics listed for action after having been publicly discussed at one or more meetings.

WESTPORT PUBLIC SCHOOLS

ELLIOTT LANDON
Superintendent of Schools

110 MYRTLE AVENUE
WESTPORT, CONNECTICUT 06880
TELEPHONE: (203) 341-1010
FAX: (203) 341-1029

To: Members of the Board of Education

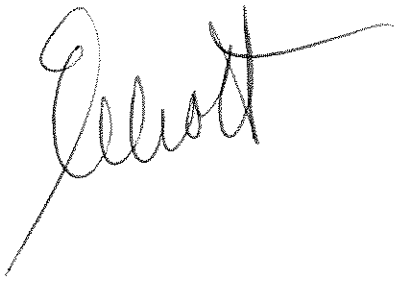
From: Elliott Landon

Subject: NESDEC Enrollment Projections, 2015-2020

Date: December 7, 2015

You will find appended to this memorandum Power Point slides that will be referred to by Dr. Donald Kennedy of the New England School Development Council (NESDEC) during his presentation related to the above-referenced subject at our meeting of December 7.

Dr. Kennedy will make his presentation directly to the Board of Education. Since the presentation will precede the preliminary discussions with the Board of Finance pertaining to the preparation of the Board of Education's proposed budget for the 2016-17 school year, members of the Board of Finance and invited representatives of the RTM also will be present with us for our discussions concerning enrollment projections.



NESDEC 5 YEAR ENROLLMENT

PROJECTIONS

Westport, CT Historical Enrollment

School District: **Westport, CT Five-year forecast** **10/14/2015**

Historical Enrollment By Grade

Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2000	339	**2005-06**	56	415	401	410	439	438	453	428	480	413	420	394	393	323	0	5407	5463
2001	284	**2006-07**	48	380	441	415	435	434	439	460	419	492	412	428	385	382	0	5522	5570
2002	300	**2007-08**	55	370	418	461	425	443	440	448	464	430	488	413	433	390	0	5623	5678
2003	306	**2008-09**	57	408	412	430	465	433	436	452	446	471	438	484	413	430	0	5718	5775
2004	264	**2009-10**	52	377	430	406	442	464	422	448	443	445	467	436	476	408	0	5664	5716
2005	265	**2010-11**	53	393	402	441	421	464	446	437	445	443	464	468	434	471	0	5729	5782
2006	230	**2011-12**	39	356	401	423	442	428	474	460	436	456	467	463	471	428	0	5705	5744
2007	194	**2012-13**	46	364	386	421	431	451	438	479	462	439	479	468	469	466	0	5753	5799
2008	221	**2013-14**	41	364	388	398	435	450	461	446	484	461	442	476	465	454	0	5724	5765
2009	168	**2014-15**	51	343	390	408	412	449	439	468	445	489	472	442	478	463	0	5698	5749
2010	192	**2015-16**	50	346	346	404	419	423	455	439	468	456	493	480	437	477	0	5643	5693

Historical Enrollment in Grade Combinations

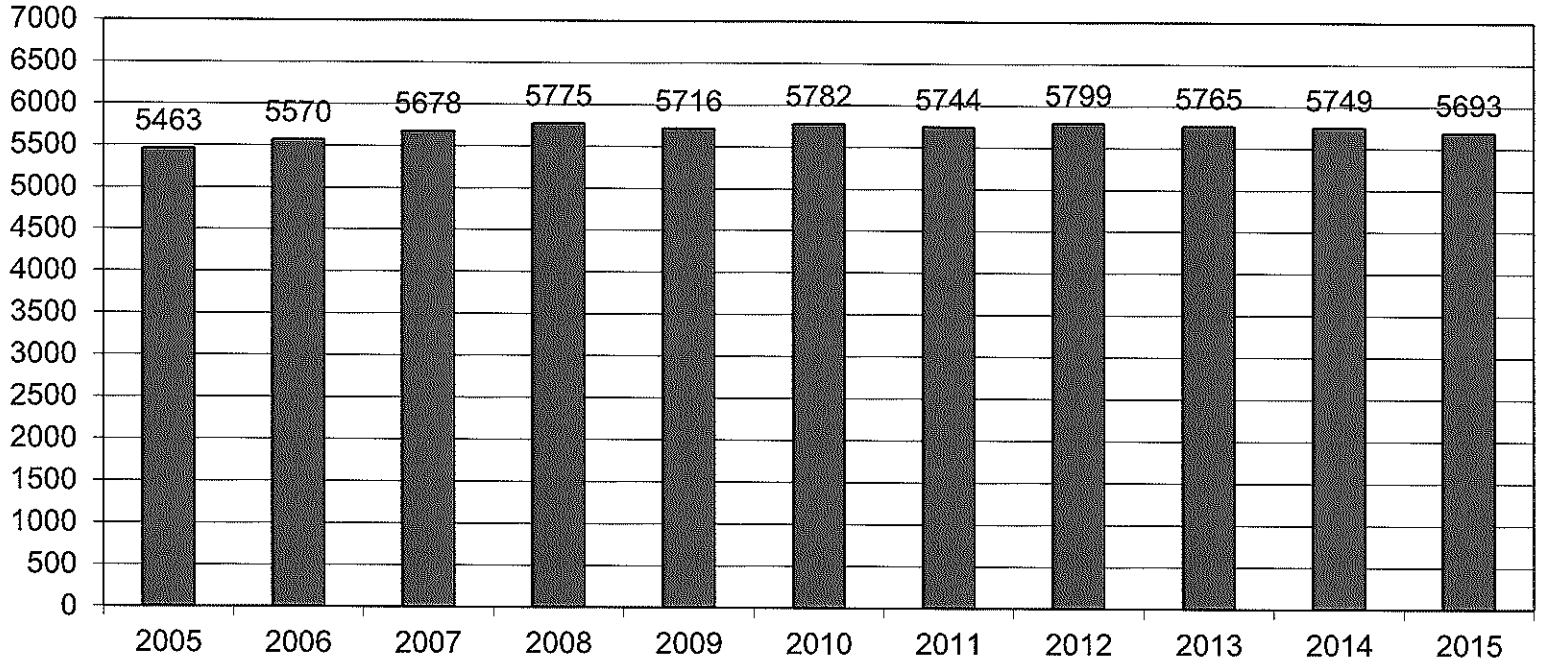
Year	PK-5	K-5	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2005-06	2612	2556	2984	3877	1774	1321	893	2423	1530
2006-07	2592	2544	3004	3915	1810	1371	911	2518	1607
2007-08	2612	2557	3005	3899	1782	1342	894	2618	1724
2008-09	2641	2584	3036	3953	1805	1369	917	2682	1765
2009-10	2593	2541	2989	3877	1758	1336	888	2675	1787
2010-11	2620	2567	3004	3892	1771	1325	888	2725	1837
2011-12	2563	2524	2984	3876	1826	1352	892	2721	1829
2012-13	2537	2491	2970	3871	1818	1380	901	2783	1882
2013-14	2537	2496	2942	3887	1852	1391	945	2782	1837
2014-15	2492	2441	2909	3843	1841	1402	934	2789	1855
2015-16	2443	2393	2832	3756	1818	1363	924	2811	1887

Historical Percentage Changes

Year	K-12	Diff.	%
2005-06	5407	0	0.0%
2006-07	5522	115	2.1%
2007-08	5623	101	1.8%
2008-09	5718	95	1.7%
2009-10	5664	-54	-0.9%
2010-11	5729	65	1.1%
2011-12	5705	-24	-0.4%
2012-13	5753	48	0.8%
2013-14	5724	-29	-0.5%
2014-15	5698	-26	-0.5%
2015-16	5643	-55	-1.0%
Change		**236**	**4.4%**

Westport, CT Historical Enrollment

PK-12, 2005-2015



Westport, CT Projected Enrollment

School District: **Westport, CT Five-year forecast** **10/14/2015**

Enrollment Projections By Grade*

Birth Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2010	192		2015-16	50	346	346	404	419	423	455	439	468	456	493	480	437	477	0	5643	5693
2011	176		2016-17	52	340	364	360	417	433	425	460	440	473	462	495	478	431	0	5578	5630
2012	190		2017-18	54	367	358	378	371	431	435	430	461	445	479	464	493	472	0	5584	5638
2013	162		2018-19	56	313	386	372	390	384	433	440	431	466	451	481	462	487	0	5496	5552
2014	178	(est.)	2019-20	58	343	329	401	384	403	386	438	441	436	472	453	479	456	0	5421	5479
2015	180	(est.)	2020-21	60	346	361	342	414	397	405	390	439	446	442	474	451	473	0	5380	5440

*Projections should be updated on an annual basis.

Based on an estimate of births | Based on children already born | Based on students already enrolled

Projected Enrollment in Grade Combinations*

Year	PK-5	K-5	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2015-16	2443	2393	2832	3756	1818	1363	924	2811	1887
2016-17	2391	2339	2799	3712	1798	1373	913	2779	1866
2017-18	2394	2340	2770	3676	1771	1336	906	2814	1908
2018-19	2334	2278	2718	3615	1770	1337	897	2778	1881
2019-20	2304	2246	2684	3561	1701	1315	877	2737	1860
2020-21	2325	2265	2655	3540	1680	1275	885	2725	1840

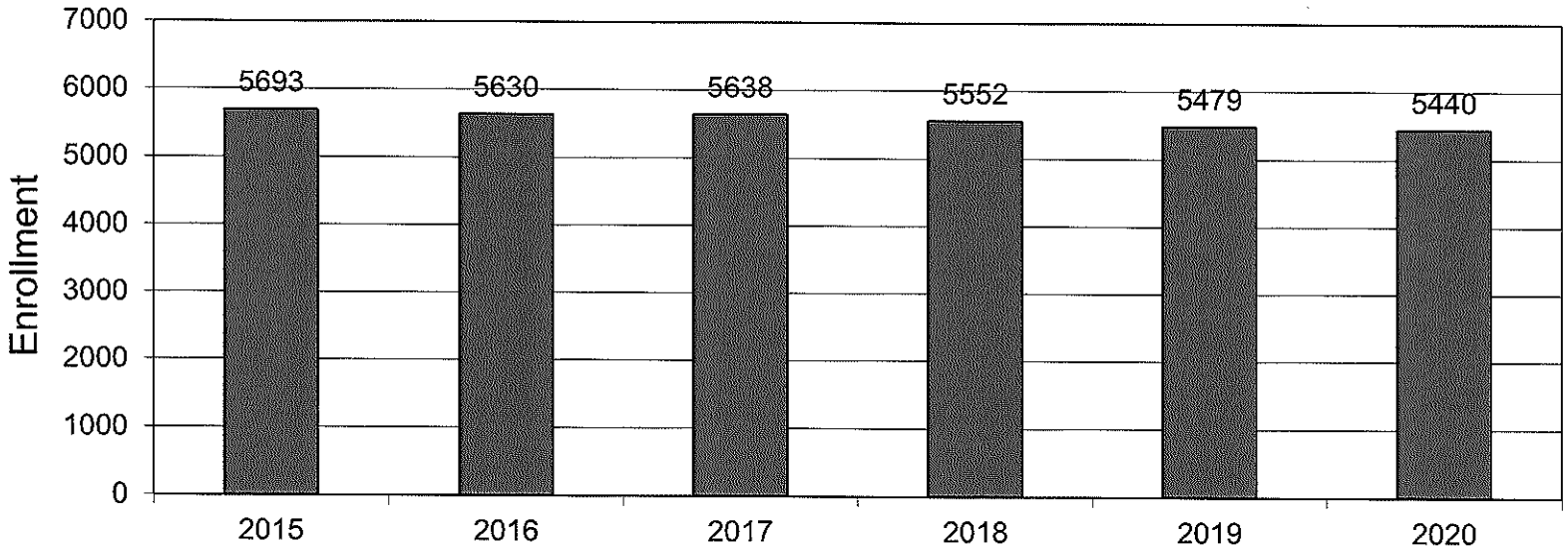
See "Reliability of Enrollment Projections" section of accompanying letter.
Projections are more reliable for Years #1-5 in the future than for Years #6 and beyond.

