Common Writing Assignment (CWA)

Professional Development Session
Science Department
October 18, 2012

- Welcome & Introductions
- CWA: What is it and why do it?
- Writing in science
- Student writing samples and rubrics
- Writing prompts
- Feedback to students
- Planning for implementation
- Reporting data
- Closing

Welcome and Introductions

Please share the following:

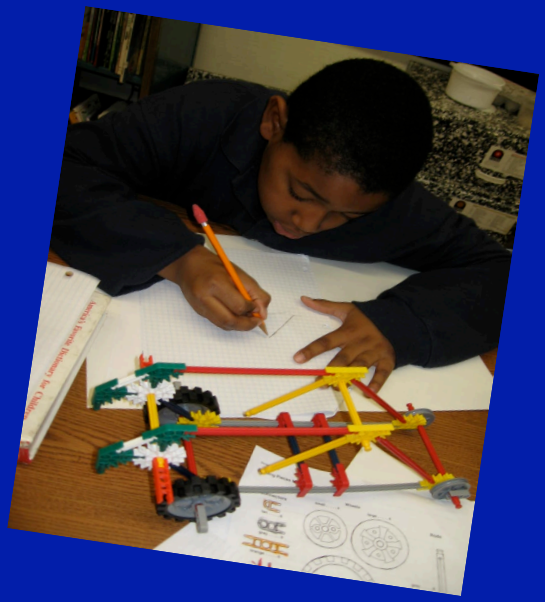
- name
- school
- position
- grade level
- Your experience with CWA

CWA: What is it?

CWA is a district-wide initiative;

- students communicate in writing their analytical thinking (grades 4-12).
- assignments are taught and graded by teachers, preferably a team of teachers.
- writing is scored using a common rubric.
- data informs instruction.

The CWA in Science is…



- To be completed by all students in grades 4-12.
- A multi-draft writing assignment.
- Related to BPS Science Course Descriptions
- Aligned with MA Science & Technology/ Engineering Curriculum Framework.

What it is ***NOT!***

- On-demand writing samples
- Written assignments given without teacher instruction, support, and feedback
- Solely a homework assignment
- Solely an in-class assignment

WHY CWA?

- “By laying out thought processes in an organized manner …writers gain critical-thinking skills, develop communication skills, and generate a product that compares with those presented by practicing scientists.”

- http://serc.carleton.edu/eet/writing_tectonics/case_study_x.html

The Future for Our Students??

A survey of 120 major American corporations employing nearly eight million people concludes that in today's workplace, writing is a 'threshold skill' for hiring and promotion among salaried (i.e., professional) employees….Writing is a ticket to professional opportunity, while poorly written job applications are a figurative kiss of death.

-- National Commission on Writing, 2004

Why in Science?

These assignments…

- encourage collaboration between content area and ELA/Humanities teachers.
- prepare students with requisite writing skills to become college-ready.
- empower students to see themselves as successful, capable writers.
- provide data to inform instruction.

Connections to the Common Core State Standards

grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in Appendix C of the *Common Core State Standards*.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Text Types and Purposes		
1. Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented.	**1.** Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	**1.** Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	**2.** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	**2.** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

These assignments

- create a culture of equity in all schools
- ensuring that all students have access to high quality assignments supported by rigorous instruction given district-wide expectations for quality writing.
- increase time and intensity of content area writing instruction, making explicit the expectations for literacy in the content areas to both teachers and students.

Writing in Science

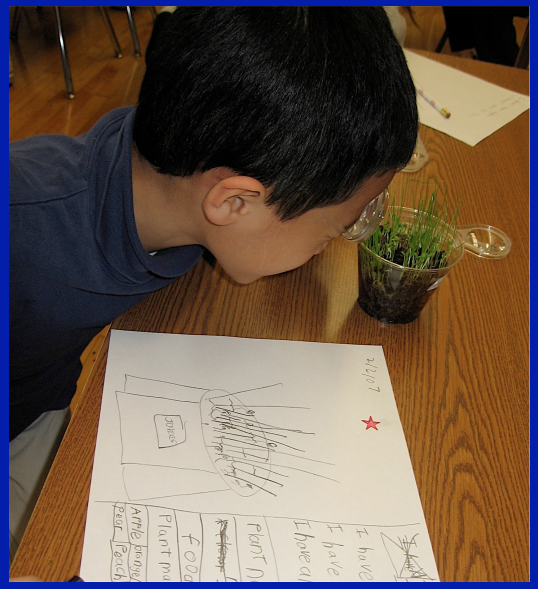
- "But we *already* do this…"
- A (re)NEW(ed) emphasis: Scientific explanation

