Teaching Principles of Sustainability to Non-majors through Community Engagement

Jessica Goldstein

Barnard College, Biology Department, 3009 Broadway, New York NY 10027 USA (jgoldstein@barnard.edu)

Non-majors often take a science class out of obligation and have varied levels of interest in biological topics. To increase excitement and understanding about ecological concepts, we combined data-heavy footprint calculations with a tangible community-based civic engagement project. We asked students to volunteer at a local organization that would have a positive impact on their environment. Before volunteering, students took a short online "quiz" hosted by the Global Footprint Network (www.footprintnetwork.org) to calculate their ecological footprint and think about issues of sustainability locally and globally. Armed with this information, students were asked to decide how to collect data during their volunteer experience that would provide information on how their activity affected their local environment. Students chose to work on projects ranging from park clean-ups to salvaging and restoring bicycles for urban youth. They presented what they learned (poster session or powerpoint), with an added benefit of enhancing communication skills. These projects got students interested, engaged, and excited about sustainability and using resources more responsibly. This workshop will describe how to implement this project as well as provide time for participants to explore the Global Footprint Network's vast set of ecological and sustainability resources.

Keywords: sustainability, ecological footprint, Global Footprint Network, community engagement, non-majors

© 2019 by Jessica Goldstein

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 http://www.ableweb.org/.

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

Goldstein J. 2019. Teaching principles of sustainability to non-majors through community engagement. Article 32. In: McMahon K, editor. Tested studies for laboratory teaching. Volume 40. Proceedings of the 40th Conference of the Association for Biology Laboratory Education (ABLE). http://www.ableweb.org/volumes/vol-40/?art=32

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.