Projected Percentage Changes

Year	K-12	Diff.	%
2015-16	5643	0	0.0%
2016-17	5578	-65	-1.2%
2017-18	5584	6	0.1%
2018-19	5496	-88	-1.6%
2019-20	5421	-75	-1.4%
2020-21	5380	-41	-0.8%
Change		-5643	-100.0%

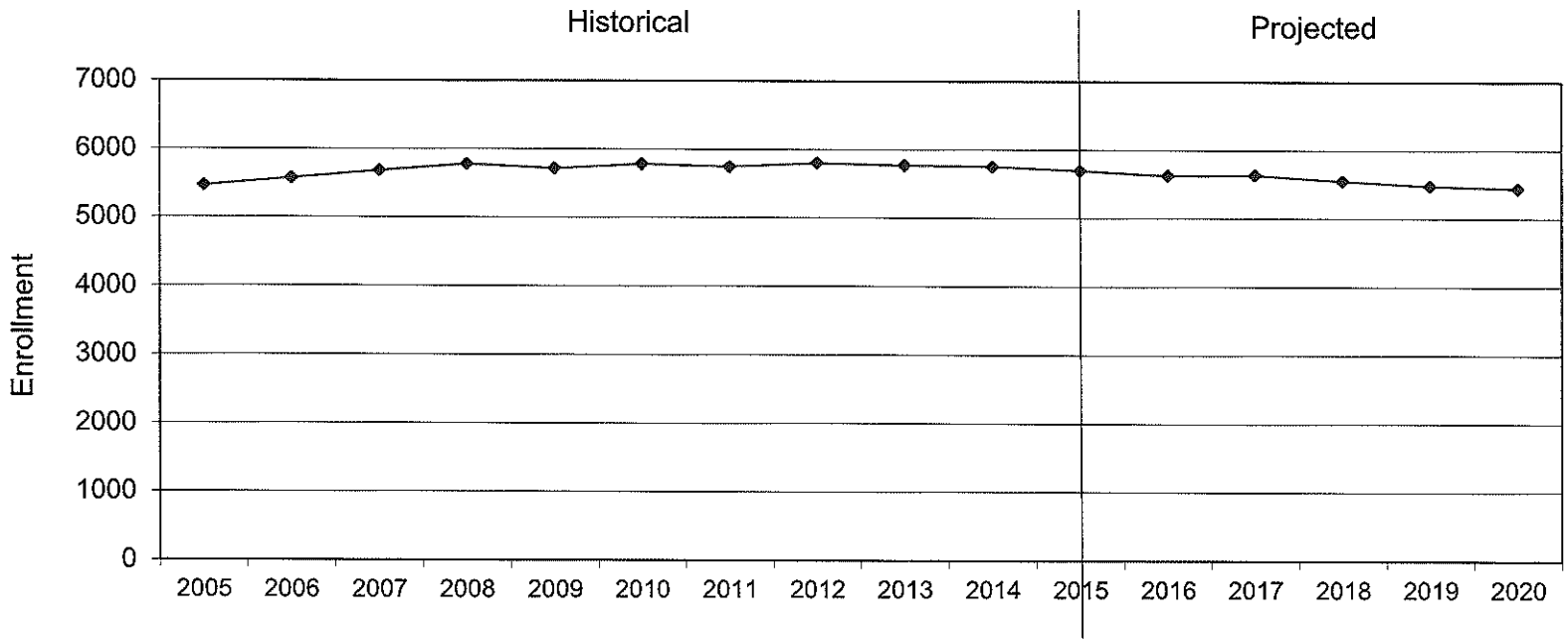
Westport, CT Projected Enrollment

PK-12 TO 2020 Based On Data Through School Year 2015-16

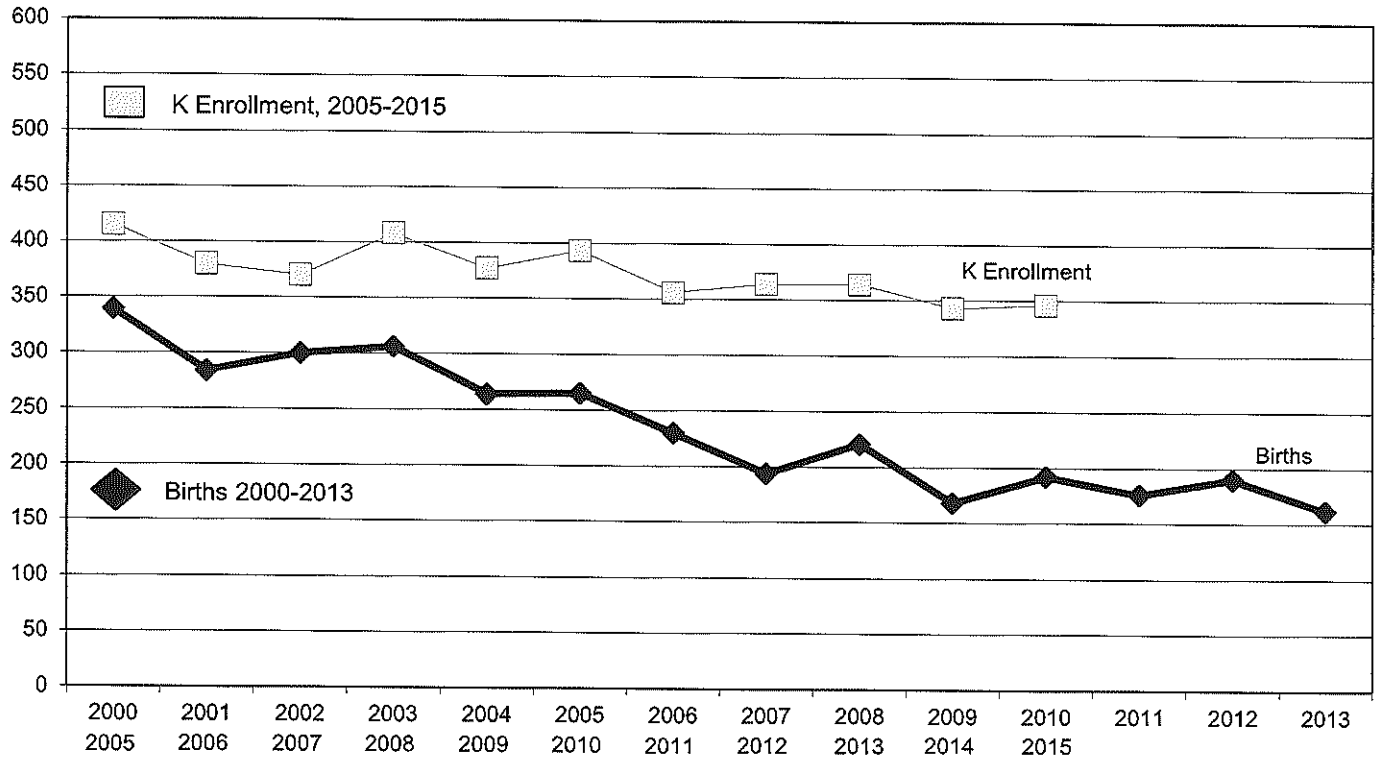


Westport, CT Historical & Projected Enrollment

PK-12, 2005-2020



Westport, CT Birth-to-Kindergarten Relationship



Westport, CT Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
2005	114	0
2011	72	0
2012	86	4
2013	103	0
2014	109	54 (2 in duplex)
2015	58 to Aug 31	0

Source: HUD and Building Department

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
2005-06	n/a	412
2011-12	n/a	n/a
2012-13	n/a	n/a
2013-14	n/a	n/a
2014-15	n/a	481
2015-16	n/a	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)														
Enrollments Oct. 1, 2014	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	23	31	33	23	33	51	44	53	46	44	32	41	27	481

K-12 Home-Schooled Students	
2015	4

K-12 Residents "Choiced-out" or in Charter or Magnet Schools	
2015	1

1 at Wilton Night School

K-12 Special Education Outplaced Students	
2015	28

K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2015	32

Total is 100, including Stepping Stone Preschool

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.

NESDEC 10 YEAR ENROLLMENT

PROJECTIONS

Westport, CT Historical Enrollment

School District: **Westport, CT**

10/14/2015

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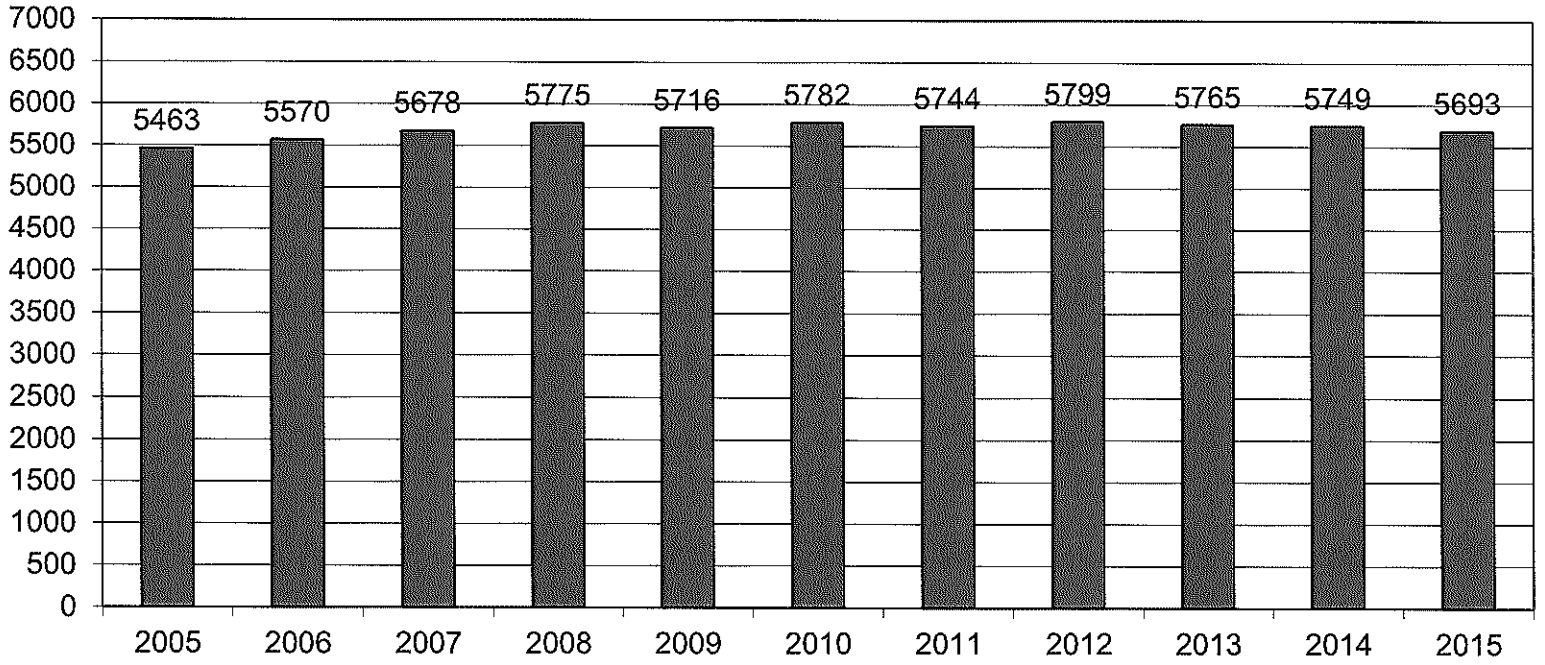
Westport, CT Historical Enrollment

PK-12, 2005-2015



Westport, CT Projected Enrollment

School District: Westport, CT

10/14/2015

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2016	177	(est.)	2021-22	62	342	364	375	353	428	399	410	391	444	452	444	472	445	0	5319	5381
2017	177	(est.)	2022-23	64	342	360	378	387	365	430	403	411	395	450	454	442	466	0	5283	5347
2018	175	(est.)	2023-24	66	337	360	374	390	400	367	435	404	416	400	452	452	436	0	5223	5289
2019	177	(est.)	2024-25	68	342	355	374	386	403	402	371	436	408	421	401	450	446	0	5195	5263
2020	177	(est.)	2025-26	70	342	360	369	386	399	405	406	372	441	413	422	399	444	0	5158	5228

*Projections should be updated on an annual basis.

