## **Cultivating Creative Communication through Graphic Summary**

## Lisa Farmer

University of Houston, Biology and Biochemistry, 3455 Cullen Blvd, Science and Research 2, Rm 369, Houston TX 77204 USA (<a href="mailto:lmfarmer@uh.edu">lmfarmer@uh.edu</a>)

The graphic summary is a combination of text and graphics that models a concept or process and presents evidence to support an argument. I use this format to train students to dig into the primary literature, find and evaluate sources beyond the textbook, and communicate effectively and creatively – all essential steps in training students in writing scientifically. The concise guidelines introduce students to disciplinary conventions for writing, but solicit creative responses at both the introductory and advanced levels. It requires students to exercise the same level of analytical skill as a traditional written summary, but is faster and more interesting to grade. In classes of 30 – 60 students, more than 90% of students choose a unique graphic approach to summarize experimental methods and results. To demonstrate this pedagogical approach, workshop attendees will construct paper-based graphic summaries derived from experimental data given the same preset guidelines and grading criteria that students receive. Completed summaries will be randomly redistributed among workshop attendees for rubric-based peer review to mimic the student peer review process that is paired with instructor-based review. Instructors that are seeking creative new approaches to assess student communication skills without requiring extensive writing assignments will benefit from this presentation.

Keywords: graphic summary, science writing

## Mission, Review Process & Disclaimer

The Association for Biology Laboratory Education (ABLE) was founded in 1979 to promote information exchange among university and college educators actively concerned with teaching biology in a laboratory setting. The focus of ABLE is to improve the undergraduate biology laboratory experience by promoting the development and dissemination of interesting, innovative, and reliable laboratory exercises. For more information about ABLE, please visit <a href="http://www.ableweb.org/">http://www.ableweb.org/</a>.

Papers published in *Tested Studies for Laboratory Teaching: Peer-Reviewed Proceedings of the Conference of the Association for Biology Laboratory Education* are evaluated and selected by a committee prior to presentation at the conference, peer-reviewed by participants at the conference, and edited by members of the ABLE Editorial Board.

## Citing This Article

Farmer L. 2019. Cultivating creative communication through graphic summary. Article 31 In: McMahon K, editor. Tested studies for laboratory teaching. Volume 40. Proceedings of the 40th Conference of the Association for Biology Laboratory Education (ABLE). <a href="http://www.ableweb.org/volumes/vol-40/?art=31">http://www.ableweb.org/volumes/vol-40/?art=31</a>

Compilation © 2019 by the Association for Biology Laboratory Education, ISBN 1-890444-17-0. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright owner.

ABLE strongly encourages individuals to use the exercises in this proceedings volume in their teaching program. If this exercise is used solely at one's own institution with no intent for profit, it is excluded from the preceding copyright restriction, unless otherwise noted on the copyright notice of the individual chapter in this volume. Proper credit to this publication must be included in your laboratory outline for each use; a sample citation is given above.

© 2019 by Lisa Farmer 1