

“Producing and peer reviewing inclusive science writing about socioscientific issues”

Learning objectives:

After this assignment, students will be able to:

1. Frame unique messages to two distinct audiences, taking into account their perspectives
2. Write about the intersection of science and social justice issues
3. Provide feedback on the quality of peer’s writing
4. Improve their writing in response to peer feedback

Science communication can take many forms, from a deficit-based approach that speaks to the public as a non-informed monolith to a more inclusive approach that considers the perspectives of diverse audiences. Science writing is an important disciplinary STEM skill, but it often fails to be inclusive of diverse audiences, both in terms of diversity of identity as well as diversity of expertise. The goal of this assignment is to help you develop skills in producing inclusive science writing as well as assessing the quality of that writing via peer review.

In this assignment, you will consider a socioscientific issue that relates to what you have learned in your courses this year. Then, you will write about this topic via two short (~1 paragraph) essays to two different, unique audiences.

To outline your paragraph, utilize the COMPASS Message Box (*COMPASS: The Message Box Workbook*, n.d.). The Message Box helps you talk about an issue to a specific audience and consider why they care about the problem, how they can be involved in a solution, or how they will benefit from the solution. Think about the social justice ramifications of the socioscientific issue you are writing about and how diverse audiences may consider the issue from different angles.

After you write your paragraphs, you will be assigned a peer’s writing to assess. You will utilize the Universal Science Writing Rubric (Pisano et al., 2021) for your peer review. This rubric helps you focus on diverse rhetorical concerns – science content, interpretation of science content, targeting the audience, organization, and writing quality – so that you are not only focusing on surface features like grammar. Both the process of critically analyzing a peer’s writing as well as receiving feedback from a peer are important aspects of the scientific writing process.

Since targeting two unique audiences is a key focus of this assignment, utilize these questions to guide your rating of the targeting construct:

1. Did they utilize language that will be understandable by the specific audience?
2. Did they consider the perspectives of why this audience cares about the issue?
3. Did they consider the ways in which this audience can be involved in a solution, or barriers to their involvement in a solution?

Once you receive this peer review feedback, you will edit your paragraphs to produce final drafts.