Based on an estimate of births

Based on children already born

Based on students already enrolled

Projected Enrollment in Grade Combinations*

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2022-23	2326	2262	2665	3471	1639	1209	806	2618	1812
2023-24	2294	2228	2663	3483	1622	1255	820	2560	1740
2024-25	2330	2262	2633	3477	1617	1215	844	2562	1718
2025-26	2331	2261	2667	3480	1624	1219	813	2491	1678

See "Reliability of Enrollment Projections" section of accompanying letter.
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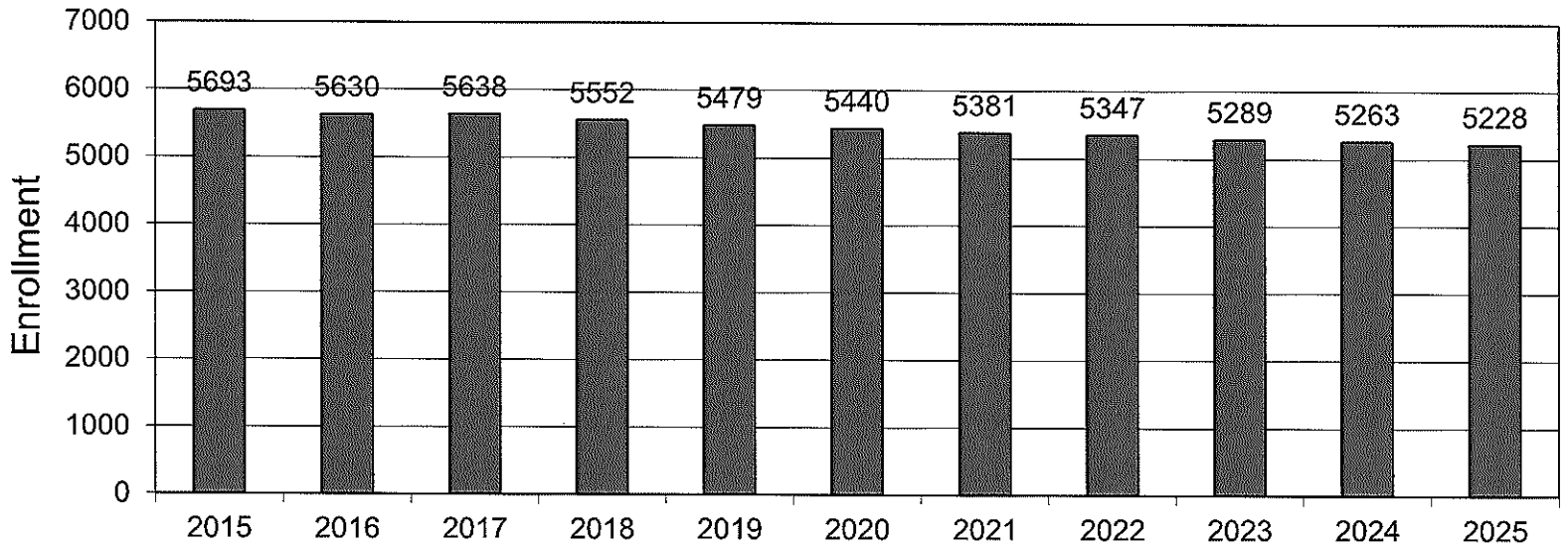
2020-21	5380	-41	-0.8%
2021-22	5319	-61	-1.1%
2022-23	5283	-36	-0.7%
2023-24	5223	-60	-1.1%
2024-25	5195	-28	-0.5%
2025-26	5158	-37	-0.7%
Change		-485	-8.6%

Westport, CT Projected Enrollment

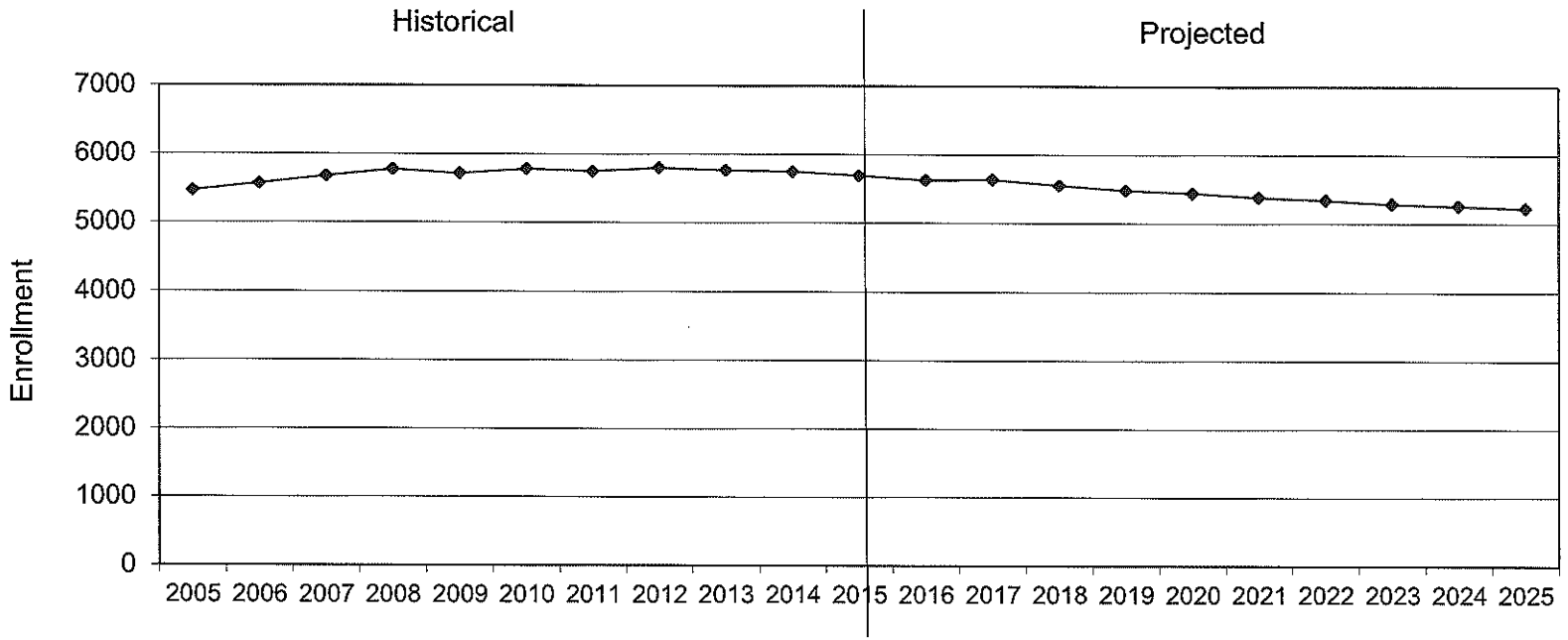
PK-12 TO 2025 Based On Data Through School Year 2015-16



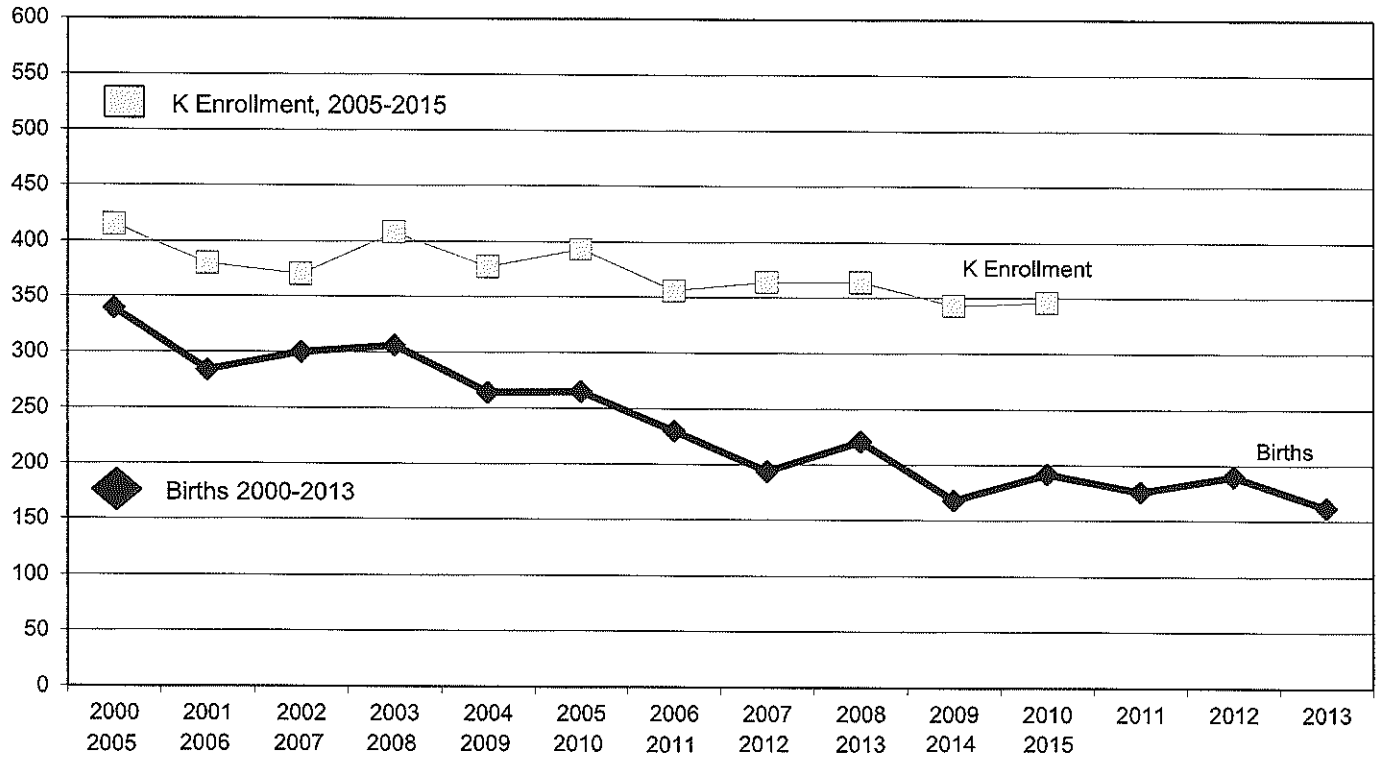
NESDEC

Westport, CT Historical & Projected Enrollment

PK-12, 2005-2025



Westport, CT Birth-to-Kindergarten Relationship



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James J. D'Amico
Director of Secondary Education

TO: Elliott Landon
FROM: James D'Amico
SUBJECT: Literacy Coaches at the Secondary Level
DATE: December 7, 2015

As we adapt our curriculum to meet the demands of new standards in every subject area, it is clear that the teaching of literacy skills is not solely the purview of English Language Arts classes. While we have always engaged students in different aspects of reading and writing in Social Studies, Science, and Mathematics classes, the standards of these curriculum areas since the introduction of the Common Core State Standards places significant emphasis on disciplinary literacy.

As Releah Cossett Lent states in *This is Disciplinary Literacy,* "Current thinking about literacy places reading and writing in its rightful place, firmly rooted *within* each discipline. This new model… recognizes that reading, writing, thinking, reasoning, and *doing* within each discipline is unique- and leads to the understanding that every field of study creates, communicates, and evaluates knowledge differently." The reading, writing, and thinking skills our students need to succeed are complex, but critical in order for students to meet our rigorous learning expectations. To highlight this point, I have attached to this report Appendix M of the Next Generation Science Standards document, "Connections to the Common Core State Standards for Literacy in Science and Technical Subjects." With this understanding, we must be sure that teachers are supported in building their capacity to deliver high quality instruction in literacy. Especially in subject areas outside of English Language Arts, most teachers may not have the training or expertise necessary to fully implement this type of instruction. At the same time, we need to be sure that the principles and practices associated with the Reading and Writing Workshop model in ELA, which we have been implementing over the past three years, are being modeled for new teachers continually improved upon by veteran teachers.

We have already had success with Literacy Coaches at Staples High School, where we have a full-time Literacy Coach in addition to an English and Academic Support teacher who currently coaches Science teachers as part of her schedule. We would like to expand this coaching to 1.5

next year. The most effective way to accomplish these goals in grades 6-8 is to provide teachers with a Literacy Coach at both Bedford and Coleytown Middle Schools.

It is important to note that the role of Literacy Coach is not a supervisory role, as the role is most successful when trust is built between teachers and coaches, which will be especially important for teachers who may already not feel fully confident in teaching literacy skills. A coach can play a vital role in organizing conversations across grade teams, across disciplines, and even vertically - to look at whether student work is improving year over year. For example, by facilitating the examination of student work across disciplines with common rubrics, we will be able to build a culture of collaboration around literacy. As the senior staff developer we have been working with, Audra Robb put it, "this kind of norming across a school is so important to transforming the culture from one of "my classroom/my kids" into "everyone's school/everyone's kids". I have also an excerpt from the document The Literacy Coach: A Key to Improving Teaching and Learning in Secondary Schools, to provide more background and rationale for Literacy Coaches at the middle and high school levels.

I will be joined by Rebecca Marsick and Barbara Robbins to make a brief presentation to the Board of Education in support of adding these important positions to our faculty.

Literacy Coaching in Westport's Secondary Schools

Westport Public Schools
December 7, 2015

Comprehensive Professional Development

- Build teacher capacity to deliver high-quality literacy instruction and intervention
- Sustain implementation of Reading and Writing Workshop in ELA
  - CCSS & Westport 2025 Goals
- Expert literacy consultants lead the learning through workshops, demonstration and practice in lab site "classrooms"
- Job-embedded follow-up through targeted coaching on teachers' focus areas

Research-Based Best Practice

- Professional development for teachers needs to be **job-embedded and sustained** over time - not only reliant on one-shot workshops

  -Linda Darling-Hammond

- Teachers must be **guided and supported** in a continuous learning process about effective ways to combine their teaching of **literacy and content in the secondary school environment**.

  Key players in the change process are literacy coaches—master teachers who provide essential leadership... that supports both the **development and implementation of the literacy program over months and years**.

