



## LAB-AIDS CORRELATIONS TO COMMON CORE ENGLISH /LANGUAGE ARTS<sup>1</sup>

### SCIENCE & TECHNICAL SUBJECTS<sup>2</sup>

#### SEPUP GRADES 6-8

*The purpose of this document is to provide an overview of support for the 6-8 Common Core English/Language Arts standards relating to science and technical subjects in science materials produced by the Science Education for Public Understanding Program (SEPUP) and published and distributed by LAB-AIDS.*

#### **About the Common Core State Standards (CCSS)**

The Common Core State Standards Initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The standards were developed in collaboration with teachers, school administrators, and experts, to provide a clear and consistent framework to prepare our children for college and the workforce.

The standards are informed by the highest, most effective models from states across the country and countries around the world, and provide teachers and parents with a common understanding of what students are expected to learn. Consistent standards will provide appropriate benchmarks for all students, regardless of where they live.

These standards define the knowledge and skills students should have within their K-12 education careers so that they will graduate high school able to succeed in entry-level, credit-bearing academic college courses and in workforce training programs.

#### **About SEPUP**

The Science Education for Public Understanding Program is based at the Lawrence Hall of Science, University of California, Berkeley, and develops science instructional materials for grades 6-12 with support from the National Science Foundation. The course materials are issue-oriented, inquiry-based, spiral, and support the 21<sup>st</sup> century design for school science programs as found in the Next Generation Science Framework (<http://www.lab-aids.com/correlations/Next%20Generation%20Science%20Framework.pdf>).

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<sup>2</sup> <http://www.corestandards.org/the-standards/english-language-arts-standards/science-technical/grades-6-8/>

There are three SEPUP programs at the middle level:

- Issues and Earth Science (IAES)
- Issues and Life Science (IALS)
- Issues and Physical Science (IAPS)

SEPUP materials are published and distributed by LAB-AIDS ([www.lab-aids.com](http://www.lab-aids.com)). To learn more about SEPUP, visit [www.sepuplhs.org](http://www.sepuplhs.org).

### **About SEPUP Literacy Support**

The SEPUP science programs provide frequent opportunities for students to develop their language skills. Students are expected to read informational text and procedures, and the Analysis Questions, Designing Investigations activities, and science notebook entries all involve writing clearly. Students practice their oral language skills in role-plays, discussions, debates, and presentations. Teachers who are looking for ways for science classes to help students develop language literacy will find these exercises particularly helpful. SEPUP has developed and adapted many separate literacy support strategies for reading, writing, oral and written presentations, and media viewing, as shown in the following table.

*Table 1. Literacy Strategies Embedded in SEPUP Middle Level Programs*

<b>Literacy Category</b>	<b>SEPUP Literacy Strategy</b>
Supporting reading comprehension	Anticipation Guide Directed Activities Related to Text Listen, Stop, Write Three-Level Reading Guide
Enhancing student writing	Science Notebook Writing Guidelines Writing Frame Writing Review Research Project
Facilitating group discussion	Discussion Web Intra-act Oral Presentation Walking Debate
Synthesizing concepts and vocabulary	Categorization Activity Concept Map KWL Talking Drawing Venn Diagrams

For more information, see the *Diverse Learners* section of the SEPUP Teacher's Guides.

Table 2. Support in 6-8 SEPUP for ELA Key Ideas, by Program and Activity Number

<b>ELA Key Ideas and Details</b>	<b>Support in SEPUP for ELA Key Idea</b>
<p>RST.6-8.1. Cite specific textual evidence to support analysis of science and technical texts.</p>	<p>Readings with embedded “stop-to think” (STT) strategy:            IAES – 5, 19, 29, 33, 38, 45, 58, 60, 66, 74, 78, 87, 92, 96            IALS – 4, 6, 7, 15, 23, 25, 28, 42, 45, 57, 63, 79, 85, 97, 103            IAPS – 13, 16, 21, 23, 31, 34, 41, 50, 57, 64, 71, 80</p> <p>Three level reading guides:            IAES – 15, 29, 78, 87            IALS – 11, 25, 57, 83, 89, 101            IAPS – 21, 23, 50, 57, 64, 84</p> <p>Anticipation guides:            IAES - 18, 44, 55, 62, 63, 74, 85, 96            IALS – 1, 2, 4, 5, 7, 8, 16, 17, 30, 32, 33, 45, 46, 49, 51, 52, 77, 79, 84, 85, 87, 97,            IAPS – 53, 55, 56, 63, 67, 71</p>
<p>RST.6-8.2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.</p>	<p>Readings with embedded “stop-to think” (STT) strategy:            IAES – 5, 19, 29, 33, 38, 45, 58, 60, 66, 74, 78, 87, 92, 96            IALS – 4, 6, 7, 15, 23, 25, 28, 42, 45, 57, 63, 79, 85, 97, 103            IAPS – 13, 16, 21, 23, 31, 34, 41, 50, 57, 64, 71, 80</p> <p>Directed Activities Related to Text            IAES – 5, 19, 34, 45, 53, 58            IALS – 2, 6, 7, 12, 15, 23, 26, 28, 42, 45, 57, 58, 60, 63, 66, 69, 79, 85, 87, 94, 97, 98, 103            IAPS – 2, 11, 13, 16, 32, 47, 80</p>
<p>RST.6-8.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p>	<p>All “Laboratory” type activities            IAES – 3, 4, 6, 10, 13, 16, 17, 20, 46, 59, 61, 63, 67, 93            IALS – 5, 8, 14, 16, 17, 19, 22, 27, 35, 36, 38, 39, 43, 47, 55, 62, 64, 70, 78, 80-83, 90, 106            IAPS – 5-9, 14, 18, 19, 24-28, 35, 37, 38, 42,</p>

