Jadynn Flowers

Grade: 4

Materials: Crossword/pencil

Instructional Strategies:

- ☐ Direct instruction
- ☐ Guided practice
- ☐ Socratic Seminar
- ☐ Learning Centers
- ☐ Lecture
- ☐ Technology integration
- ☐ Other (list)
- ☐ Peer teaching/collaboration/ cooperative learning
- ☐ Visuals/Graphic organizers
- ☐ PBL
- ☐ Discussion/Debate
- ☐ Modeling

Guided Practices and Concrete Application:

- ☐ Large group activity
- ☐ Independent activity
- ☐ Pairing/collaboration
- ☐ Simulations/Scenarios
- ☐ Other (list)
- ☐ Hands-on
- ☐ Technology integration
- ☐ Imitation/Repeat/Mimic

Standard(s) Proficient Standard

Objective(s): Take away a few facts about the four big fossils of the Underwater World segment.

Classroom Management- (grouping(s), movement/transitions, etc.)
I plan to situate myself around the parts of the exhibit I'm talking about so their eyes don't have to stray too far from me while I'm talking to the object I'm talking about. I'll try to let them all file in as close as they can so they can all see.

Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)
They will be expected to listen to the factual information and keep from distracting their neighbor. They will also be expected to be respectful to the Heritage Center property and keep from touching what is not allowed to be touched.

Minutes	Procedures
	Set-up/Prep: I will help guide them into the space and make as much room for them as I can, maximizing the amount that can clearly hear me and be able to see everything.
	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) I could creatively ask questions about the creatures, prompting them to think of how big the sea turtle is in comparison to a turtle we would find here in a North Dakota lake, what it maybe eats, etc. Questions and ideas like these will hopefully help them connect the world they know today to something that no longer exists. Imagination is key.
	Explain: (concepts, procedures, vocabulary, etc.) Facts to go over for sure: Archelon – a name which means "ruling turtle." An average sea turtle is about 7 feet long and weighs around 350 pounds. Archelon, on the other hand, was 12 feet long and weighed around 2 tons – or about 4,000 pounds. That made it about the length of a small great white shark but much, much heavier. No, it had either bony plates or a leather-like covering that stretched over a framework of bones on its back. If it would've had a hard shell, then it most likely wouldn't have been able to stay afloat while swimming in the ocean. It probably lived around 100 years and ate jellyfish. "Hesperornis was a large flightless bird that swam in the oceans and snared fish with a tooth-lined beak. Its small wings were held close in to the body and were of little use beyond possibly helping it steer through the water. Instead, Hesperornis relied on its powerful hind legs and webbed feet to chase prey and evade predators in the Cretaceous seas. A flattened tail may have helped the bird change depth and direction underwater. Laid eggs on land. "What other types of flightless birds can you think of?" "Maybe the great great ancestor of the penguin?" Xiphactinus (combination Latin and Greek for "sword ray"). About 20 feet long and 500-1,000 pounds and ate fish. Noted for its under bite. One of the most famous Xiphactinus fossils contains the almost-intact remains of an obscure, 10-foot-long Cretaceous fish called Gillicus. Paleontologists speculate that the Xiphactinus died right after swallowing the fish, possibly because its still-living prey managed to puncture its stomach in a desperate attempt at escape, like the grisly extraterrestrial in the movie *Alien*. If this is really what happened, Xiphactinus would be the first fish known to have died from acute indigestion! ***Make note that the ND one is not the same fish that was found with another fish inside. Mosasaurs were large marine going lizards related to the modern monitor lizards. Mosasaurs ranged from about 3 meters long, to upwards of 12 meters. An average Plioplatecarpus would have been about 5 meters long. "What sort of lizards can you think of?"
	Explore: Give them some time to look around for themselves

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	Review (wrap up and transition to next activity): I will transition them into the next segment.

In-depth post-lesson reflection:

My lesson in the Underwater World segment went quite swimmingly all day. I have really improved my tone of voice, yet I still need to work on flow of information a bit and practice handling large groups of young children a little more confidently. The older students were calmer and less energetic, thus a bit easier to handle in terms of eye contact and noise volume, though their engagement was disappointing from a select few that seemed 'too cool for school.' I was overall fairly proud of the way I presented myself except for one glaring issue I ran into at the end. One young man challenged one of the topics I was speaking about, claiming that he knew what the name of the dinosaur was and seemed confused when I called it something else. I kindly corrected him and he did not really try to argue it after that, but after scrambling in my brain when we were all done, I had realized he was right. After doing my research on the 'big four' dinosaurs I wanted to talk about, I had overlooked the sizes since I felt like focusing on size and weights of the animals was a little less interesting than the food they ate, where they laid eggs, etc. Most kids tend to not remember numbers as the highlight of something, and my lack of attention to memorizing sizes was my fatal mistake. I had mixed up two of the fossils I was speaking about. Looking back on it, I did read about the sizes once or twice, so my vague memory on what they were proved that the student was right, and I had pointed to the wrong fossil all day when talking about the flightless bird in my lesson. What I learned from this is even though my intentions were alright to not worry about numbers, I should at least know the numbers more for my own sake so I do not teach something wrong in the end. If that class were to return as if I had them every day, I would let the student who corrected me know that he was super smart for catching my mistake, and as a teacher, I am bound to make a mistake now and again, and I will admit fault for it. Fairness is important to me, and I love learning things from the people I am supposed to be teaching and seeing how smart they are too.