Curating Adaptations

Students will curate a Padlet board of unique animal and plant adaptations. Curation will include an explanation of how the structures and functions help the plant/animal survive in its environment.

Grade: 4th **Subject:** Science **Time/Duration**: Two 60 minute sessions

Rationale

I focused on this lesson as I read a blog post about curation several weeks ago from Cult of Pedagogy. It really stuck with me as a way to meaningfully use technology and encourage higher-order thinking. I teach only math and science, and life science particularly interests me. We teach animal and plant adaptations during Unit 10 of fourth grade science so I look forward to getting to teach this lesson this spring.

Resources

Science Doodles (purchased from Teachers Pay Teachers)
Cult of Pedagogy blog post about curation
Strangest Animal Adaptations in Nature YouTube video
Padlet
Schoology (our district's online classroom platform)

Learning Goal

Today I am exploring plant and animal structures and functions so I can understand how organisms interact with their environment.

Success Criteria

I'll know I've got it when I can define adaptation, provide examples of plant and animal adaptations, and explain how adaptations help organisms to survive in their environment.

Texas Essential Knowledge and Skills (TEKS)

Collect, record, and analyze information using tools, including cameras, computers, hand lenses, collecting nets, and notebooks. (SCI.4.4.A - Process Standard)
Explore how structures and functions enable organisms to survive in their environment. (SCI.4.10.A)

Materials

Science journals, pencils, computers

Background Knowledge

Before this lesson, students will have learned the definition and common examples of plant and animal adaptations. Students will have read, discussed, and created an interactive notebook entry on adaptations as reference. Students have experience using a web browser, as well.

Engage

Show video of the strangest animal adaptations in nature. Remind students of definition of adaptations and examples in plants and animals. Demonstrate how to find resources and links in Schoology. Outline expectations and criteria. Also demonstrate using Padlet (link will be posted in Schoology). Show an exemplar project for students to see what their final product will be like.

Explore

Assignment will be posted on Schoology (our district's online classroom platform). Students will explore resources posted in adaptations folder to find unique animal and plant adaptations, as well as further explore the websites linked in the folder. The links will serve as a starting point, not a limiting factor. Lesson will be conducted in the computer lab so that all students have access to a computer for their research and creation. Students will take notes (see template below) in their journal of what structures the plant or animal has and how that functions to help it survive in its environment.

Plant/animal	Structure	Function	Other details
1			
2			
3			
4			
5			

Links for folder:

http://mentalfloss.com/article/57204/20-amazing-animal-adaptations-living-desert
http://www.animalplanet.com/wild-animals/animal-adaptations/
https://www.youtube.com/watch?v=Mbj_WQ76F1Q
https://www.generationgenius.com/animal-and-plant-adaptations-video-lesson-for-kids/
https://owlcation.com/stem/10-Most-Wacky-Plants-of-the-World

Create

Students will create their own Padlet board with at least five unique plant and animal adaptations. Students will also write an explanation of how the structure and function of that plant or animal helps it to survive in its environment. Further, students will create a Venn diagram comparing two organisms' adaptations. Teacher will facilitate a class discussion on findings, and connect to humans and how we survive with/without adaptations.

Share

Students will share their Padlet on our Schoology page and provide/receive feedback with one peer. Padlets will also be shared with students' families and with the school on our Schoology page.

Assessment Criteria

- Name and picture of each plant and/or animal (5 points)
- Description of structure and function (5 points)
- Explanation of how the adaptation helps the animal survive (10 points)
- Spelling and grammar is correct and grade-level appropriate (5 points)