

AOL

WW

Score
Booster
Oct 31, 2023

1. AOL WW Rubric
- Exemplary Essays
 - Components

2. Mentor Texts

• Language Stems → AOL Rubric

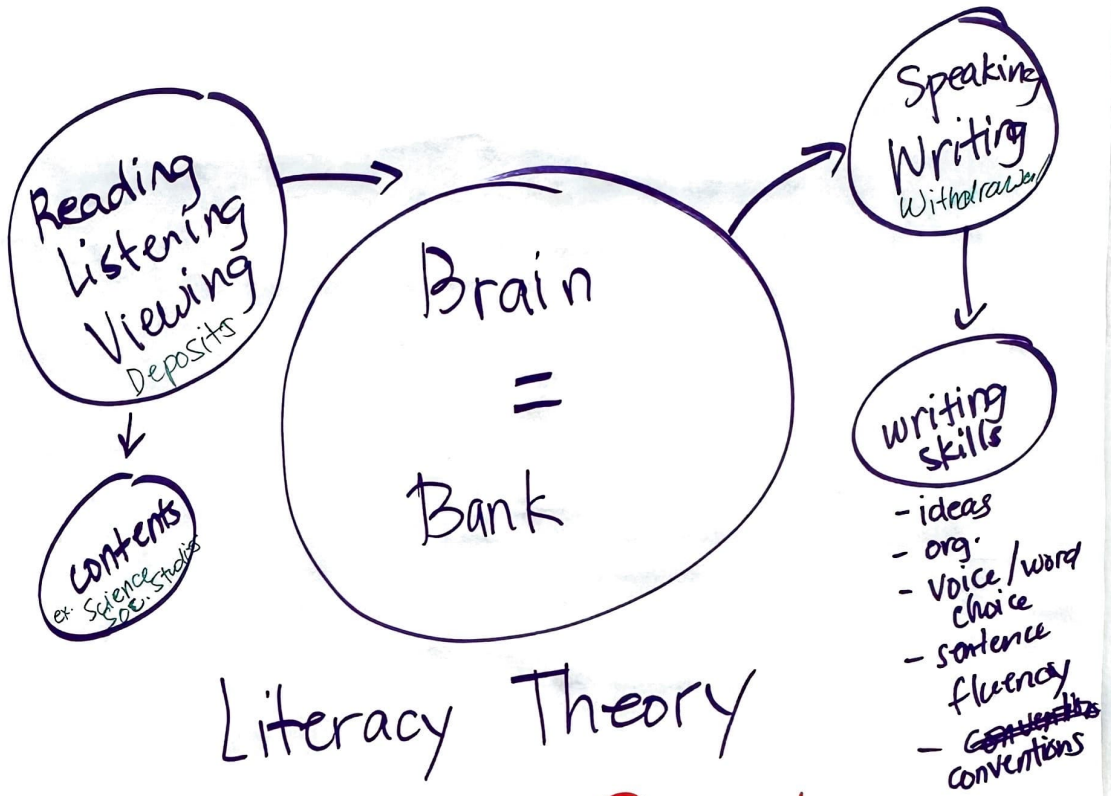
3. Group Work Analysis → to equip you → Situational type PROCESS

4. Peer Review ^{if there is enough time} → AOL Rubric → Scientists

[The Big Debate]

→ "The Big Debate" → Writing Workshop

I	II
Disease + Injury	Habitat Destruction
III	IV
Persecution by Humans	Reduction in Population Size



Literacy Theory

Research - Based
Evidence - Based

Disease & Injury Hellbender

~~Siddharth, Nathan,~~
Siddharth, Nathan,
Ravshan, Lee

Questions?

① Why does carrying chytrid weaken their immune systems?

- Do they carry other disease?
- ~~How~~ Do these diseases spread?
- How do they attract the disease?

② Where do the pathogens in the water come from?

- Why are they associated with diseases?
- Why are hellbenders associated or affected by pathogens?

③ How can the transmission of pathogens through boats be prevented?

- Where are the boats coming from?

Hypothesis:

- ① If there is a 53% decrease of BPA's, then there will be a 54% decrease in pathogens in a river.
- ② If boats are sanitized by ~~•~~ Clorox spray, then there will decrease of 68% of pathogens in the river.
- ③ If we spray a mixture of antibiotics, then there will be a 53% decrease in sick Hellbenders and less chytrids.

Questions

- How many habitats are destroyed each year?
- Are there specific regions that are more likely to be destroyed?
- Does lack of food in habitat affect anything?

Finding Research/Methodology

- Cameras to watch habitats
- Comparison in health for Hellbender in thriving vs. destroyed habitat
- Reports/findings from other ecologists/conservationists
- Put in various temperatures/locations to see if it matters
-

Presentation

- Show effects of habitat destruction in person
- Show how much more a perfect habitat would increase health

If habitat is destroyed, species will die

1) What are some possible reasons why there was a decline in the population of Hellbenders, and how would you fix that?

~~What if~~
2) What can we do if a dam is in the area where the hellbender is dense in population, and how would we fix that?

3) Have there been any credible reports or sightings of the hellbenders, and at what time?

Answers

1) dams, Human Activities, developments in rural population and mining. Work with local nature organizations and mining corporations like the Crystal Water organization and the Mining Co. We can create deals outlawing them from mining in areas with Hellbenders

2) We can not move the dam, but would have to move the Hellbenders by working with wildlife reserves.

3) Yes, there was a report made yesterday at 3:07 A.M. claiming that the Hellbenders were spotted in the Shenandoah Mountains

Methodology

1) Because dams, rural developments,

If our hypothesis doesn't work, we can relocate the Hellbender population to an area with a similar habitat that doesn't suffer from these issues.

Hypothesis

If we implement our solution of working together with the wildlife orgs, then we can effectively stop the decrease of pop in the Hellbenders species.

Methods

Because dams, rural development, mining are leading causes of Hellbender habitat destruction, being able to create agreements with mining and construction companies to outlaw construction and mining in Hellbender dense areas. Creating wildlife reserves in areas where Hellbender population is dense so we can protect their population and habitat. We can set up cameras and stations to collect accurate sightings of Hellbenders.

Questions

- Why are Eastern Hellbenders resorting to Cannibalism as a source for food? I believe that the lack of biodiversity is a big cause to the reason why hellbenders are resorting to cannibalism.
- Are humans playing a role in the decline of the Eastern Hellbender? Yes, the industrialization of nature (parks and cutting down trees) have caused a decline in population of Eastern Hellbender.
- What materials and technology would help me design a solution?
 - I would use a vision sensor, a 4K UHD gopro waterproof camera that will track down the salamanders.

Methodology

Our Conservation Project is going to be a dispenser that dispenses mostly fish-like crawfish for the Eastern Hellbenders. We will use a 4K UHD gopro waterproof camera, a vision sensor that uses a CAD model designed by a fish and wildlife conservation group. The prototype will sense when a Eastern Hellbender comes and it will use a wind propelled wings to fly towards the hellbender and dispense the fish to eat rather than eating the eggs.

Hypothesis

It will follow the salamanders, dropping fish when too close to the egg. As a result of this, the males will happily eat the food dropped out of the dispenser, disregarding the idea of eating the larvae.