  Successful coaches must be viewed by teachers as **advisors/mentors who understand their goals, frustrations, and visions—not as supervisors** who evaluate their performance.

  -Elizabeth G. Sturtevant, Alliance for Excellent Education and Carnegie Foundation

Disciplinary Literacy: Social Studies

Connecticut Social Studies Frameworks | GRADES 6 & 7 — WORLD REGIONAL STUDIES

DIMENSION 4: COMMUNICATING CONCLUSIONS AND TAKING INFORMED ACTION

Students should construct and communicate claims for a variety of purposes and audiences. These audiences may range from the school classroom to the larger public community (C3, p. 59–62).

It is expected that students in eighth-grade U.S. History will individually and with others:

INQ 6–8.10 Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations of the arguments.
INQ 6–8.11 Construct explanations using reasoning, correct sequences, examples, and details with relevant information and data, while acknowledging the strengths and weaknesses of the explanations.
INQ 6–8.12 Present adaptations of arguments and explanations on topics of interest to others to reach audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).
INQ 6–8.13 Critique arguments for credibility.
INQ 6–8.14 Critique the structure of explanations.
INQ 6–8.15 Draw on multiple disciplinary lenses to analyze how a specific problem can manifest itself at local, regional, and global levels over time, identifying its characteristics and causes, and the challenges and opportunities faced by those trying to address the problem.
INQ 6–8.16 Assess their individual and collective capacities to take action to address local, regional, and global problems, taking into account a range of possible levels of power, strategies, and potential outcomes.
INQ 6–8.17 Apply a range of deliberative and democratic procedures to make decisions and take action in their classrooms and schools, and in out-of-school civic contexts.

CT Core Standards: ***CCSS.ELA-Literacy.RH.6-8.1, CCSS.ELA-Literacy.WHST.6-8.1-8***
Key academic vocabulary: argument, explanation, sources, evidence, claims, counterclaims, visually/visualize, credibility

From *Connecticut Elementary and Secondary Social Studies Frameworks*, CSDE, 2015

Disciplinary Literacy: Science

MS-PS2-4 Motion and Stability: Forces and Interactions

Students who demonstrate understanding can:

MS-PS2-4. **Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.** [Clarification Statement: Examples of evidence for arguments could include data generated from simulations or digital tools; and charts displaying mass, strength of interaction, distance from the Sun, and orbital periods of objects within the solar system.] [*Assessment Boundary: Assessment does not include Newton's Law of Gravitation or Kepler's Laws.*]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K-12 Science Education:*

Engaging in Argument from Evidence
Engaging in argument from evidence in 6–8 builds from K–5 experiences and progresses to constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.

- Construct and present oral and written arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.

Connections to Nature of Science

Scientific Knowledge is Based on Empirical Evidence

- Science knowledge is based upon logical and conceptual connections between evidence and explanations.

PS2.B: Types of Interactions

- Gravitational forces are always attractive. There is a gravitational force between any two masses, but it is very small except when one or both of the objects have large mass—e.g., Earth and the sun.

Systems and System Models

- Models can be used to represent systems and their interactions—such as inputs, processes and outputs—and energy and matter flows within systems.

Connections to other DCIs in this grade-band:
MS.ESS1.A ; **MS.ESS1.B** ; **MS.ESS2.C**
Articulation of DCIs across grade-bands:
5.PS2.B ; **HS.PS2.B** ; **HS.ESS1.B**
Common Core State Standards Connections:
ELA/Literacy -
WHST.6-8.1 Write arguments focused on *discipline-specific content.* (MS-PS2-4)

From Next Generation Science Standards

Disciplinary Literacy: Mathematics

CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and —if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

From Common Core State Standards for Mathematical Practice

Literacy Support: Roles and Responsibilities

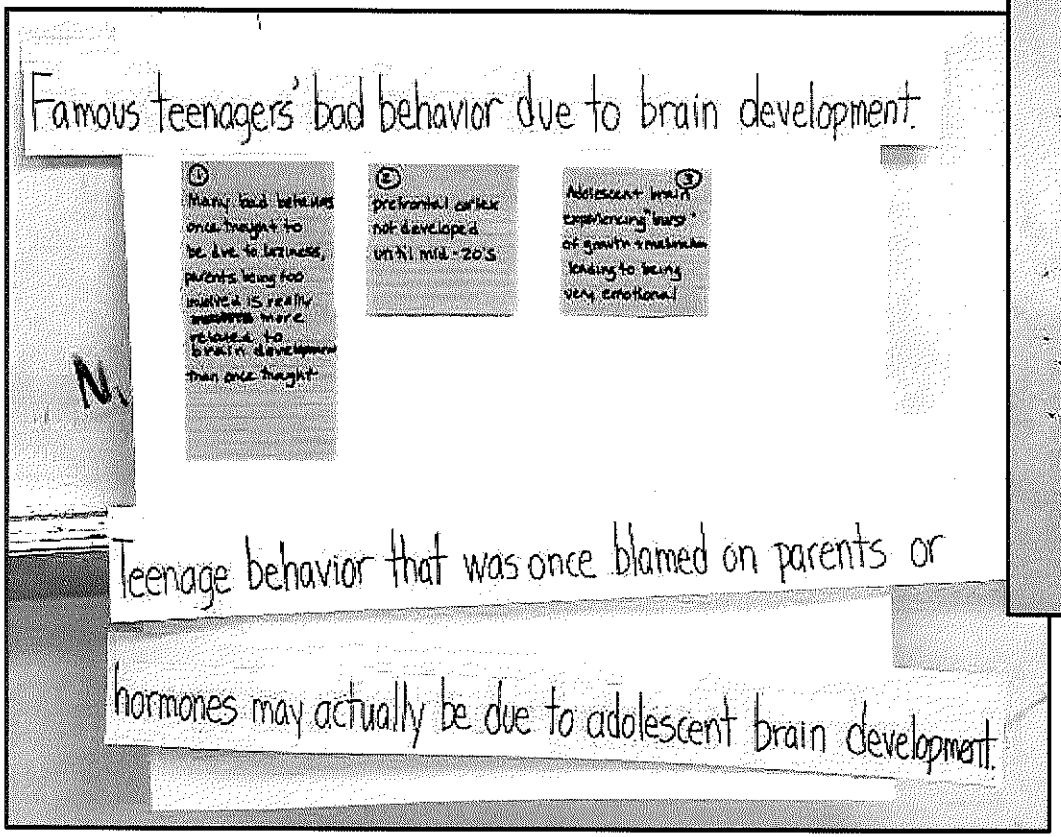
- **Literacy Coach**
  - **Job-embedded professional learning for teachers**
  - **Models lessons, observes instruction, provides feedback**
  - **Supports new teachers**
  - **Plans lessons with teachers across disciplines**
  - **Facilitate looking at student work across disciplines w/common rubrics**
  - **Participates in district-level meetings**

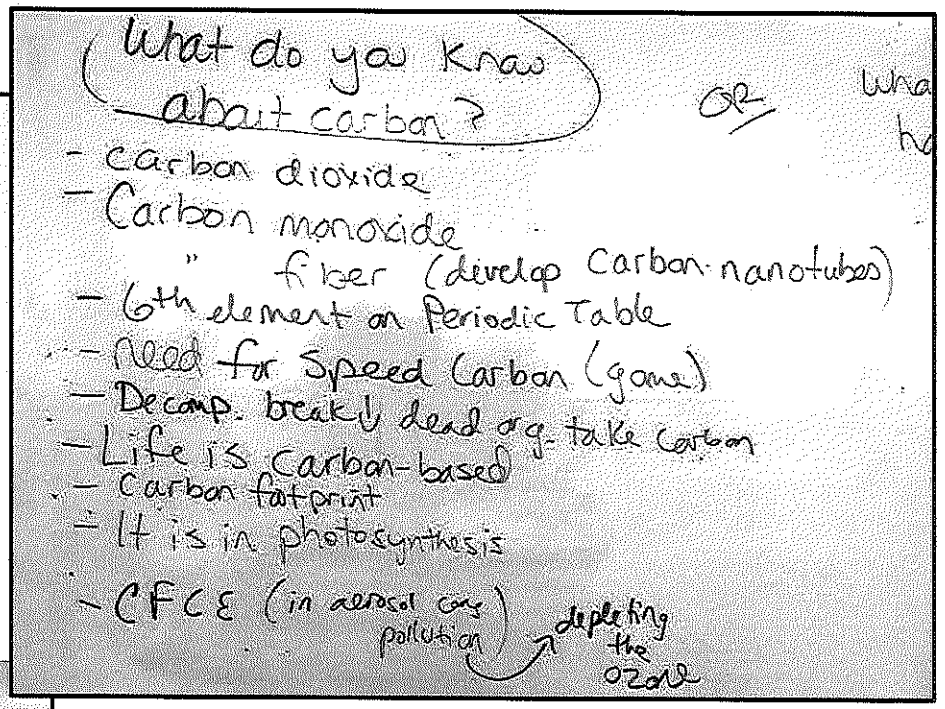
- Reading Interventionist (MS)/Academic Support (HS)
  - Assists students based on assessment data
  - RTI Tier 2 and Tier 3 support
  - Monitors student progress, individual student data

- Department Chairs & Building Administrators
  - Plan professional development
  - Supervise and evaluate teachers
  - Manage curriculum for all courses across three schools grades 6-12

Current Examples: Staples High School

- **Rebecca Marsick and Barbara Robbins**
  Staples High School Literacy Coaches





Feedback from Teachers

"It was the first time this class was completely independent not only in getting the material but also in executing the lab...They themselves mentioned that they noticed an obvious change. ..The intention from now on is to have them reading and highlighting the lab main points and focusing on any questions they might have to get answers even before they start."

Meeting during my duty time was great, so I hope it works out again, because [my special education co-teacher] will be available as well.

I would like to continue to work on non-fiction reading and add in lessons for students to elaborate and provide evidence to support answers to questions

Our Proposal

- Staples High School
  - Increase to 1.5 Literacy Coaches
    - Full-Time Coach
    - 0.5 Coach/0.5 Academic Support or English
  - Continue work in Social Studies and English
  - Expand on work in Science, Math, Electives
- Bedford and Coleytown Middle Schools
  - Establish Full-Time Literacy Coach at each school
  - Collaborate with elementary and high school colleagues
  - Participate in cross-disciplinary planning and coaching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NEXT GENERATION SCIENCE STANDARDS
For States, By States

APPENDIX M – Connections to the Common Core State Standards for Literacy in Science and Technical Subjects[1]

Literacy skills are critical to building knowledge in science. To ensure the CCSS literacy standards work in tandem with the specific content demands outlined in the NGSS, the NGSS development team worked with the CCSS writing team to identify key literacy connections to the specific content demands outlined in the NGSS. As the CCSS affirms, reading in science requires an appreciation of the norms and conventions of the discipline of science, including understanding the nature of evidence used, an attention to precision and detail, and the capacity to make and assess intricate arguments, synthesize complex information, and follow detailed procedures and accounts of events and concepts. Students also need to be able to gain knowledge from elaborate diagrams and data that convey information and illustrate scientific concepts. Likewise, writing and presenting information orally are key means for students to assert and defend claims in science, demonstrate what they know about a concept, and convey what they have experienced, imagined, thought, and learned.

Every effort has been made to ensure consistency between the CCSS and the NGSS. As is the case with the mathematics standards, NGSS should always be interpreted and implemented in such a way that they do not outpace or misalign to the grade-by-grade standards in the CCSS for literacy (this includes the development of NGSS-aligned instructional materials and assessments). Below are the NGSS Science and Engineering Practices and the corresponding CCSS Literacy Anchor Standards and portions of the Standards for Science and Technical Subjects.

Connections to the English/language arts (ELA) CCSS are included across all disciplines and grade bands in the final version of the NGSS. However, Appendix M focuses on connections to the Standards for Literacy in Science and Technical Subjects, which only cover grades 6–12. Therefore this appendix likewise only lists connections for grades 6–12. The K–12 ELA connections that are currently listed in the NGSS connection boxes will also be added to this appendix in the near future. See the Common Core State Standards website for more information about the Literacy standards: http://www.corestandards.org/ELA-Literacy.

[1] Many thanks to the contributions of Susan Pimentel in the development of this document..

Science and Engineering Practice: Asking Questions and Defining Problems

Students at any grade level should be able to ask questions of each other about the texts they read, the features of the phenomena they observe, and the conclusions they draw from their models or scientific investigations. For engineering, they should ask questions to define the problem to be solved and to elicit ideas that lead to the constraints and specifications for its solution. (NRC *Framework* 2012, p. 56)

Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	Connection to Science and Engineering Practice
CCR Reading Anchor #1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. • **RST.6-8.1**: "…support analysis of science and technical texts." • **RST.9-10.1**: "…support analysis of science and technical texts, attending to the precise details of explanations or descriptions." • **RST.11-12.1**: "…support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account."	Evidence plays a critical role in the kinds of questions asked, information gathered, and findings reported in science and technical texts. The notion of close reading in Reading Standard 1 emphasizes the use of asking and refining questions in order to answer them with evidence that is either explicitly stated or implied.
CCR Reading Anchor #7: Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words. • **RST.6-8.7**: "Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)." • **RST.9-10.7**: "Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. • **RST.11-12.7**: "…evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem."	Scientists and engineers present data in a myriad of visual formats in order to reveal meaningful patterns and trends. Reading Standard 7 speaks directly to the importance of asking questions about and evaluating data presented in different formats.
CCR Reading Anchor #8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. • **RST.6-8.8**: "Distinguish among facts, reasoned judgment based on research findings, and speculation..." • **RST.9-10.8**: "Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem." • **RST.11-12.8**: "Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information."	Challenging or clarifying scientific hypotheses, arguments, experiments or conclusions—and the evidence and premises that support them—are key to this practice. Reading Standard 8 emphasizes evaluating the validity of arguments and whether the evidence offered backs up the claims logically.

CCR Writing Anchor #7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. • **RST.6-8.7**: "…answer a question (including a self-generated question)…generating additional related, focused questions that allow for multiple avenues of exploration." • **RST.9-12.7**: "…narrow or broaden inquiry when appropriate…"	Generating focused questions and well-honed scientific inquiries are key to conducting investigations and defining problems. The research practices reflected in Writing Standard 7 reflect the skills needed for successful completion of such research-based inquiries.
CCR Speaking & Listening Anchor #1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. • **SL.8.1**: "…Pose…specific questions by making comments that contribute to the discussion…" • **SL.9-10.1**: "... posing and responding to questions that relate the current discussion to broader themes or larger ideas…" • **SL.11-12.1**: "…posing and responding to questions that probe reasoning and evidence…"	The ability to pose relevant questions, clarify or elaborate on the ideas of others or request information from others are crucial to learning and conducting investigations in science class. Speaking and Listening Standard 1 speaks directly to the importance of asking and refining questions to clarify ideas that generate solutions and explanations.
CCR Speaking & Listening Anchor #3: Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric. • **SL.8.3**: "…evaluating the soundness of the reasoning and sufficiency of the evidence, and identifying when irrelevant evidence is introduced." • **SL.9-10.3**: "…identifying fallacious reasoning or exaggerated or distorted evidence." • **SL.11-12.3**: "…assessing the stance, premises, links among ideas, word choice, points of emphasis."	Evaluating the soundness of a speaker's reasoning and evidence concerning scientific theories and concepts through a series of inquiries teaches students to be discriminating thinkers. Speaking and Listening Standard 3 directly asserts that students must be able to critique a point of view from the perspective of the evidence provided and reasoning advanced.

Science and Engineering Practice: Planning and Carrying Out Investigations Students should have opportunities to plan and carry out several different kinds of investigations during their K-12 years. At all levels, they should engage in investigations that range from those structured by the teacher—in order to expose an issue or question that they would be unlikely to explore on their own (e.g., measuring specific properties of materials)—to those that emerge from students' own questions. (NRC *Framework*, 2012, p. 61)	
Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	**Connection to Science and Engineering Practice**
CCR Reading Anchor #3: Analyze how and why individuals, events, or ideas develop and interact over the course of a text. • **RST.6-8.3**: "Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks." • **RST.9-10.3**: "Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text." • **RST.11-12.3**: "Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text."	Systematic investigations in the field or laboratory lie at the heart of scientific inquiry. Reading Standard 8 emphasizes the importance of accuracy in carrying out such complex experiments and procedures, in following a course of action that will provide the best evidence to support conclusions.
CCR Writing Anchor #7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	Planning and carrying out investigations to test hypotheses or designs is central to scientific and engineering activity. The research practices reflected in Writing Standard 7 reflect the skills needed for successful completion of such research-based inquiries.
CCR Writing Anchor #8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. • **WHST.6-8.8**: "… quote or paraphrase the data and conclusions of others…" • **WHST.9-10.8**: "…assess the usefulness of each source in answering the research question…" • **WHST.11-12.8**: "…assess the strengths and limitations of each source in terms of the specific task, purpose, and audience…"	Collecting relevant data across a broad spectrum of sources in a systematic fashion is a key element of this scientific practice. Writing Standard 8 spells out the importance of gathering applicable information from multiple reliable sources to support claims.
CCR Speaking & Listening Anchor #1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. • **SL.8.1**: "Come …having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion…define individual roles as	Carrying out investigations in collaborative settings is crucial to learning in science class and engineering settings. Speaking and Listening

needed." • **SL.9-10.1**: "Come…having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas… make new connections in light of the evidence and reasoning presented." • **Sl.11-12.1**: "…determine what additional information or research is required to deepen the investigation or complete the task."	Standard 1 speaks directly to the importance of exchanging theories and evidence cooperatively and collaboratively to carrying out investigations.

NEXT GENERATION SCIENCE STANDARDS For States, By States

Science and Engineering Practice: Analyzing and Interpreting Data

Once collected, data must be presented in a form that can reveal any patterns and relationships and that allows results to be communicated to others. Because raw data as such have little meaning, a major practice of scientists is to organize and interpret data through tabulating, graphing, or statistical analysis. Such analysis can bring out the meaning of data—and their relevance—so that they may be used as evidence.

Engineers, too, make decisions based on evidence that a given design will work; they rarely rely on trial and error. Engineers often analyze a design by creating a model or prototype and collecting extensive data on how it performs, including under extreme conditions. Analysis of this kind of data not only informs design decisions and enables the prediction or assessment of performance but also helps define or clarify problems, determine economic feasibility, evaluate alternatives, and investigate failures. (NRC *Framework*, 2012, p. 61-62)

Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	**Connection to Science and Engineering Practice**
CCR Reading Anchor #7: Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words. • **RST.6-8.7**: "Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)." • **RST.9-10.7**: "Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. • **RST.11-12.7**: "…evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem."	Scientists and engineers present data in a myriad of visual formats in order to reveal meaningful patterns and trends. Reading Standard 7 speaks directly to the importance of understanding and presenting information that has been gathered in various formats to reveal patterns and relationships and allow for deeper explanations and analyses.
CCR Reading Anchor #9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. • **RST.6-8.9**: "Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic." • **RST.9-10.9**: "Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts." • **RST.11-12.9**: "Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible."	Scientists and engineers use technology to allow them to draw on multiple sources of information in order to create data sets. Reading Standard 9 identifies the importance of analyzing multiple sources in order to inform design decisions and create a coherent understanding of a process or concept.
CCR Speaking and Listening #2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally. • **SL.8.2**: "Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally)…"	Central to the practice of scientists and engineers is integrating data drawn from multiple sources in order to create a cohesive vision of what the data means. Speaking and Listening Standard 2

• **SL.9-10.2**: "Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source." • **SL.11-12.2**: "…evaluating the credibility and accuracy of each source and noting any discrepancies among the data."	addresses the importance of such synthesizing activities to building knowledge and defining and clarifying problems. This includes evaluating the credibility and accuracy of data and identifying possible sources of error.
CCR Speaking and Listening #5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations. • **SL.8.5**: "Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence..." • **SL.9-12.5**: "Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence…"	Presenting data for the purposes of cross-comparison is essential for identifying the best design solution or scientific explanation. Speaking and Listening Standard 5 stresses the importance of visual displays of data within presentations in order to enhance understanding of the relevance of the evidence. That way others can make critical decisions regarding what is being claimed based on the data.

Science and Engineering Practice: Constructing Explanations and Designing Solutions

Asking students to demonstrate their own understanding of the implications of a scientific idea by developing their own explanations of phenomena, whether based on observations they have made or models they have developed, engages them in an essential part of the process by which conceptual change can occur.

In engineering, the goal is a design rather than an explanation. The process of developing a design is iterative and systematic, as is the process of developing an explanation or a theory in science. Engineers' activities, however, have elements that are distinct from those of scientists. These elements include specifying constraints and criteria for desired qualities of the solution, developing a design plan, producing and testing models or prototypes, selecting among alternative design features to optimize the achievement of design criteria, and refining design ideas based on the performance of a prototype or simulation. (NRC *Framework*, 2012, p. 68-69)

Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	**Connection to Science and Engineering Practice**
CCR Reading Anchor #1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. • **RST.6-8.1**: "…support analysis of science and technical texts." • **RST.9-10.1**: "…support analysis of science and technical texts, attending to the precise details of explanations or descriptions." • **RST.11-12.1**: "…support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account."	Evidence plays a critical role in determining a theory in science and a design solution in engineering. The notion of close reading in Reading Standard 1 emphasizes pursing investigations into well-supported theories and design solutions on the basis of evidence that is either explicitly stated or implied.
CCR Reading Anchor #2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. • **RST.6-8.2:** "…provide an accurate summary of the text distinct from prior knowledge or opinions." • **RST.9-10.2:** "…trace the text's explanation or depiction of a complex process, phenomenon, or concept…" • **RST.11-12.2:** "…summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms."	Part of the power of a scientific theory or engineering design is its ability to be cogently explained. That ability to determine and clearly state an idea lies at the heart of Reading Standard 2.
CCR Reading Anchor #8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. • **RST.6-8.8**:"Distinguish among facts, reasoned judgment based on research findings, and speculation..." • **RST.9-10.8**: "Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem." • **RST.11-12.8**: "Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the	Constructing theories and designing solutions both require analysis that is rooted in rational argument and in evidence stemming from an understanding of the world. Reading Standard 8 emphasizes evaluating the validity of arguments and whether the

data when possible and corroborating or challenging conclusions with other sources of information."	evidence offered backs up the claim logically.
CCR Writing Anchor #2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. • **WHST.6-8.2**: "…Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples…" • **WHST.9-10.2**: "…Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic…" • **WHST.11-12.2**: "…Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic…"	Building a theory or a model that explains the natural world requires close attention to how to weave together evidence from multiple sources. With a focus on clearly communicating complex ideas and information by critically choosing, arranging, and analyzing information, Writing Standard 2 requires students to develop theories with the end goal of explanation in mind.
CCR Writing Anchor #8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. • **WHST.6-8.8**: "… quote or paraphrase the data and conclusions of others…" • **WHST.9-10.8**: "…assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas …" • **WHST.11-12.8**: "…assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas …"	Collecting relevant data across a broad spectrum of sources in a systematic fashion is a key element of constructing a theory with explanatory power or a design that meets multiple constraints. Writing Standard 8 spells out the importance of gathering applicable information from multiple reliable sources in order to construct well-honed explanations.
CCR Writing Anchor #9: Draw evidence from literary or informational texts to support analysis, reflection, and research. • **WHST.6-12.9**: "Draw evidence from informational texts to support analysis, reflection, and research."	The route towards constructing a rigorous explanatory account centers on garnering the necessary empirical evidence to support a theory or design. That same focus on generating evidence that can be analyzed is at the heart of Writing Standard 9.
CCR Speaking and Listening Anchor #4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	A theory in science and a design in engineering is a rational explanatory account of how the world works in light

• **SL.8.4**: "Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning…" • **SL.9-10.4**: "Present information, findings, and supporting evidence clearly, concisely, and logically…" • **SL.11-12.4**: "Present information, findings, and supporting evidence, conveying a clear and distinct perspective… alternative or opposing perspectives are addressed…"	of the evidence. Speaking and Listening Standard 4 stresses how the presentation of findings crucially relies on how the evidence is used to illuminate the line of reasoning embedded in the explanation offered.