  Claims

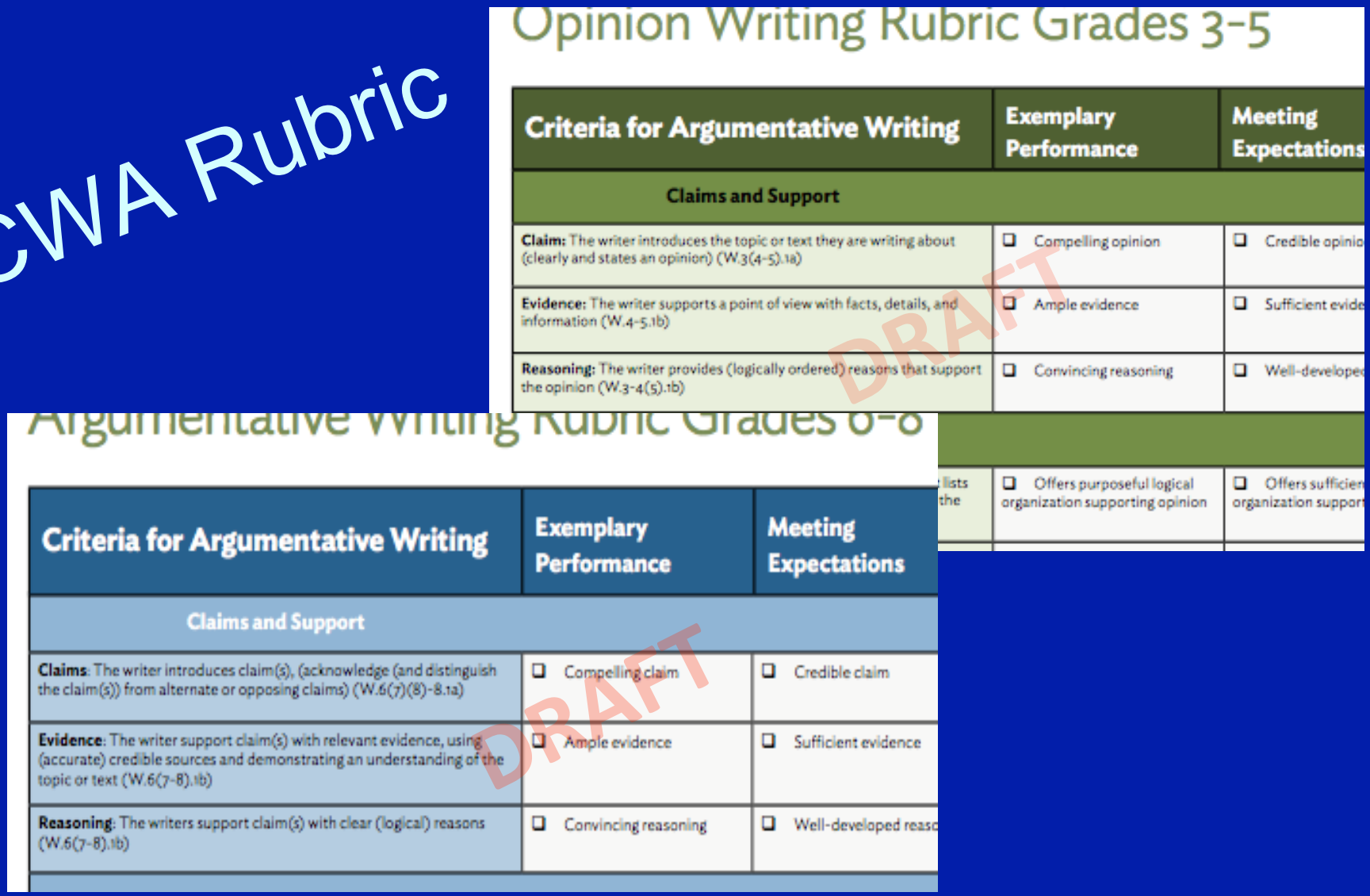
  Evidence

  Reasoning

  Rebuttal



CWA Rubric



Opinion Writing Rubric Grades 3-5

Criteria for Argumentative Writing	Exemplary Performance	Meeting Expectations
Claims and Support		
Claim: The writer introduces the topic or text they are writing about (clearly and states an opinion) (W.3(4-5).1a)	❑ Compelling opinion	❑ Credible opinio
Evidence: The writer supports a point of view with facts, details, and information (W.4-5.1b)	❑ Ample evidence	❑ Sufficient evide
Reasoning: The writer provides (logically ordered) reasons that support the opinion (W.3-4(5).1b)	❑ Convincing reasoning	❑ Well-developed
	❑ Offers purposeful logical organization supporting opinion	❑ Offers sufficien organization support

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Argumentative Writing Rubric Grades 6-8

Criteria for Argumentative Writing	Exemplary Performance	Meeting Expectations
Claims and Support		
Claims: The writer introduces claim(s), (acknowledge (and distinguish the claim(s)) from alternate or opposing claims) (W.6(7)(8)-8.1a)	❑ Compelling claim	❑ Credible claim
Evidence: The writer support claim(s) with relevant evidence, using (accurate) credible sources and demonstrating an understanding of the topic or text (W.6(7-8).1b)	❑ Ample evidence	❑ Sufficient evidence
Reasoning: The writers support claim(s) with clear (logical) reasons (W.6(7-8).1b)	❑ Convincing reasoning	❑ Well-developed reasc

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CWA Rubric

- Four point matrix including
  - Claims
  - Evidence
  - Reasoning
  - Rebuttal (9-12)
  - Conventions

Boston Public Schools

Common Writing Assignment: Science Rubric 2011-2012

Name _____ **Prompt** _____ **Class/Grade** _____ **Date** _____

	4	3	2	1
Scientific Claim A statement or conclusion that answers the original question or problem. Score: ____	• Clear scientifically accurate claim that is placed correctly in the context of the prompt	• Scientifically accurate claim	• Claim reveals partial understanding or a claim is implied but not clearly stated.	• No identifiable statement of claim.
