

The Ocean in the News: Content Option #2

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Below are summaries of six separate articles I found that have a focus on the ocean. Each article is quite different from the others as far as its main idea and purpose. The link to each article can be found following the summaries in the Works Cited pages. Each summary also contains an explanation of how understanding the Essential Principles of the Ocean would further the reader's understanding of the content in the news article.

Article 1: *SpaceX to launch NASA's PACE ocean-monitoring satellite this week.*

This article was published on February 4, 2024, by Mike Wall, on space.com. The article describes NASA's PACE spacecraft which was set to take off on February 8, weather permitting. This spacecraft will be able to monitor the health of the oceans as it is equipped with satellites to take notice of the color of the ocean to aid in research. The name PACE actually stands for Plankton, Aerosol, Cloud, and Ocean Ecosystem, which are the areas the spacecraft hopes to analyze. With this data collection, researchers will be able to better determine the health of the ocean, including the location of microscopic algae, which are important in keeping the ocean healthy. The mission has experienced several setbacks as the previous administration tried to stop the program on three separate occasions. Fortunately, the project was saved and funding was provided, albeit at a higher number than originally planned.

In order for the reader to have a better understanding of the importance of this article, it would help if the reader knew principles 3, 4, and 5. Principle 3 states that the ocean is a major influence on Earth's weather and climate. This principle relates to this article from the very beginning, in its name. The C in PACE stands for clouds. If the

reader is unfamiliar with these principles then they might be confused or have misconceptions about why the word “cloud” is in the name of the spacecraft. Principle 4 reminds the reader that the ocean makes Earth habitable. It is possible that the previous administration does not recognize this principle, thus trying to stop the funding of this important project. If the ocean is not healthy, then life on Earth will be effected in various ways. The PACE spacecraft will help guage the health of the ocean and could impact future actions taken on Earth. Principle 5 states that the ocean supports supports great diversity of life and ecosystems, and all of these ecosystems are connected. If the reader of the article understands this principle, then as they are reading about the location of plankton and algae they will make connections.

Article #2: Ocean Beach Pier not only one battered by rising seas and storms. Is fixing them worth it?

This article was published on February 2, 2024 in San Diego, by Julie Watson, Haven Daley and Associated Press, under the topic of climate change. The gist of the article is that there are at least 6 iconic piers on the California coast that have been shut down due to repeated battering of the stronger storms the state has experienced in the past two years. At least one of these piers has stood strong since 1857, only to be damaged in the last two years due to climate change. The cost to continue fixing these piers is in the millions. The question is being asked whether or not it is wise to fix these piers. The change in climate is bringing such massive, strong storms that a new plan may need to be considered. Piers have long been an integral part of the culture of California coasts as people use them to spot whales and dolphins. Some of the piers

are a part of the tourism industry. In the past, piers have been used as an offloading spot for steamships to bring in lumber. The people of California are deeply connected to the piers and this is a difficult decision for the park managers to make.

This article connects to Principle 3- The ocean is a major influence on climate and weather. If the reader of the article understands this principle, then they will read the article with a different focus. Understanding how deeply entwined the ocean's health is on the climate will help them recognize that humankind should consider how our actions are having an impact on the health of the ocean, which in turn effects us. The people in California should see this first hand, as they see what is happening to their beloved piers. This connection also makes principle 6 stand out: The ocean and humans are inextricably connected.

Article 3: Weathering and ocean burial of rocks could have triggered Earth's ice ages

This article was published by Isabelle Dume, on February 1, 2024, in Physics World. This article is very intriguing as it presents a theory that shows the cooling of the climate, which works against, or possibly balances, the global warming we are experiencing. According to this article, the researchers, which are working through MIT, are finding evidence that the previous four ice ages might have been triggered by two phenomena: exposure of ophiolites, fast weathering rocks, causes the climate to get cooler and the erosion of mountains into the ocean cause the climate to cool off. As mountains erode into the oceans, carbon can be trapped under the water and can cause cooling. Through the research, these are the first findings that the movement of

plate tectonics in the past may have caused the ice ages and can have implications for understanding future climate change on the planet. Though it does not relate to the oceans, the end of the article also mentioned that these findings can also help researchers understand the past climate on Mars: interesting factoid!