NEXT GENERATION SCIENCE STANDARDS For States, By States

Science and Engineering Practice: Engaging in Argument from Evidence The study of science and engineering should produce a sense of the process of argument necessary for advancing and defending a new idea or an explanation of a phenomenon and the norms for conducting such arguments. In that spirit, students should argue for the explanations they construct, defend their interpretations of the associated data, and advocate for the designs they propose. (NRC *Framework*, 2012, p. 73)	
Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	**Connection to Science and Engineering Practice**
CCR Reading Anchor #6: Assess how point of view or purpose shapes the content and style of a text. • **RST.6-8.6**: "Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text." • **RST.9-10.6**: "Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address." • **RST.11-12.6**: "Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved."	The central motivation of scientists and engineers is to put forth what they believe is the best explanation for a natural phenomena or design solution, and to verify that representation through well wrought arguments. Understanding the point of view of scientists and engineers and how that point of view shapes the content of the explanation is what Reading Standard 6 asks students to attune to.
CCR Reading Anchor #8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. • **RST.6-8.8**: "Distinguish among facts, reasoned judgment based on research findings, and speculation..." • **RST.9-10.8**: "Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem." • **RST.11-12.8**: "Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information."	Formulating the best explanation or solution to a problem or phenomenon stems from advancing an argument whose premises are rational and supported with evidence. Reading Standard 8 emphasizes evaluating the validity of arguments and whether the evidence offered backs up the claim logically.
CCR Reading Anchor #9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. • **RST.6-8.9**: "Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic." • **RST.9-10.9**: "Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts."	Implicit in the practice of identifying the best explanation or design solution is comparing and contrasting competing proposals. Reading Standard 9 identifies the importance of comparing different sources in the process of creating a

• **RST.11-12.9**: "Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible."	coherent understanding of a phenomenon, concept, or design solution.
CCR Writing Anchor #1: Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence. • **WHST.6-8.1**: "…Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources…" • **WHST.9-10.1**: "…Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns…" • **WHST.11-12.1**: "…Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases…"	Central to the process of engaging in scientific thought or engineering practices is the notion that what will emerge is backed up by rigorous argument. Writing Standard 1 places argumentation at the heart of the CCSS for science and technology subjects, stressing the importance of logical reasoning, relevant evidence, and credible sources.
CCR Speaking & Listening Anchor #1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. • **SL.8.1**: "… Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented." • **SL.9-10.1**: "…actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented." • **Sl.11-12.1**: "…Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task."	Reasoning and argument require critical listening and collaboration skills in order to identify the best explanation for a natural phenomenon or the best solution to a design problem. Speaking and Listening Standard 1 speaks directly to the importance of comparing and evaluating competing ideas through argument to cooperatively and collaboratively identify the best explanation or solution.
CCR Speaking & Listening Anchor #3: Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric. • **SL.8.3**: "…evaluating the soundness of the reasoning and sufficiency of the evidence, and identifying when irrelevant evidence is introduced." • **SL.9-10.3**: "…identifying fallacious reasoning or exaggerated or distorted evidence." • **SL.11-12.3**: "…assessing the stance, premises, links among ideas, word choice, points of emphasis."	Evaluating the reasoning in an argument based on the evidence present is crucial for identifying the best design or scientific explanation. Speaking and Listening Standard 3 directly asserts that students must be able to critique the point of view within an argument presented orally from the perspective of

	the evidence provided and reasoning advanced by others.
CCR Speaking and Listening Anchor #4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. • **SL.8.4**: "Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning…" • **SL.9-10.4**: "Present information, findings, and supporting evidence clearly, concisely, and logically…" • **SL.11-12.4**: "Present information, findings, and supporting evidence, conveying a clear and distinct perspective… alternative or opposing perspectives are addressed…"	The practice of engaging in argument from evidence is a key ingredient in determining the best explanation for a natural phenomenon or the best solution to a design problem. Speaking and Listening Standard 4 stresses how the presentation of findings crucially relies on how the evidence is used to illuminate the line of reasoning embedded in the explanation offered.

Science and Engineering Practice: Obtaining, Evaluating, and Communicating Information Any education in science and engineering needs to develop students' ability to read and produce domain-specific text. As such, every science or engineering lesson is in part a language lesson, particularly reading and producing the genres of texts that are intrinsic to science and engineering. (NRC *Framework*, 2012, p. 76)	
Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Standards for Science and Technical Subjects	**Connection to Science and Engineering Practice**
CCR Reading Anchor #2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. • **RST.6-8.2:** "…provide an accurate summary of the text distinct from prior knowledge or opinions." • **RST.9-10.2:** "…trace the text's explanation or depiction of a complex process, phenomenon, or concept…" • **RST.11-12.2:** "…summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms."	Part of the power of a scientific theory or engineering design is its ability to be cogently explained. That ability to determine and clearly state or summarize a salient scientific concept or phenomena lies at the heart of Reading Standard 2.
CCR Reading Anchor #7: Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words. • **RST.6-8.7**: "Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)." • **RST.9-10.7**: "Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. • **RST.11-12.7**: "…evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem."	A key practice within scientific and engineering communities is communicating about data through the use of tables, diagrams, graphs and models. Reading Standard 7 speaks directly to the importance of understanding information that has been gathered by investigators in visual formats that reveal deeper explanations and analyses.
CCR Reading Anchor #9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. • **RST.6-8.9**: "Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic." • **RST.9-10.9**: "Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts." • **RST.11-12.9**: "Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible."	The end goal of these scientific and engineering practices is to position scientists and engineers to be able to evaluate the merit and validity of claims, methods, and designs. Reading Standard 9 identifies the importance of synthesizing information from a range of sources to the process of creating a coherent understanding of a phenomenon or concept.

CCR Reading Anchor #10: Read and comprehend complex literary and informational texts independently and proficiently. • **RST.6-8.10:** "By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently." • **RST.9-10.10:** "By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently." • **RST.11-12.10:** "By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently."	When reading scientific and technical texts, students need to be able to gain knowledge from challenging texts that often make extensive use of elaborate diagrams and data to convey information and illustrate concepts. Reading Standard 10 asks students to read complex informational texts in these fields with independence and confidence.
CCR Writing Anchor #2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. • **WHST.6-8.2:** "…include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension…Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples…" • **WHST.9-10.2:** "…include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension…Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic…" • **WHST.11-12.2:** "…include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension…Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic…"	The demand for precision in expression is an essential requirement of scientists and engineers, and using the multiple means available to them is a crucial part of that expectation. With a focus on clearly communicating complex ideas and information by critically choosing, arranging, and analyzing information—particularly through the use of visual means—Writing Standard 2 requires students to develop their claims with the end goal of explanation in mind.
CCR Writing Anchor #8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. • **WHST.6-8.8:** "…using search terms effectively…quote or paraphrase the data and conclusions of others…" • **WHST.9-10.8:** "…using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas …" • **WHST.11-12.8:** "…using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas …"	Collecting relevant data across a broad spectrum of sources in a systematic fashion is a key element of assessing the validity of claims, methods, and designs. Writing Standard 8 spells out the importance of gathering applicable information from multiple reliable sources so that information can be communicated accurately.
CCR Speaking & Listening Anchor #1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	Reasoning and argument require critical listening and collaboration skills in order

• **SL.8.1**: "… Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented." • **SL.9-10.1**: "…actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented." • **SL.11-12.1**: "…Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task."	to evaluate the merit and validity claims, methods, and designs. Speaking and Listening Standard 1 speaks directly to the importance of comparing and assessing competing ideas through extended discussions grounded in evidence.
CCR Speaking and Listening Anchor #4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. • **SL.8.4**: "Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning…" • **SL.9-10.4**: "Present information, findings, and supporting evidence clearly, concisely, and logically…" • **SL.11-12.4**: "Present information, findings, and supporting evidence, conveying a clear and distinct perspective… alternative or opposing perspectives are addressed…"	Central to the professional activity of scientists and engineers alike is communicating their findings clearly and persuasively. Speaking and Listening Standard 4 stresses how the presentation of findings crucially relies on how the evidence is used to illuminate the line of reasoning embedded in the explanation offered.
CCR Speaking and Listening #5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations. • **SL.8.5**: "Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence..." • **SL.9-12.5**: "Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence…"	Presenting data for the purposes of communication is essential for evaluating the merit and validity of claims, methods, and designs. Speaking and Listening Standard 5 stresses the importance of visual or digital displays of data within presentations in order to enhance understanding of the evidence. That way others can make critical decisions regarding what is being claimed based on the data.

The Literacy Coach

A Key to Improving Teaching and Learning in Secondary Schools

ALLIANCE FOR
EXCELLENT EDUCATION

The Literacy Specialist as Coach

Across the United States, many school districts are beginning to implement valuable programs designed to improve adolescent literacy. These initiatives are noted for their recognition that effective, continuing, and supportive staff development is critical to success. Nor should professional development be limited to teachers. Administrators and other key district-level personnel who have responsibility for the school's academic program need these kinds of supports, as well. Effective change that will truly improve every student's literacy and content learning requires strong support at all levels of school leadership.

Key players in the change process are *literacy coaches*—master teachers who provide essential leadership for the school's entire literacy program. This leadership includes helping to create and supervising a long-term staff development process that supports both the development and implementation of the literacy program over months and years.

Lead literacy teams

To begin the process, coaches often organize literacy leadership teams (e.g., Anders, 1999) that review assessment data and develop literacy plans for their schools. Coaches also attend meetings and professional development sessions at the district or state level, and bring information and ideas for curriculum revision back to their school colleagues.

Schools often begin the school-based staff development with in-service days or summer workshops. This is, of course, typical of procedures that have been in place in schools across the nation for many years. The *difference* is significant, however, for schools that have incorporated literacy coaches into the process. In these structures, coaches meet after the training session is over with teacher teams and individual teachers on an ongoing basis. They review student assessment data, guide lesson planning, and generally ensure that the literacy strategies learned in the workshops are used effectively in classroom instruction.

Guide teachers in using appropriate strategies

Coaches also assist teachers in overcoming the problems they undoubtedly will experience in choosing appropriate teaching strategies and combining literacy instruction with content area curriculum requirements. Although educators universally share certain goals—that students learn to read and comprehend their texts, understand essential vocabulary, and grow in both their literacy and their content knowledge—even the best-intentioned teachers need to work through ways to meet these objectives that fit within their own teaching styles and the school context. The coach plays a critical role in facilitating that process.

Liaise with teachers and administrators

In addition, coaches provide an essential link between teachers within a department and across departments, and to school administrators. The coach can help all educators within a school brainstorm solutions to problems and resolve issues before they grow to insurmountable levels. They also can work closely with new teachers or administrators, helping them to understand the

school's literacy program and their role in it. Overall, the coaching role is highly collaborative. Successful coaches must be viewed by teachers as advisors/mentors who understand their goals, frustrations, and visions—not as supervisors who evaluate their performance.

Supervisory and management responsibility, in most programs, belongs to the school administrators. The importance of including these school leaders in the development of and dialog about literacy improvement in their schools cannot be overemphasized. Administrators must know what changes are being asked of the teachers, and why. They must be a part of the process, approving programs and providing the necessary support to bring changes to fruition. This support could encompass a variety of actions, including finding the resources needed to obtain new materials, modifying time schedules, and approving interdisciplinary courses. It could go as far as making changes in the hiring process or teaching assignments.

The position of *literacy coach* is, in many ways, similar to that of the 1970s and early 1980s secondary school reading specialist who worked in federally funded projects in low-income schools across the United States. Like these earlier counterparts, the twenty-first-century literacy coach must be highly knowledgeable in reading and literacy. Most states already have certification processes in place for reading specialists; these processes are appropriate models for helping to define the skills and knowledge that secondary school literacy coaches need.

Example Job Posting:

WANTED LITERACY COACH/CONSULTANT

Job responsibilities:
Collaborate with teachers to develop curriculum and effective instructional approaches in literacy and literacy in the content areas. Provide professional development for teachers, particularly in the areas of literacy across the curriculum. Model literacy strategies in content area classrooms. Help middle and high school faculty create individual teacher and school-based professional development plans. Support school administrators and teachers to develop and use a school-wide literacy plan.

Qualifications:
Experience teaching diverse learners at the middle or high school level. Knowledgeable about adolescents' literacy development, high school literacy curriculum and instruction, and balanced literacy approaches. Experience providing professional development and working in small-group facilitation. Excellent interpersonal skills. Must hold or be working toward state certification as a literacy professional.

Be regarded as expert teachers

In addition to the necessary expertise in reading and literacy, secondary school literacy coaches must be highly regarded by content area teachers. They must have an intimate knowledge of the secondary school culture and student, as well as an understanding of the stresses and dilemmas of the secondary content teacher. With these criteria in mind, many schools specifically seek current, experienced secondary teachers and then provide them with incentives and support to gain the knowledge they need in literacy to provide coaching to their school colleagues. As part of their extensive and ongoing training, coaches also need to develop the skills necessary to effectively collaborate with adults on a professional basis. Selection of the right individuals with the appropriate knowledge base is essential to the success of this model.

Program Examples

Schools, school districts, and state educational agencies across the nation are developing programs to improve adolescent literacy. Many of these efforts include literacy coaches as an integral part of the improvement to teaching and learning. Additionally, these programs have several other commonalities that are important to note.