Evidence Scientific data or information that supports the claim. The data/information needs to be relevant, accurate and sufficient to support the claim. Score: ____	• Relevant, accurate and sufficient evidence is provided to support the claim	• Relevant, accurate and sufficient evidence is provided to support the claim • There is additional evidence included that is not relevant to the claim.	• Accurate evidence is provided but it is not sufficient to support the claim OR • There is enough evidence provided, but it contains both accurate and inaccurate statements	• No evidence is provided or the evidence is inaccurate.
Scientific Reasoning A justification that links the claim and evidence. It shows why the data and information counts as evidence by using relevant, accurate and sufficient scientific principles. Score: ____	• Explicit reasoning is provided that links all evidence to the claim. • The appropriate scientific principles (what we know in science) are described and organized logically, and are used to justify why the data/information counts as evidence. • The response describes an application of the scientific principles beyond the context of the prompt. • [Middle School only -- OR includes an effective rebuttal of alternative explanations.]	• Explicit reasoning is provided that links all relevant evidence to the claim. • The appropriate scientific principles (what we know in science) are described and organized logically, and are used to justify why the data/information counts as evidence.	• The reasoning does not link all relevant evidence to the claim OR • The appropriate scientific principles are not fully described or accurately used to justify why the data/information counts as evidence.	• No reasoning is provided or the reasoning does not support the claim.