ELA Key Ideas and Details	Support in SEPUP for ELA Key Idea
	43, 45, 46, 48, 51, 54, 59-61, 63, 65, 67-69, 74, 76-77, 79, 82
Craft and Structure	
RST.6-8.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 6–8 texts and topics</i> .	Categorization activities IAES – 6, 12, 17, 19, 30, 38, 51, 60 IALS – 15, 23, 45, 56, 80 IAPS – 35, 58
RST.6-8.5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.	Writing Frame/ <b>Writing Review</b> IAES – 11, 16, 36, 41, 55, 83, <b>84, 98</b> IALS – 10, 11, 14, 29, 32, 34, 48, 49, 53, 64, 67, 70, 71, 72, 81, 83, 87, 88, 89, 101, 105, <b>10, 15, 32, 67 89</b> IAPS – 33, 72, 88
RST.6-8.6. Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	Three level reading guides: IAES – 15, 29, 78, 87 IALS – 11, 25, 57, 83, 89, 101 IAPS – 21, 23, 50, 57, 64, 84
Integration of Knowledge and Ideas	
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).	Concept maps: IAES – 5, 6, 9, 15, 19, 29, 33, 60, 84 IALS – 86 IAPS – 34, 38, 83 Venn Diagrams: IAES – 3, 5, 42, 77 IALS – 23, 38, 43, 45, 57, 82, IAPS – 2, 47, 66 Talking Drawings: IAES – 19, 38, 73, 90, 91 IALS – 15, 55, 62, 64, 79 IAPS – 39, 55, 84 Makes/interprets graphs: IAES – 27, 51, 52, 55, 70, 75, 93, 95 IALS – 3, 14, 17, 19, 30, 51, 54, 72, 77, 79, 84, 85 IAPS – 12, 22, 30, 75, 78, 83
RST.6-8.8. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.	Contrast evidence vs opinion: IAES – 2, 36, 40, 41, 49, 57, 70, 77, 89, 98

ELA Key Ideas and Details	Support in SEPUP for ELA Key Idea
	<p>IALS – 10, 20, 29, 32, 43, 47, 48, 53, 60, 67, 68, 70, 71, 75, 87, 88, 99, 100</p> <p>IAPS – 6, 7, 11, 18, 24, 26, 29, 31, 33, 52, 62, 70</p>
<p>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.</p>	<p>“Talking it over” type activities:  IAES – 2, 18, 23, 24, 36, 41, 50, 70, 71, 83, 98  IALS – 10, 34, 52, 72, 87, 89, 101, 108  IAPS – 11, 29, 33, 44, 47, 52, 73, 87</p> <p>Computer simulations/multimedia/“View &amp; Reflect” type activities:  IAES – 47, 48, 51, 64, 68, 76, 81  IALS – 2, 33, 50, 56  IAPS – 1</p> <p>In addition to the above citations, there are over 100 web links to support each SEPUP course on line at <a href="http://www.sepuplhs.org">www.sepuplhs.org</a>.</p>
<p>Range of Reading and Level of Text Complexity</p>	
<p>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.</p>	<p>Readings with embedded “stop-to think” (STT) strategy:  IAES – 5, 19, 29, 33, 38, 45, 58, 60, 66, 74, 78, 87, 92, 96  IALS – 4, 6, 7, 15, 23, 25, 28, 42, 45, 57, 63, 79, 85, 97, 103  IAPS – 13, 16, 21, 23, 31, 34, 41, 50, 57, 64, 71, 80</p>