Similarities in approaches to coaching

1. Coaching is seen as part of a larger system of professional development and support for teachers and the school community as a whole. The literacy coach is integrated into this system, with intensive training for the coaches as well as for teachers and school administrators.
2. Selection of coaches takes into account the knowledge and skills needed, and the ease with which the coach will be able to establish respect and trust in the school. Often, ideal candidates are respected teachers within the school who have agreed to take substantial time to obtain certification from their state as a reading specialist, as well as training on coaching with middle and high school teachers. In some cases, training programs provided by state or regional agencies are linked to university programs so that teachers can get partial credit toward certification.
3. Support for the coaches is ongoing. Within the single-district examples (Stafford and Boston), the district holds regular meetings for the coaches to provide training and support. In the larger projects (Alabama Reading Initiative and the Reading Success Network), a system is established that allows meetings to be held among groups of coaches and principals from schools in the same region.
4. Coaches are seen as supporting, but not replacing, teacher knowledge. Content teachers are expected to attend professional development sessions to learn important theoretical and practical information about literacy processes and improvement. In many cases, this professional development is offered by the coaches through ongoing inquiry discussion groups for teachers in their own schools. A key component in the process is that teachers are included as experts in their own content areas; they team with the coach for more effective instruction. One-shot staff development programs without follow-up (which have been commonplace in many school districts) are avoided.
5. Funding sources are available. For all projects, funding is necessary to hire coaches and provide ongoing professional development and support for coaches, teachers, and administrators. The models require a long-term commitment, and concern about continuance of funding is common. For example, the Alabama initiative began with funding from both a business partner and the state. Currently, funding has shifted to the school districts with some state support. Budgetary concerns within the state have affected program expansion.

It would be impossible to list and describe them all, but the following examples provide a representative sampling of the variety of programs that are showing promising results in different areas of the country, utilizing different modes of implementation.

These programs demonstrate some of the many ways that literacy coaches are being effectively used to improve literacy teaching and learning. Although each is different, all initiatives share the ultimate goal of helping students to read at higher levels and comprehend the complex texts and other informational sources they need in order to graduate from high school prepared for college or a challenging job.

James J. D'Amico
Director of Secondary Education

TO: Elliott Landon
FROM: James D'Amico
SUBJECT: Staples High School Capstone Requirement Update
DATE: December 7, 2015

As you know, our high school programs are being examined in light of the graduation requirement changes outlined in the Connecticut General Statutes (§ 10-221a (2012)). These requirements have once again been delayed by the State, and at this point will be required beginning with the Class of 2021. Aside from adjustments to distribution of credits, the statute includes the requirement of a Senior Demonstration or Capstone experience. With the high school administrative team, we have developed a working framework for moving forward with this requirement. At the current time, this framework includes the following characteristics:

1. All students will be required to complete a Portfolio reflecting on our Learning Expectations
    - The portfolio will require both submission of evidence and reflection on growth in reference to Critical Thinking, Creativity, Communication, and Global Thinking Capacities. This will also include the capacities of the 5th Domain of the lens when the development of those expectations are finalized
    - The portfolio will include academic and co-curricular or extracurricular examples.
    - Evaluated using School Wide Rubrics
    - Evaluated by faculty members
2. We will consider including other graduation requirement skills that may be currently embedded in a class, for example:
    - The Research Paper: Allow students to provide evidence from sources other than English class, ASR or an AP History class, for example.

We are also in the process of considering other approaches that would give students another option to the portfolio. One source is the Capstone program at Farmington (CT) High School. Farmington has a series of project-based Capstone Courses that students can elect as juniors or seniors. Details can be found at https://sites.google.com/a/fpsct.org/fhs-capstone/.

We will keep you updated on further progress toward meeting the new graduation requirements, with the goal of having a plan in place by the start of the 2016-17 school year.

Julie Droller
Director of Elementary Education

James J. D'Amico
Director of Secondary Education

TO: Elliott Landon
FROM: James D'Amico & Julie Droller
SUBJECT: Next Generation Science Standards Overview
DATE: December 7, 2015

The Next Generation Science Standards (NGSS) represent a major shift in the scope, sequence, and focus of Science standards in the United States. Connecticut recently adopted the NGSS as our state standards, so it is important for us to train teachers and administrators on these new expectations so that we may adapt our curriculum in the best ways to support student learning.

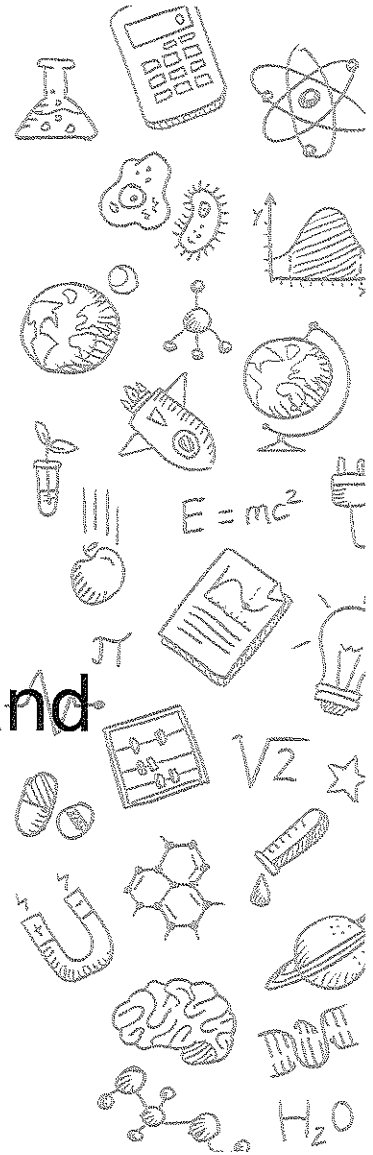
The NGSS differ from previous Science standards, in that the emphasis is not on acquisition of content knowledge, but a balance of Science content, thinking skills, and connections to real-world applications and other disciplines. In addition to this shift in curriculum, there will also be changes made to the state's standardized assessments in Science.

The NGSS will take several years to fully implement, and will require a significant investment of resources by the district to provide effective professional development.

We will be joined by Dr. A.J. Scheetz, Science Department Chair for Grades 6-12, and Mr. Pete Alfano, Design and Engineering teacher/Elementary Science Coach who will share a brief presentation with the Board on NGSS.

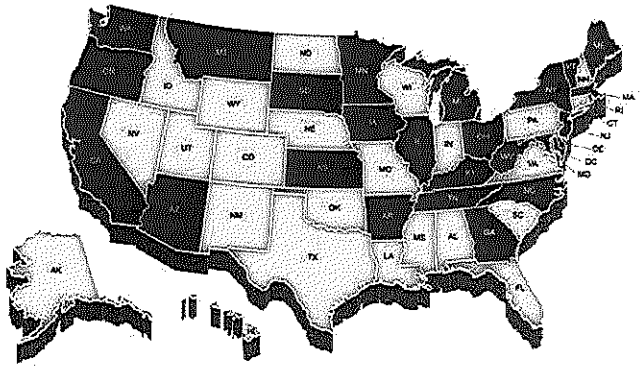
NGSS

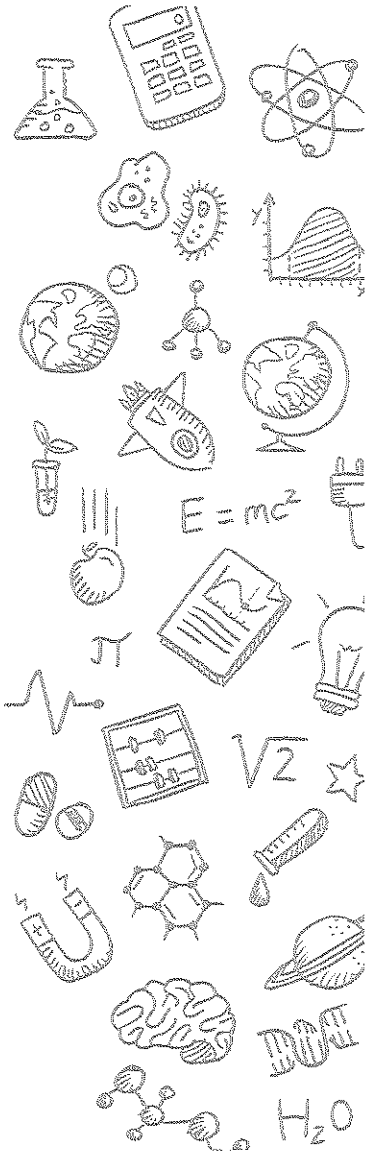
Their nature, implementation timeline and professional development



NEXT GENERATION SCIENCE STANDARDS
For States, By States

What is NGSS?





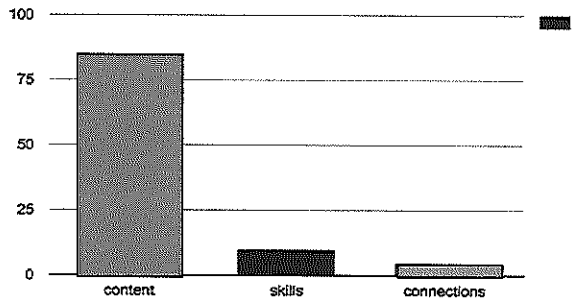
Nationally organized science standards, K-12

Adopted by 18 states so far, 26 states are lead partners

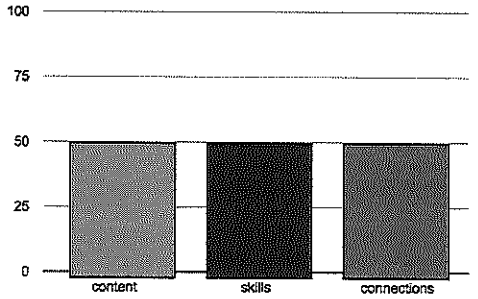
Developed with the idea that science is a way of thinking, not a set of facts to memorize

NEXT GENERATION SCIENCE STANDARDS
For States, By States

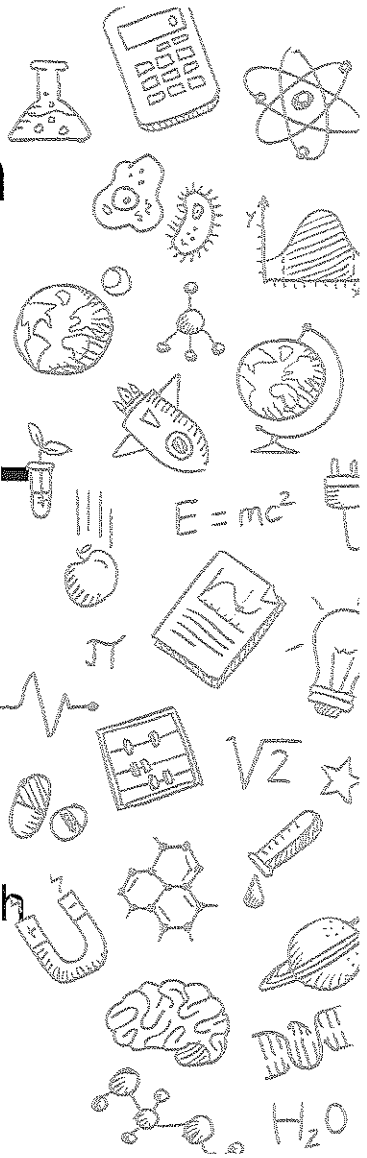
The nature of NGSS shifts science education dramatically



Our Current Approach



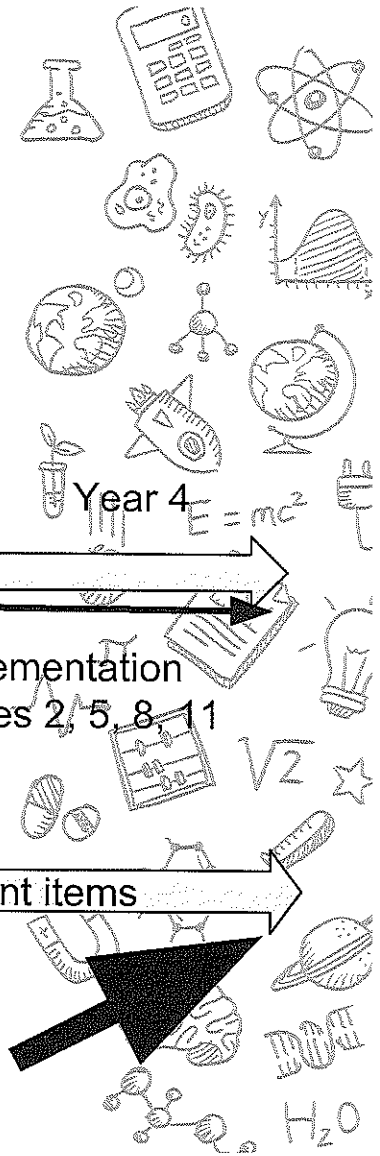
The NGSS Approach



NEXT GENERATION SCIENCE STANDARDS
For States, By States

Timeline

The state has proposed a four-year adoption process



Year 1 | Year 2 | Year 3 | Year 4

Curriculum development and Professional development

Implementation grades K, 3, 6, 9

Implementation grades 1, 4, 7,10

Implementation grades 2, 5, 8, 11

Science CMT/CAPT grades 5,8,10

Piloting NGSS-based assessment items

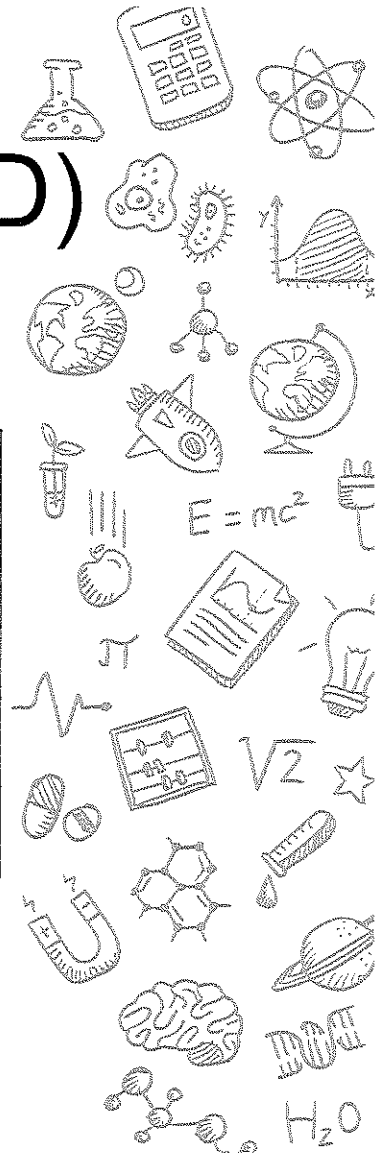
NEXT GENERATION SCIENCE STANDARDS
For States, By States

