Making Connections







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Subject/Grade: Living Earth - Biology / 9th

Lesson Summary (1-2 sentences) How are you going to share "Sustainable Solutions for Alternative Futures" with your students? How will this fit into your regular scope and sequence?

This externship will be incorporated into our Ecology unit (Food webs; Interdependence; Energy flow), as well as in our study of Human Impact On the Environment. What I have learned will be shared both during semester one (Ecology) and semester two (Human Impact).

Industry Focus Areas (e.g., an industry-related career, skill, or challenge)

Conservation advocacy and practice

Learning Goals:

Students will be able to identify the roles of native plants in maintaining sustainable ecosystems.

<u>Driving Question</u> that Students Will Explore

How can plant selection influence local ecosystems?

Part 1 Above Due Tuesday for Peer Share (Track Your Progress With this Rubric)

Instructional Outline (examples from science week): This should be the bulk of your writing. Bullets of what the students will do throughout the lesson to reach the learning goals. Consider the ideas of UDL as you create your lesson plan.

Hook/Intro...

Background - [In class warm-up talking about biomes and the roles of plants in defining habitats.] This summer I participated in a teacher externship program that focused on sustainability. One theme that was repeated was the importance of preserving habitat for native species. Remember that habitat loss is the primary cause of species endangerment, and 99% of threatened species are at risk due to human activities that lead to habitat loss.

Go to the school garden - How could we increase the number of local insects and other animals that this area serves?

During...

Research Native Plants for relevant USDA Hardiness Zone. Select a plant that you are interested in learning more about, and provide at least three native species that this plant supports. Make an animal card - Name; Scientific Name; Drawing; Life stages supported. Plant native plants in the garden!

Reflection...

Individual actions matter!

Materials/Resources:

5x7 Note cards Native plants Internet Access Drawing paper

Standards: Common Core, NGSS, CTE, GoalBook or another state or national list.

HS - NGSS - Interdependent Relationships in Ecosystems CCC - Sustainability

Industry-related careers or skill

Community activism; Environmental engineering; Habitat restoration; Habitat/Wildlife interpreter; Environmental Law

Assessment: How will you check your students' understanding? <u>Creative assessment</u> ideas

Construct a food web that incorporates their native plant and organisms that are supported by this resource. [Individual product will be used as a puzzle piece to build a more complex image using work from the entire class]

Part 2 Due on Monday After Externship Week: