

Methods of STEM Education

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Nature of Science & Math:

Analyzing the Presence in Everyday Communication

The purpose of this paper is to analyze how the article I select meets the tenets of Nature of Science discussed in NGSS and Common Core Mathematics Practices. The title of the article is 'Earth just experienced one of the warmest years on record', and it is from CNN website.

In terms of Nature of Science discussed in NGSS, I list what and how this article meets its tenets in the following:

- Science is a Human Endeavor: in this article, it mentions that last year was the fourth-hottest year ever recorded. This data come from the National Oceanic and Atmospheric Administration and NASA, and it's scientists' endeavor.
- Scientific Knowledge is based on Empirical Evidence: in this article, several scientists observe how the climate change make an impact on different region on the earth, such as Polar region and the United states. It shows that scientists look for patterns and order when making observations about the world.
- Scientific Knowledge Assumes an Order and Consistency in Natural Systems: in this article, it mentions that this climate issue has been a historic period of weather and climate extremes.

In terms of Common Core Mathematics Practices, I list what and how this article meets its tenets in the following:

- Attend to precision: in this article, it mentions that “the contiguous US average rainfall of 34.63 inches made 2018 the wettest year in 35 years and the third-wettest year since records began in 1895”. It tries to communicate precisely to others, and specify carefully units of measure to clarify the correspondence with quantities in a problem.
- Reason abstractly and quantitatively: in this article, it states that “The average global temperature has risen about 2 degrees Fahrenheit, or a little over 1 degree Celsius, since the 1880s. That puts us more than two-thirds of the way to the warming limit of 1.5 degrees Celsius that was set in the Paris climate agreement.” It helps readers to make sense of quantities and their relationships in this problem situation.
- Model with mathematics: in this article, it provides a model that shows it is eighteen of the hottest 19 years have occurred since 2001 on the earth. It is able to identify important quantities in a practical situation and map their relationships.

Reference

Earth just experienced one of the warmest years on record, retrieved from <https://www.cnn.com/2019/02/06/world/2018-global-temp-hottest-year-noaa-nasa/index.html>.