Boston Public Schools

Common Writing Assignment: Science Rubric 2011-2012

Name _____ **Prompt** _____ **Class/Grade** _____ **Date** _____

	4	3	2	1
Rebuttal Recognizes and describes alternative explanations (using the same evidence or by providing counter evidence) and the reasoning for why the alternative explanation is not appropriate. Score: ____ ***Rebuttal is required for High School only***	• A rebuttal of alternative explanations is provided that includes relevant, accurate and sufficient (counter) evidence and reasoning.	• A rebuttal of alternative explanations is provided that includes relevant, accurate and sufficient (counter) evidence and reasoning. • There is additional (counter) evidence included that is not relevant to the claim.	• The alternative explanations that are provided are relevant and accurate but the (counter) evidence and reasoning are insufficient.	• Does not recognize that alternative explanations exist or makes an inaccurate rebuttal.
Conventions Score: ____	• Control of sentence structure, grammar and usage, and mechanics • Length and complexity of response provides opportunity for student to show control of standard English conventions	• Errors do not interfere with communication and/or clarity • Few errors relative to length of response or complexity of sentence structure, grammar and usage, and mechanics	• Errors interfere somewhat with communication and/or clarity • Too many errors relative to the length of the response or complexity of sentence structure, grammar and mechanics	• Errors seriously interfere with communication AND clarity • Little control of sentence structure, grammar and usage, and mechanics
TOTAL: ____ ☐ ***No response to prompt or plagiarism receives a score of 0.***	**TEACHER COMMENTS:**			

Writing Sample Procedure

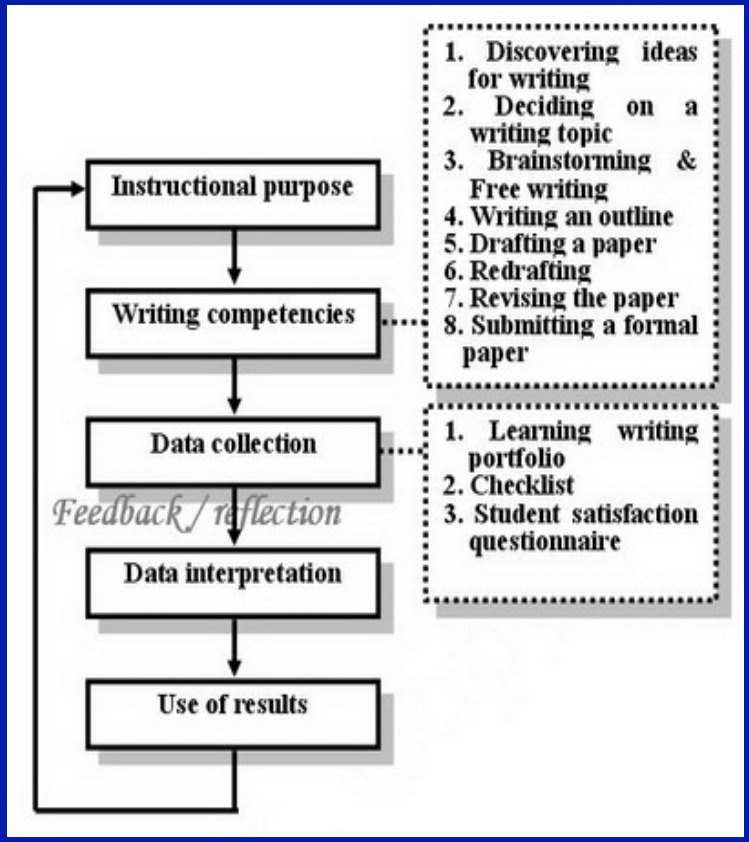
- Read through student work.
- Individually, identify the claim, evidence, and reasoning (rebuttal at high school level)
- Individually, use the BPS CWA rubric to score the piece.
- Share your scores with your group. Discuss how you used the rubric.
- As a group, assign a score for each category. Write the score for each category and a brief rationale for that score.
- Discuss & write about the benefits and challenges of using this rubric.

Feedback
Qualities and Attributes

- Timely: the sooner the better
- Individualized
- Empowering
- Manageable
- Feedback should open doors, not close them.

Implementation

- Talk with ELA/Humanities teacher(s) and/or Literacy coach to build understanding and garner support.
- Discuss the Writer's Workshop model and the process that students are already using to complete multi-draft work.



Implementation

- Develop an implementation plan for the CWA possibly with ELA/Humanities teacher(s). Work out details of assigning and carrying out the work.

