Beyond the Lab Report: Using Non-scientific Genres to Facilitate and Assess First-Year Student Learning

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Many of our first-year students come to us without having written (or read) a lab report and are understandably daunted by this “new” field-specific genre of writing. As a result those initial forays into the genre often fail to accurately reflect what students have learned through their primary research, and present challenges in assessing an individual student’s mastery of the content or in determining how successfully a given experiment facilitated students’ collective learning. As first-year students develop proficiency in the genre, their formal lab report writing can be supplemented with other more familiar, non-scientific genres (informal responses, essays, letters, oral presentations, and even children’s books or comic strips) geared to public audiences. Allowing students to share or develop their knowledge of biological concepts through other forms or low stakes “writing to learn” exercises might permit them to more confidently communicate what they’ve come to understand through their experiments; prepare them to write more detailed, analytical lab reports; and open possibilities for discussing best practices for communicating science to public audiences. Presenters will share strategies they’ve used with first-year STEM students, and participants will share and discuss other options for using non-scientific genres of writing in laboratory courses.
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