**Cross-walk from Common Core Standards to Nature-Based Learning**

**For English Language Arts/Literacy**

Assembled December 19, 2013 by the San Diego Children and Nature Collaborative

There are many standards for Common Core, provided in 98-page document at <http://www.cde.ca.gov/be/st/ss/documents/finalelaccssstandards.pdf>, and this long document is difficult to read through and absorb.

One of the ways to consider how to support teachers for Common Core standards through nature-based learning is to view the standards listed for each of the grade-level Disciplinary Core Ideas (DCIs) in the Next Generation Science Standards (NGSS). (Thank you, Nancy Taylor, for this suggestion!)

Review the standards for each grade level, across the DCIs, for solid indicators of what language arts activities can complement or be activities within the nature-based lessons. The same cross-walk could be done for Common Core standards for mathematics, but is not included in this document. Review nature-based units by grade bands, in documents posted at <http://sdchildrenandnature.org/wp/education/next-generation-science-standards-2/>.

The following Common Core State Standards Connections for English Language Arts(ELA)/Literacy are excerpted from <http://nstahosted.org/pdfs/ngss/20130509/CombinedDCIVersionBookmarked5.1.13.pdf>, for the four DCIs that most relate to nature-based learning:

* LS2: Ecosystems: Interactions, Energy, and Dynamics
* LS4: Biological Evolution: Unity and Diversity
* ESS2: Earth’s Systems
* ESS3: Earth and Human Activity

For K-ESS-2:

**RI.K.1** With prompting and support, ask and answer questions about key details in a text. (K-ESS2-2)

**W.K.1** Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book. (K-ESS2-2)

**W.K.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K-ESS2-2)

**W.K.7** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-ESS2-1)

For K-ESS-3:

**RI.K.1** With prompting and support, ask and answer questions about key details in a text. (K-ESS3-2)

**W.K.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K-ESS3-3)

**SL.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-ESS3-2)

**SL.K.5** Add drawings or other visual displays to descriptions as desired to provide additional detail. (K-ESS3-1)

(None for Grade 1 for LS-2, LS-4, ESS-2 or ESS-3)

For 2-LS-2:

**W.2.7** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (2-LS2-1)

**W.2.8** Recall information from experiences or gather information from provided sources to answer a question. (2-LS2-1)

**SL.2.5** Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. (2-LS2-2)

For 2-LS-4:

**W.2.7** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (2-LS4-1)

**W.2.8** Recall information from experiences or gather information from provided sources to answer a question. (2-LS4-1)

For 2-ESS-2:

**RI.2.3** Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. (2-ESS2-1)

**RI.2.9** Compare and contrast the most important points presented by two texts on the same topic. (2-ESS2-1)

**W.2.6** With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers. (2-ESS2-3)

**W.2.8** Recall information from experiences or gather information from provided sources to answer a question. (2-ESS2-3)

**SL.2.5** Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. (2-ESS2-2)

For 3-LS-2:

ELA/Literacy –

**RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. (3-LS2-1)

**RI.3.3** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. (3-LS2-1)

**W.3.1** Write opinion pieces on topics or texts, supporting a point of view with reasons. (3-LS2-1)

For 3-LS-4:

**RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. (3-LS4-1),(3-LS4-2),(3-LS4-3)

(3-LS4-4)

**RI.3.2** Determine the main idea of a text; recount the key details and explain how they support the main idea. (3-LS4-1),(3-LS4-2),(3-LS4-3),(3LS4-4)

**RI.3.3** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. (3-LS4-1),(3-LS4-2),(3-LS4-3),(3-LS4-4)

**W.3.1** Write opinion pieces on topics or texts, supporting a point of view with reasons. (3-LS4-1),(3-LS4-3),(3-LS4-4)

**W.3.2** Write informative/explanatory texts to examine a topic and convey ideas and information clearly. (3-LS4-1),(3-LS4-2),(3-LS4-3),(3-LS4-4)

**W.3.9** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. (3-LS4-1)

**SL.3.4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. (3-LS4-2),(3-LS4-3),(3-LS4-4)

For 3-ESS-2:

**RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. (3-ESS2-2)

**RI.3.9** Compare and contrast the most important points and key details presented in two texts on the same topic. (3-ESS2-2)

**W.3.9** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. (3-ESS2-2)

For 3-ESS-3:

**W.3.1** Write opinion pieces on topics or texts, supporting a point of view with reasons. (3-ESS3-1)

**W.3.7** Conduct short research projects that build knowledge about a topic. (3-ESS3-1)

For 4--ESS-2:

**RI.4.7** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (4-ESS2-2)

**W.4.7** Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-ESS2-1)

**W.4.8** Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. (4-ESS2-1)

For 4-ESS-3:

**RI.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4-ESS3-2)

**RI.4.9** Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. (4-ESS3-2)

**W.4.7** Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-ESS3-1)

**W.4.8** Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. (4-ESS3-1)

**W.4.9** Draw evidence from literary or informational texts to support analysis, reflection, and research. (4-ESS3-1)

For 5-LS-2:

**RI.5.7** Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-LS2-1)

**SL.5.5** Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-LS2-1)

For 5-ESS-2:

**RI.5.7** Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-ESS2-1),(5-ESS2-2)

**W.5.8** Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (5-ESS2-2)

**SL.5.5** Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-ESS2-1),(5-ESS2-2)

For 5-ESS-3:

**RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-ESS3-1)

**RI.5.7** Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.(5-ESS3-1)

**RI.5.9** Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-ESS3-1)

**W.5.8** Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (5-ESS3-1)

**W.5.9** Draw evidence from literary or informational texts to support analysis, reflection, and research. (5-ESS3-1)

For MS-LS-2:

**RST.6-8.1** Cite specific textual evidence to support analysis of science and technical texts. (MS-LS2-1),(MS-LS2-2),(MS-LS2-4)

**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). (MS-LS2-1)

**RST.6-8.8** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. (MS-LS2-5)

**RI.8.8** Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims. (MS-LS-4),(MS-LS2-5)

**WHST.6-8.1** Write arguments to support claims with clear reasons and relevant evidence. (MS-LS2-4)

**WHST.6-8.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (MS-LS2-2)

**WHST.6-8.9** Draw evidence from literary or informational texts to support analysis, reflection, and research. (MS-LS2-2),(MS-LS2-4)

**SL.8.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly. (MS-LS2-2)

**SL.8.4** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. (MS-LS2-2)

**SL.8.5** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. (MS-LS2-3)

For MS-LSS-4:

**RST.6-8.1** Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions (MS-LS4-1),(MS-LS4-2),(MS-LS4-3),(MS-LS4-4),(MS-LS4-5)

**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). (MS-LS4-1),(MS-LS4-3)

**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. (MS-LS4-3),(MS-LS4-4)

**WHST.6-8.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (MS-LS4-2),(MS-LS4-4)

**WHST.6-8.8** Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources. (MS-LS4-5)

**WHST.6-8.9** Draw evidence from informational texts to support analysis, reflection, and research. (MS-LS4-2),(MS-LS4-4)

**SL.8.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly. (MS-LS4-2),(MS-LS4-4)

**SL.8.4** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. (MS-LS4-2),(MS-LS4-4)

For MS-ESS-2:

**RST.6-8.1** Cite specific textual evidence to support analysis of science and technical texts. (MS-ESS2-2),(MS-ESS2-3),(MS-ESS2-5)

**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). (MS-ESS2-3)

**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. (MS-ESS2-3),(MS-ESS2-5)

**WHST.6-8.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (MS-ESS2-2)

**WHST.6-8.8** Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources. (MS-ESS2-5)

**SL.8.5** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. (MS-ESS2-1),(MS-ESS2-2),(MS-ESS2-6)

For MS-ESS-3:

**RST.6-8.1** Cite specific textual evidence to support analysis of science and technical texts. (MS-ESS3-1),(MS-ESS3-2),(MS-ESS3-4),(MS-ESS3-5)

**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). (MS-ESS3-2)

**WHST.6-8.1** Write arguments focused on discipline content. (MS-ESS3-4)

**WHST.6-8.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (MS-ESS3-1)

**WHST.6-8.7** Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-ESS3-3)

**WHST.6-8.8** Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources. (MS-ESS3-3)

**WHST.6-8.9** Draw evidence from informational texts to support analysis, reflection, and research. (MS-ESS3-1),(MS-ESS3-4)

For HS-LS-2:

**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. (HS-LS2-6),(HS-LS2-7),(HS-LS2-8)

**RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. (HS-LS2-1),(HS-LS2-2),(HS-LS2-3),(HS-LS2-6),(HS-LS2-8)

**RST.11-12.7** Integrate and 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. (HS-LS2-6),(HS-LS2-7),(HS-LS2-8)

**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. (HS-LS2-6),(HS-LS2-7),(HS-LS2-8)

**WHST.9-12.2** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-LS2-1),(HS-LS2-2),(HS-LS2-3)

**WHST.9-12.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (HS-LS2-3)

**WHST.9-12.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. (HS-LS2-7)

For HS-LS-4:

**RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. (HS-LS4-1),(HS-LS4-2),(HS-LS4-3),(HS-LS4-4)

**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. (HS-LS4-5)

**WHST.9-12.2** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-LS4-1),(HS-LS4-2),(HS-LS4-3),(HS-LS4-4)

**WHST.9-12.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (HS-LS4-6)

**WHST.9-12.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. (HS-LS4-6)

**WHST.9-12.9** Draw evidence from informational texts to support analysis, reflection, and research. (HS-LS4-1),(HS-LS4-2),(HS-LS4-3),(HS-LS4-4),(HS-LS4-5)

**SL.11-12.4** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. (HS-LS4-1),(HS-LS4-2)

For HS-ESS-2:

**RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. (HS-ESS2-2),(HS-ESS2-3)

**RST.11-12.2** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. (HS-ESS2-2)

**WHST.9-12.1** Write arguments focused on discipline-specific content. (HS-ESS2-7)

**WHST.9-12.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. (HS-ESS2-5)

**SL.11-12.5** 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 and to add interest. (HS-ESS2-1),(HS-ESS2-3),(HS-ESS2-4)

For HS-ESS-3:

**RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. (HS-ESS3-1),(HS-ESS3-2),(HS-ESS3-4),(HS-ESS3-5)

**RST.11-12.2** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. (HS-ESS3-5)

**RST.11-12.7** Integrate and 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. (HS-ESS3-5)

**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. (HS-ESS3-2),(HS-ESS3-4)

**WHST.9-12.2** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-ESS3-1)

Excerpted from NGSS-DCIs by Anne S. Fege, 19dec13