Scientific Communication Writing Assignment Rubric – Peer Evaluation

your name: Charlee Thacker

assignment reviewed: 67

Using the rubric below, please evaluate each of your assigned news articles in each of the areas shown, filling out a separate evaluation form for each news article. Please highlight the part of the rubric text that explains why you chose a specific assessment category. In the "General Feedback" section at the bottom of this form, please include more specific feedback, including things that you liked as well as things that you feel could be improved upon and suggestions on how to improve them.

Red underline = what's missing

	Excellent	Good	Needs Improvement
Content: **Does the news article convey the writer's understanding of a biological topic?**	The news article introduces a biological topic and clearly illustrates the writer's understanding of the topic including what is known and not known about it and how understanding the biology associated with the topic helps us understand larger issues or concepts.	*The news article introduces a biological topic and presents information about it, but the topic is not explained clearly or doesn't distinguish between what is known vs. what is not known or doesn't explain how understanding the biology associated with the topic helps us understand larger issues or concepts.	The news article does not illustrate the writers understanding of the topic and does not indicate what is known vs. what is not known or how understanding the biology associated with the topic helps us understand larger issues or concepts.
Audience: **Is the writing appropriate for the target audience?**	The news article avoids jargon and clearly defines terms and ideas for a non-expert audience.	*The news article defines or explains some terms, but some key terms or ideas would be challenging for a non-expert audience.	The news article lacks definitions and explanations, making the topic inaccessible to a non-expert audience.

Organization: **Is the news article clearly organized?**	*The news article is well organized and easy to follow with good transitions between the paragraphs.	The news article is generally organized and easy to follow but conceptual connections aren't always clear.	The news article is disorganized, and the information presented doesn't flow well.

Rubric continues on next page

	Excellent	Good	Needs Improvement
Format, spelling & grammar: **Does the news article follow the recommended format and is it free of writing errors?**	The news article follows guidelines for paper length and format and has been carefully proofread for spelling and grammatical mistakes.	*The news article is outside the recommended length or does not conform to the formatting guidelines; the news article contains a small number of spelling and/or grammatical errors.	The news article is significantly outside the recommended length and does not conform to the formatting guidelines; the news article contains numerous spelling and/or grammatical errors.
Citations: **Are the citations presented appropriately?**	*The news article contains appropriate in-text citations and a list of references for all source material.	The news article is missing either appropriate in-text citations or a list of references.	The news article is missing appropriate in-text citations and a list of references OR citations are missing for one or more sources.
Rationale for choosing topic: **Did the writer indicate why they chose the topic?**	*The rationale for choosing the topic is clearly explained.		No rationale for the topic's choice is provided.

General feedback (5 points): see below ↓!

First of all, I need to say, I really am obsessed with your topic because my whole niche is marine biology, specifically with coral, so it was a very fun read for me. Anyways, I think you articulate yourself extremely well, but of course there is bound to be a few errors in everything. I think the one thing you didn't mention in your topic is if there is anything unknown, or maybe something that needs further studies, to your topic. You do a great job talking about what is known, how it relates to larger issues, and including your own voice into your article, however, you still lack unknown issues — because nothing can never be fully known yet. Aside from that, there are just a couple things that I think you should explain for readers, such as the coral's polyps, not everyone who is reading will understand what that is. Additionally, there are a few technical things that I edited such as sentence structure and punctuations, but other that that you're all good!

Overall assessment (excellent, good, needs improvement):
Excellence is on the way, there are just a few minor touch ups! An extremely strong start on your essay, good job :)
Below is an annotated copy of your essay should you wish to look at it!

Bronwyn McVeigh

Dr. Davis

Biology 110

October 23, 2022

Scientific Communication Draft-Climate Change and Coral Reefs

As carbon dioxide levels rise due to climate change, the widespread impacts continue to increase. One of the more concerning effects is the damage being done to coral reefs, their surrounding habitats, and the incredibly large amount of organisms that live in them. Coral reefs are some of the most biodiverse habitats on Earth and their neighboring ecosystems heavily depend on them ~~heavily~~ to remain stable. Coral reefs are incredibly sensitive to their surrounding environments and as little of an increase in sea surface as 1 to 3 degrees Celsius will lead to more frequent coral bleaching and widespread mortality (Bernstein et al. 2007). Between 50% and 70% of all coral reefs are directly affected by climate change ~~related~~ to human activity, and without them, large scale chain reactions will occur in both the ocean and on land (Hoegh-Guldberg 1999).

consider: environments; a slight increase of 1 to 3° degrees Celsius in sea surface will lead ...

rephrase? reads a little confusing & wordy

use blue is my suggestion of how to rephrase, but feel free to do your own. Also — is sea surface in relation to temp? If so, I would clarify sea surface temperature

period after reference

in relation

One of the major threats to coral reefs is ocean acidification, which is caused by increased levels of carbon dioxide being absorbed by the ocean. These higher levels of carbon dioxide make it incredibly difficult for coral and other marine life to create their skeletons made out of calcium carbonate. In order for coral populations to continue to grow, they have to be able to accumulate calcium carbonate and without this ability they experience mass die-offs. Many experiments have been done to interpret the relationship between ocean acidification and coral die-offs, which have gone to prove a direct linkage between the two. With this knowledge, we can attempt to find solutions to lower greenhouse gas emissions and levels of carbon dioxide

explanation & reasoning

expansion of understanding larger issues

being absorbed into the ocean in order to preserve coral populations and the biodiversity that depends on it.

Another large concern is coral bleaching, which occurs when ocean temperatures rise creating an unsuitable environment for the algae that lives within the coral's polyps. Coral relies on the algae for their color and as a main source of food and nutrients. Once the coral expels the algae, it becomes increasingly susceptible to disease and are subject to a very high likelihood of death and population loss. As climate change and global warming progress, coral reefs are experiencing much higher water temperatures than they have ever experienced and are falling victim to bleaching at higher rates. For example, the Great Barrier Reef has experienced five major bleaching events over the past two decades where up to 2/3rds of the reef were affected. Though coral can survive through some bleaching events, the surrounding ecosystems suffer until the algae is restored.

briefly explain what this is / the coral anatomy location of the polyps. Why does algae live there? etc.

Maybe expand why surrounding ecosystems need algae to be restored

These threats to coral reefs and their reliant ecosystems are increasing in size as climate change becomes a greater threat. Without action to halt emissions immediately, we are at risk of losing all of our reefs and the immense number of organisms that exist within them. The majority of the climate change driven impacts are caused by the disruption of the carbon cycle due to fossil fuels and overconsumption. If we cannot find a solution for climate change, the future of biology, especially ecology, is doomed.

impactful ending!

Works Cited

Hoegh-Guldberg O (1999) Climate change, coral bleaching and the future of the world's coral reefs. Marine and Freshwater Research 50(8): 839-866

Berstein L (2007) An Assessment of the Intergovernmental Panel on Climate Change. Climate Change 2007: Synthesis Report 1: 1-52

Link to original article: https://www.sciencedaily.com/releases/2022/10/221011161225.htm

I chose this topic because I have a heavy interest in ecology, particularly marine ecosystems and the conservation of them. To me, coral reefs are a perfect example of why it is so important to put more effort into defending the environment as they are some of the most biodiverse ecosystems on the planet and hold so much importance when it comes to the stability of coastal areas and their local economies.