New science assessment system

Professional Development (PD)

Multi-pronged approach

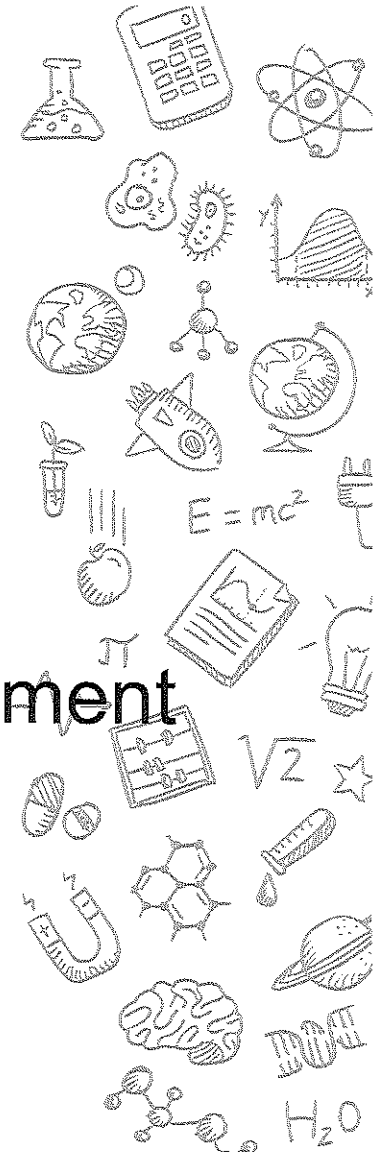
Model	Impact	Cost
Individual online PD	low	low
Group online PD	moderate	low
Train the trainer PD	moderate	moderate
Hybrid immersive PD	high	high



NEXT GENERATION SCIENCE STANDARDS
For States, By States

Summary

→ NGSS is a fundamental change
→ It will take four years to phase in
→ It will require extensive PD for teachers
→ CMT/CAPT will be replaced by an assessment system



NEXT GENERATION SCIENCE STANDARDS
For States, By States

DEPARTMENT OF PUPIL SERVICES
WESTPORT PUBLIC SCHOOLS
72 North Avenue
Westport, Connecticut 06880-2721

MICHAEL RIZZO
DIRECTOROF PUPIL SERVICES

(203) 341-1253
FAX (203) 341-1295

TO: Dr. Elliott Landon

FROM: Michael Rizzo and Sue Levasseur

DATE: December 7, 2015

RE: Automated External Defibrillator (AED) Professional Development and Implementation

To assure the continued safety of our staff and students, and in acknowledgement of the generous donation of the Adam Greenlee Foundation, the Westport Public Schools have developed procedures and protocols to successfully respond to a cardiac emergency.

PROFFESIONAL DEVELOPMENT

A cardiac emergency response team has been created in each school building. The team consists of health office staff, teachers, administrators and other staff who maintain current certification in Cardiopulmonary Resuscitation (CPR) and the use of an AED. The Westport Public Schools will assist these staff members in maintaining this certification. In addition, staff will be offered Hands Only CPR training and training in the use of the AED. Drills will be conducted twice annually in each school building to assure competency and coordination of team members.

IMPLEMENATION: PLACEMENT and MAINTENANCE

The attached table details the placement of the current and proposes additional AED locations. These locations were determined in consultation with building principals, nursing staff, and the SHS athletic director with the recognition that a prompt response, generally considered to be less than 3 minutes, is crucial for an optimal outcome. There will be a total of 65 AED units across our buildings and athletic fields.

AEDs will be regularly checked and maintained in accordance with operating guidelines by school staff in conjunction with town EMS. Battery life is generally expected to be four years at which time batteries will need to be replaced.

WESTPORT PUBLIC SCHOOLS

AED DISTRICT PLAN

Building	Present Location	Proposed Additional Locations
SHS	• 1 outside Health Office • 1 outside Field House • 1 with Athletic Trainer	• 1 Second Floor • 1 Third Floor • 1 Cafeteria • 1 Pool
BMS	• 1 outside Health Office	• 1 in South end of building • 1 in Auditorium
CMS	• 1 outside Health Office	• 1 outside Gym • 1 in Cafeteria
CES	• 1 outside Health Office	• 1 outside Preschool • 1 in North end hallway
GFS	• 1 outside Health Office	• 1 Second Floor • 1 outside Gym
KHS	• 1 outside Office	• 1 outside Gym • 1 Second Floor
LLS	• 1 between Office and Health Office	• 1 between Gym and Cafeteria • 1 on Ground floor
SES	• 1 outside Health Office	• 1 outside Auditorium • 1 Second Floor
Other	• 1 in each building Emergency Bag (9)	• 15 portable AEDs to be used by the athletic department for inter-scholastic athletic events off the SHS campus

Outside Locations Mounted on Poles

- 1 Baseball Field
- 1 Soccer Field
- 1 Field Hockey Field
- 1 Stadium
- 1 Tennis Courts
- 1 Wakeman
- 7 other School Field Recess Locations

WESTPORT PUBLIC SCHOOLS
FIVE YEAR PROPOSED CAPITAL FORECAST - PRIORITY LISTING
2016-2017 PROPOSED CONSTRUCTION TIMELINE

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	Priority	RFP	Town Approvals	Construction	Notes
2016-2017								
	Coleytown Elementary School							
	Replace Pitched Asphalt 3-Tab Shingled Roof (1986)	$165,000	$165,000	1	Jan/Feb	March	Start: July 1, 2016 Completion: Early August	Work with Camp Gan and Preschool regarding building and grounds access.
	Staples High School							
	Upgrade Boys Gym Locker Room Area (lockers, flooring,ceiling tiles and showers)	$300,000		2	Dec/Jan	February	Start: July 1, 2016 Completion: Early/Mid August	Work with David Gusitch and Continuing Ed regarding summer programs.
	Upgrade Pool General Area and Bleachers (tile, trim, paint, seating and glass wall)	$300,000		2	Jan/Feb	March	Start: July 1, 2016 Completion: Early/Mid August	Pool can remain open during construction period. Pool must be closed if impr to the pool locker rooms are approved.
	Upgrade Boys and Girls Pool Locker Room Area (lockers, flooring, showers and fixtures)	$550,000	$1,150,000	2	Jan/Feb	March	Start: July 1, 2016 Completion: Mid/Late August	Pool closed. Work with David Gusitch and Continuing Ed on an alternative si
	Coleytown Elementary School							
	Replace Classroom Casework	$200,000	$200,000	3	Jan/Feb	March	Start: July 1, 2016 Completion: Mid August	Coordinate with Camp Gan and Preschool classroom needs.
	Total Fiscal Year 2016-2017		**$1,515,000**					

WESTPORT PUBLIC SCHOOLS
FIVE YEAR PROPOSED CAPITAL FORECAST - PRIORITY LISTING
2016-2017 THROUGH 2020-2021 - (Revised 12/3/2015)

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
2016-2017						
	Coleytown Elementary School					
	Replace Pitched Asphalt 3-Tab Shingled Roof (1986)	$165,000	$165,000	2011	1	30 Year Roof end of life. Start Date After July 1, 2015 - Completion date Augu
	Staples High School					
	Upgrade Boys Gym Locker Room Area (lockers, flooring,ceiling tiles and showers)	$300,000		2008	2	Damaged lockers, floors, and ceiling tiles. Shower stalls rehab.
	Upgrade Pool General Area and Bleachers (tile, trim, paint, seating and glass wall)	$300,000		2008	2	
	Upgrade Boys and Girls Pool Locker Room Area (lockers, flooring, showers and fixtures)	$550,000	$1,150,000	2008	2	Damaged lockers, floors, and ceiling tiles. Shower stalls rehab.
	Coleytown Elementary School					
	Replace Classroom Casework	$200,000	$200,000	2006	3	Casework failing, splitting apart
	Total Fiscal Year 2016-2017		$1,515,000			

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
2017-2018						
	Staples High School					
	Field House Floor Resurface	$172,312		2005	1	
	Field House Roof Replacement	$610,000	$782,312	2005		Installed on Sept. 18, 1998 Carlisle Roof (Roof A) Moved from 16/17- Do Floor & Roof same time due to FH Closing
	Coleytown Middle,Bedford Middle, Green's Farms School					
	Asphalt Repair and Replacement	$517,000	$517,000	2008	2	Pending Crack and Seal Approval moved from 16/17
	Technology Center (136 Riverside Avenue) Exterior Renovation	$200,000	$200,000		3	Historic District Committee Input required
	Total Fiscal Year 2017-2018		$1,499,312			

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
2018-2019						
	Staples High School					
	Replace 1998 Roofs (106,000 square feet) Areas C, D, E, F,G, H, I, J,K,L,M,N, P,Q,Z	$1,400,000	$1,400,000	2013	1	End of Life Cycle
	Long Lots Elementary School year					
	Casework Replacement	$670,000	$670,000	2008	2	Casement work failing splitting and falling apart
	Total Fiscal Year 2018-2019		$2,070,000			

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
2019-2020						
	King's Highway Elementary School year Casework Replacement (lead remediation required)	$600,000	$600,000	2008	1	Pending Space Utilization Report/ Casement work failing
	Total Fiscal Year 2019-2020		**$600,000**			

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
2020-2021						
	Saugatuck Elementary Partial Roof Replacement Sections: 2,8,13,14,16,17,18,19 (Install date March 1995)	$976,700	$976,700	2015	1	End of Life Cycle
	Total Fiscal Year 2020-2021		**$976,700**			

	FIVE YEAR TOTAL (2016-2017 THROUGH 2020-2021)		**$6,661,012**

NOTE:

FISCAL YEAR	DESCRIPTION	ESTIMATE	SUB-TOTAL	In Capital (Year)	Priority	Notes
TBD						
	Coleytown Elementary School Install A/C in Gym and Café	290,000	290,000	Estimated Cost 2015	1	Removed from EPC under review by Facilities per Elio Longo
	Long Lots Elementary School Locker Room to Classroom Conversion (3 closets, 2 showers plus main room to 3 classrooms, 2 common rooms, boys & girls bathroom)	$1,400,000	$1,400,000	2006	2	Pending Space Utilization Report

WESTPORT PUBLIC SCHOOLS

ELLIOTT LANDON
Superintendent of Schools

110 MYRTLE AVENUE
WESTPORT, CONNECTICUT 06880
TELEPHONE: (203) 341-1010
FAX: (203) 341-1029

To: Members of the Board of Education

From: Elliott Landon

Subject: Acceptance of Gift

Date: December 7, 2015

We have received a very generous gift from the Adam Greenlee Foundation for the purchase of 65 Automatic External Defibrillators (AEDs) for use in our schools, at athletic events and on field trips. With the support of The Adam Greenlee Foundation, these AEDs will be installed on all our school athletic fields and gymnasiums and in critical areas in each of our school buildings. In addition to the stationary AEDs, AEDs will be placed in the emergency evacuation bags located in each building; placed in our athletic department for travel with all athletic field trips; and, will be available to teachers who participate with their students on educational field trips.

With the safety of students, staff and parents in mind, it is my recommendation that the Board accept this very generous gift with gratitude to Adam and Renee Greenlee and the Adam Greenlee Foundation.

ADMINISTRATIVE RECOMMENDATION

Be It Resolved, That upon the recommendation of the Superintendent of Schools, the Board of Education accepts with great appreciation a gift from Adam and Renee Greenlee and the Adam Greenlee Foundation of 65 Automatic External Defibrillators to protect students, staff and parents at all Westport Public Schools.