

SCI 100 Question Development Worksheet

Answer the following questions. Your instructor will use these answers to evaluate the critical elements for Project 2.

1. Why did you select your news story? What about the story makes it interesting to you both personally and scientifically?

I selected the news story on hurricanes because I have always had a fascination with natural weather phenomena and hurricanes are at the top of my list. I find it fascinating how the weather patterns and pressures systems change, causing the formation of circular wind patterns that result in the formation of hurricanes. I also found it amazing how the area in the eye of the storm could be so calm. In contrast, the areas surrounding it were chaotic and resulted in damages of untold proportion depending on the strength of the hurricanes. The other reason why I selected the news story is because of global warming. Global warming has resulted in changing weather patterns that have caused more occurrences of extreme weather conditions like hurricanes, among others. Global warming has resulted in the increased speed of the winds that usually form hurricanes resulting in hurricanes with more strength and the potential to cause damage. They have also started moving poleward.

2. What did you already know about the topic before selecting the news story? What opinions or assumptions had you made about it?

Before selecting the news story, I understood that hurricanes usually form as a result of a change in pressure systems and circular winds. I knew that hurricanes usually form over the ocean and become destructive when they make landfall on the countries' coastal regions and continents where they form. Different regions have different names for hurricanes. Some of these names include typhoons and tropical cyclones, among other things. Hurricanes usually occur accompanied by thunderstorms, and they obtain their energy from warm ocean waters. Meteorologists classify the hurricanes depending on the speed of the winds that lead to their formation. The lowest wind speeds are usually less than 39 miles per hour, and these tropical storms receive the name tropical depressions. However, ones that form with maximum wind speeds of over 100 miles per hour are hurricanes. I had the assumption that hurricanes are destructive from the start, despite the speeds at which they form.

3. Which concepts covered in the course relate to your news story? How?

There are a couple of concepts from the course that I feel relate to the news story that I selected. For instance, the research that the researchers from the organization and university conducted to develop the conclusions they did is an example of a scientific method, as we previously discussed during a past session. The researchers collected the appropriate data and assessed it to come to the conclusions and findings that they had. The fact that they followed this system makes me confident in the research and the information they have provided. The researchers were also curious about the shifting weather patterns and increased hurricane speeds and made the necessary observations using satellite imagery to find a connection between their curiosity and the hypothesis they made.

4. What question do you have about the topic in the news story? Select one question that interests you based on your topic exploration graphic organizer and previous responses.

The question that I have chosen to focus on is, "What are the possible measures that we can enforce to counter the increasing strength of hurricanes?" finding a solution to this question will help people and governments better prepare to handle the consequences and damages left in the wake of hurricanes. Hurricane Katrina was one of the most destructive hurricanes ever to make landfall in the US. It caused destruction worth hundreds of millions and resulted in the displacement of hundreds of people and deaths of as many. Putting in countermeasures will prevent a repeat of the same.

5. Why would this question be important to a natural scientist?

The weather is part of natural science. A natural scientist would be curious to find measures that he or she can put in place to manage the destruction and loss of lives resulting from hurricanes making landfall. Hurricanes with increased wind speeds are very destructive, and not finding ways of regulating and possibly mitigating their effects will cause untold damage to both people and property. Finding countermeasures can also save lives in other countries prone to experiencing tropical storms.