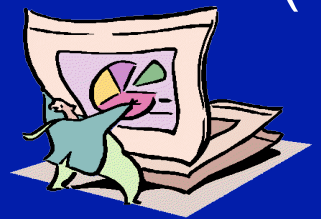
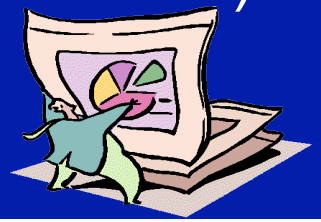
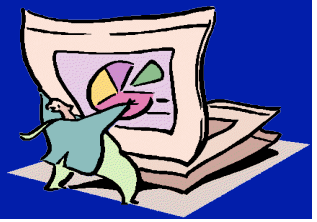
- Score the writing using the common rubric as team - science and ELA/Humanities (if possible).

A “how-to” suggestion…

- ✓ Explain the assignment.
- ✓ Have students pre-write: notebooks, lab sheets, resource books, web, CD, FOSS site, concept maps, etc.
- ✓ Assign the draft
- ✓ Provide high quality feedback (teacher, peer-edit, conference, written)
- ✓ Collect and score the Final Paper

Reporting the Data

- Homeroom teachers will enter scores for each student via ATI Galileo. Details TBA
- Administer CWA during each unit. You will be asked to enter scores for one unit. Details to follow.
- Teachers submit two samples of student work for each category (advanced, proficient, needs improvement, and warning) for each prompt used.
- Deliver these papers to your Literacy Facilitator.
- Sign Teacher Participation Verification Sheet (TPVS).
- Literacy Facilitator will make copies of student papers and return the originals to you so you can return them to students.
- Samples from each school will be submitted to Science Center (details in overview letter)

Tally Sheet

BOSTON Public Schools
Focus on Children

Common Writing Assignment 2011-2012
Science Teacher Tally Sheet

School: _____ **Literacy Facilitator** _____

Teacher (optional) _____

On this form, a teacher reports the performance of ALL his/her students by class on the Science Common Writing Assignment. Each teacher fills out one tally sheet listing every class that he/she teaches and how many students in each class scored at each performance level. This tally sheet (one per teacher) should be submitted along with the Teacher Verification Form and student materials (drafts, scored rubrics, and at the high school level a copy of the prompt). Thank you for making the CWA successful!

Course Name	Grade level	Prompt Administered	Total # Papers Received	# Papers Advanced	# Papers Proficient	# Paper Needs Improvement	# Paper Warning
Ex. Grade 6 science, section 1 (next line should be Grade 6 science, science 2....	***6***	***Human Body***	***25***	***4***	***10***	***10***	***1***

Scoring Categories for Science

Without Rebuttal (Gr. 4-8)		With Rebuttal (Gr. 9-12)	
15-16	Advanced	18-20	Advanced
12-14	Proficient	14-17	Proficient
8-11	Needs Improvement	12-13	Needs Improvement
0-7	Warning	0-11	Warning

Verification Form

BOSTON Public Schools
Focus on Children

Common Writing Assignment 2011-2012
Science Teacher Participation Verification Sheet

School: _____

Literacy Facilitator _____ **Phone/email:** _____

This form serves as official verification that teachers administered the Science Common Writing Assignment in their classes and submitted student papers to the administration of their school. Administrators are responsible for verifying and certifying its accuracy.

Please fill out this sheet and return it to Pam Pelletier, Senior Program Director for Science, by May 31st, 2012 (Cluster 12 or hand deliver to: Science Department, Campbell Resource Center, 1216 Dorchester Avenue, Dorchester, MA, ppelletier@boston.k12.ma.us) along with all student materials (drafts and scored rubrics). If you send student materials via cluster mail fax this sheet to 617.635.9801 so we will know when to expect the student work.

Thank you to all for your help in making the CWA successful!

Teacher Name	Grade level	Prompt Administered	Total # Papers Received	Date Collected	Teacher Signature	Administrator Signature (Verifies receipt of papers and certifies teacher participation)

Strengthening Literacy Skills Improves Science Learning…

Learning how to read and write in science is an important part of literacy, and it can help students understand and retain key science content.

(NSTA, 2008; NRC, 1996; Saul, 2004; Shanahan, 2004)