This article connects to principle number 3, the ocean is a major influence on weather and climate. If a reader were to read this article with this principle in mind, it would cause them to consider the implications of erosion on future climate. The reader might also be aware of how this phenomena could possibly work to balance the phenomena we are experiencing currently with global warming.

Article #4: Ocean heating breaks record, again, with disastrous outcomes for the planet

This article was published on January 30, 2024, by Elizabeth Claire Alberts, in the Mongabay Series. The overall big idea in this article is that the oceans are being influenced by human actions. These actions can include over fishing, pollution, and development going up on the coast lines. In addition to these human actions, perhaps the biggest impact humans are having on the oceans today are in the burning of fossil fuels which is causing global warming. This global warming is heating the oceans up to temperatures higher than ever before. The ocean absorbs much of the heating that is put off by humans on the planet, since it covers 70% of Earth. While it is helpful that the oceans are absorbing this heat for us, it is having negative effects on the health of the ocean, which will in turn affect life on land, specifically through climate change. Not only

does the heated ocean affect weather on Earth, it also affects the biological balance of ecosystems in the ocean.

To internalize the urgency of this article, the reader needs to have an understanding of principles 3,5 and 6. Principle 3 states that the ocean is a major influence on weather and climate. As the oceans heat up, our weather and overall climate change. Principle 5 reminds the reader that the ocean supports a great diversity of life and ecosystems. Understanding this can help the reader to have empathy for the beautiful creatures and life that depend on a healthy ocean to function and thrive. Without the knowledge of principle 5, the ignorance may cause the reader to not recognize the implications of human actions on the life under the ocean. Finally, this connects to principle 6 which helps the reader to understand that the ocean and humans are inextricably interconnected. This connection should pressure the reader to sense an urgency of fixing human behavior as they would understand that as humans affect the life in the oceans, the ocean will likewise affect them on planet Earth. We must do our part to protect the oceans.

Article #5- Cold stunned turtles are released back into the ocean

This article was published in Alaska's News Source by Marisa Gjuraj and Dorothy Sedovic on February 2, 2024. This article was based on events in Panama city Florida, and is a feel good story! The gist of the article is that dozens of sea turtles, all healthy, were stunned by the extreme cold snap that took place in January. Since turtles are cold blooded and their body temperatures adjust with the outside temperature, they can go into a comatose state if they get too cold, also coined "cold stunned." The rescue

group helped to warm the turtles and get them active and fueled up so that they could be released as soon as the water temperature rose just enough that they would not be cold stunned. They were sent back out on January 30.

Principles 5 and 6 stand out to me the most in this feel good article. These principles state that not only does the ocean support great diversity of life and ecosystems, but that we on land are connected with the ocean. This article shows this in a more personal way, in a way that is rare to experience. While I am unsure if it is best for humans to jump in to warm up these turtles, I recognize that it shows the human connection and empathy towards other life on the planet.

Article 6: *The Sunday Read: The Whale Who Went AWOL*

Similar to the previous article, this is also a post that has heart to it! This article describes the story of a beluga whale that was spotted off the coast of northern Norway. This is unusual for several reasons. First of all, beluga whales usually do not go as far south as Norway, rather, they stay in the remote Arctic normally. Another oddity is that this whale was traveling solo. While this can happen, typically this type of whale normally stays in social groups. Perhaps the most concerning aspect of this whale was that it was very friendly and was swimming near the boats, showing that it must be used to human interaction. Experts believe that this whale must have been in captivity and escaped from somewhere, but as to where, is a mystery. The sad part of this story is that the whale's friendliness and curiosity are putting the whale in danger. Different experts have different opinions and viewpoints on what should be done to help this

whale. Some feel the whale should be left alone while others feel that humans should intervene. While this article was published by Ferris Jabr on January 28, 2024, in The New York Times, the whale was first spotted on April 26, 2019.

I feel that principle number 6 is the one that best fits with this article: Humans and the ocean are interconnected. More specifically, concept G under principle 6 resonates with me. Concept G reads: "Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all." The statement that everyone is responsible for caring for the ocean really stands out to me. If the reader of this article was familiar with this principle, then it might put a different spin on the situation. On one hand, it seems sweet and cute that this whale is interacting with humans. On the other hand, knowing that this whale has been taken out of its natural habitat at some point, based on the fact that it is so friendly with humans, is disheartening. Now, many people are trying to help the whale, as these people must mean well and they must be trying to help the whale, but the answer on how to help is not clear.

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