Understanding by Design: Hacker Middle School

Designer Name(s): Rose Dillard

Subject Area: Reading

Date: 6/2014

Grade Level(s): 6

Unit Title/Focus: Unit 3, Ecology

Estimated Amount of Instructional Time: ~6-7 weeks

Stage 1 – (Desired Results)

State Content and Skill Standards:

Reading Literature:

- RL6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- RL6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- RL6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
- RL6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.
- RL6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading Informational:

- RI6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- RI6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- RI6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).
- RI6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
- RI6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of ideas.
- RI6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
- RI6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims and not.
- RI6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- 6.W.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.

Reading Foundational Skills, Writing:

- W.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 6 on page 53.)
- W.6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
- W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
- W.6.8 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.

- W6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.
 - a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").
 - b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").
- W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Reading Foundational Skills, Speaking and Listening:

- SL6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- SL6.1a Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
- SL6.1b Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
- SL6.1c Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
- SL6.1d Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
- SL6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
- SL6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
- SL6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
- SL6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 for specific expectations.)

Reading Foundational Skills, Language:

- L6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Ensure that pronouns are in the proper case (subjective, objective, possessive).
 - c. Recognize and correct inappropriate shifts in pronoun number and person.*
 - d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*
 - e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*
- L6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*
 - b. Spell correctly.
- L6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - a. Vary sentence patterns for meaning, reader/listener interest, and style.*
 - b. Maintain consistency in style and tone.*
- L6.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
 - a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience*, *auditory*, *audible*).
 - c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
- L6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - a. Interpret figures of speech (e.g., personification) in text.
 - b. Use the relationships between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of of the words.
 - c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, unwasteful, thrifty).*
- L6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Enduring Understandings: (what are the big ideas, what are the specific understandings desired)

Students will understand that...

- *Organisms can be organized and classified
- *Many food webs exist within an ecosystem
- *Changes in one food web can effect an entire ecosystem
- *Different ways ecosystems are changed
- *We can positively impact our environment

Essential Questions: (what questions will foster inquiry, understanding, and transfer of learning)

- *How do changes individual organisms change an ecosystem?
- *How do changes in different ecosystems impact us?
- *What can we do?

Big Idea(s) Ecology

Why is careful interaction among life forms important?

What Students will know: (what knowledge will they acquire)
The 5 main kingdoms and characteristics of
each (Animal, Plant, Protoctista, Monera,
Fungi)

Food Webs: Vocabulary - Producers, Primary Consumers, Secondary Consumers, Herbivores, Omnivores, and Carnivores. Changes anywhere in the food chain will impact other organisms.

Negative environmental factors: Impact of habitat loss, sickness/disease, chemicals, and population blooms.

Importance of preventative and corrective environmental measures.

What Students will be able to do: (what will they eventually be able to do as a result of their skills learned/knowledge)

Write cause and effect statements and paragraphs.

Research, edit, publish an informational report on an endangered species.

Create and present a project for an endangered species.

Compare and contrast written text with a movie (*The Lorax* or *Hoot*)

Stage 2 - Assessment Evidence (acceptable assessment evidence that students understand)

Performance Tasks: (what authentic performance task (s) will students demonstrate understanding; by what criteria will it be judged?)

- *Performance Task (ID unknown organism, cause/effect paragraph)
- *Inquiry/Informational Report-Endangered Species
- *Species Project (poster or project to save a species)

Other Evidence: (quizzes, tasks, academic prompts, homework, observations)

- *Selection assessments, Linking Concepts, Personal Response, and/or Analyze
- *Response to poems (at the end of unit)
- *Unit Benchmark

Stage 3 - Learning Plan (sequence of teaching and learning activities that will produce desired understandings, engagement and development):

earning Activities: Introduce Unit	*Read Aloud "Work That Has No End"
Introduce offic	
Unit 3, Lesson 1	"Tree of Life" (expository text), Lexile 950
	*word study/vocabulary focus – compound words, suffix –/y,
	foreign words and phrases, content words for ecology
	*reading focus - organize w/ headings
	*content focus – 5 kingdoms and classifying organisms
	*grammar focus – colons & semicolons
Unit 3, Lesson 2	"Sea Soup" (expository text), Lexile 1140
	*word study/vocabulary focus – homographs, prefixes <i>con-</i> ,
	com-, and col-, location prefixes, Greek root photo
	*reading focus – main idea and details
	*content focus – food webs
	*grammar focus – independent and dependent clauses (subordinate conj)
Unit 3, Lesson 3	"The Most Beautiful Roof in the World" (expository text), Lexile 1050
	*word study/vocabulary focus – antonyms, suffix –able, Latin root
	form, content words for ecology
	*reading focus – main idea and details, compare & contrast
	*content focus – interdependent relationships in ecosystems
	*grammar focus – Pronouns (subject, object, and possessive)
Unit 3, Lesson 4	"Alejandro's Gift" (realistic fiction), Lexile 910
OTIII 3, EC33011 4	*word study/vocabulary focus – inflectional ending –ed, suffix
	-able, homophones, shades of meaning
	*reading focus – predictions
	*content focus – human impact on the environment
	*grammar focus – complex sentences
Unit 2 Locson F	Extension ideas: Reading Rainbow video
Unit 3, Lesson 5	"The Day They Parachuted Cats on Borneo" (play), Lexile Non-Prose
	*reading focus – sequence
	*conent focus – cause and effect of changes in an ecosystem
	*grammar focus – plural nouns (regular and irregular)
Celebration Week	*Read and respond to poem (at the end of the unit)
	*The Lorax (book, video, and/or comprehension packet)
	*Unit Benchmark
Novel Study	Novel study to go along with Ecology – Hoot by Carl Hiaasen (movie is availabe
	for compare/contrast); Chomp by Carl Hiaasen; Flush by Carl Hiaasen; Gator o
	Gumbo Limbo by Jean George
Inquiry – writing project	Endangered Speices Report (informational writing),
(informational text)	available resources: worksheets for development, Endangered Means There Is Still Time power point, rubrics, a score sheets
Project	Endangered Species Project & Presentation
,	available resources: rubrics and score sheets

Materials/Resources
Companion Science Chapters:

See shared drive for material and resources.

1-Classification, 6-Ecosystems, 7-Biomes