

Peer Assessment of Writing and Critical Thinking in STEM: Insights into Student and Faculty Perceptions and Practices

Irene Reed, Steven J. Pearlman, Carol Millard, and David Carillo
University of Saint Joseph

Responding to the need for STEM undergraduates to develop strong writing, critical thinking, and peer interaction skills akin to those the students will exercise as professional scientists, biology faculty developed an introductory course in science writing. Integral to this course was the development of a peer review community in which students summatively assessed each other's work using a unique instrument for evaluating critical thinking in writing. This report from the field explores the important relationship between peer review practices and the STEM professions, and looks at student perceptions emerging from peer assessment of critical thinking and writing. Qualitative data suggest that peer evaluation and assessment within a standardized rubric improved the students' understanding of and approach to their writing and critical thinking.

DOI: [10.37514/DBH-J.2014.2.1.08](https://doi.org/10.37514/DBH-J.2014.2.1.08)