

Nature of Science & Math

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Analyzing the Presence in Everyday Communication

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The article I selected from the media was published in the September edition of The New York Times. The article, *Just a Few Pieces of Plastic Can Kill Sea Turtles*, was written by Karen Weintraub. The intriguing part of this title was that just a few pieces can kill these beautiful animals, which means that our world needs to find a faster solution to our pollution and littering issues. Additionally, this title reminded me of the facebook video campaign of several teenage boys that designed a rover of sort that collected trash in our ocean. These young scientists are using their observations and knowledge to provide solutions to real world problems. Using this article I will analyze how this article meets or doesn't meet the tenets of Nature of Science or the math practices.

Scientific Investigations Use a Variety of Methods

Science investigations are driven by questions. The driving force of this study was the question, how much plastic is too much? The study reports that only 14 pieces of plastic can increase a turtles risk of death. However skepticism took issue with, "the way the study measured vulnerability to plastic." This viewpoint creates additional questions that require further investigations to answer this driving question.

Scientific Knowledge is Based on Empirical Evidence

Although there is differing opinions about the quantity of plastic that affects sea turtles, one point they agree upon is that sea turtles are eating too much plastic. Reducing the turtles exposure to plastic can in turn save the turtles, which isn't something new. We have known for years the risk of pollutants, however even in this article scientists haven't proven how much plastic can be fatal for the turtles.

Science is a Human Endeavor

It goes without saying that there are many scientists trying to save our animal populations. This article suggests consequences for “dumping” into our oceans. This article highlights the importance of politics and corruption and how it directly impacts the animals lives. With the catchy title, it provides a call to action for the general public.

Make sense of Problems and Persevere in Solving Them

“They study’s innovation was to try to determine this inflection point, where the load of plastic becomes lethal.” . However, even after this study, no additional information has been gained. Hopefully this study is only the beginning of finding out how much is too much.

Reason Abstractly and Quantitatively

The study used data from two different databases. Upon looking at those studies they concluded that, “animals that died for reasons unrelated to eating plastic had less plastic in their guts than those that died of unknown causes or direct ingestion.” Strategically these patterns support their claim, however no mention of specific amount of plastic was given for the study.

Construct Viable Arguments and Critique the Reasoning of Others

Within the article, Dr. Jennifer Lynch presented her own research which critique the reasoning of the study. She claimed that 14 pieces is too low, and that more data needs to be collected in order to know how much plastic is too much.

References

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