**BUILDING AN INCLUSIVE BOTANY: THE “*RADICLE*” DREAM**

OVERVIEW

Driven by the national conversation on systemic racism, ongoing inequities, the many recent calls for diversity, equity, and inclusion, and appeals to decolonize science, the paper discussed in this open education resource (OER) uses stories of plants to discuss the history of bias and exclusionary practices in scientific botany, particularly regarding access to scientific spaces, and the exploitation of marginalized peoples. Following a closer look at some of the lesser well-known contributors to the field of botanical science, the authors discuss the many opportunities and challenges presented by the age of information technology as we seek to create a more inclusive botany that recognizes and acknowledges the contributions of historically marginalized groups, including Black and Indigenous communities. We hope this article can be used as a conversation starter to raise awareness, encourage reflection, and promote action toward creating a more equitable and just scientific practice.



 OBJECTIVE

To introduce students to plants that illuminate stories of botanists typically excluded from traditional narratives and explore what it means to reckon with botany’s complex past. Then together (instructor and students), open a space for discussion on ways to move forward to create a more inclusive space.

***Learning Objectives***

After completing this module, students will be able to:

* Know the names and stories of marginalized scientists that have contributed to botanical science.
* Understand ways that scientists are working to increase participation in botanical science.
* Understand how history has shaped botanical science and how science has shaped history.
* Explore the materiality behind science and history, such as herbarium specimens and archives.
* Critically examine the responsibility of scientists and upcoming students, especially in the age of information technology, to avoid perpetuating harm or supporting systems of racism and colonialism.



CLASSROOM MANAGEMENT

Time to complete: 1 -2 hours

The proposed setup for this module is two parts: A) examining plants that tell stories of the effects of unequal access to academia and scientific knowledge, how common names can have a legacy beyond their origin, and how the study of plants has relied on the exploitations of the transatlantic slave trade and the appropriation of Indigenous expertise, followed by B) a set of discussion questions to help students reflect, review, and respond to the call for building an inclusive botany. Instructors could either discuss these two parts over separate class sessions or combine them for a single session.



MATERIALS AND NOTES

In this open education resource (OER) module, you will find:

* *01- A Historical Legacy Held in Plants presentation*
	+ This presentation walks through Figure 1 from the paper.
		- The slides cover ten plants and scientists and are structured to enable students to reflect on who the individuals near the top of the figure might represent.
* *02- Discussion Questions*
	+ The proposed discussion questions are split into three parts, A) Reflection, B) Review, and C) Response.
	+ During the reflection section, we suggest students reflect on their positionality. It may be helpful to demonstrate this for students.
		- Positionality is the disclosure of how a person's racial, gender, class, or other self-identifications, experiences, and privileges, influence how they perceive the world. A discussion about this concept helps students understand the importance of this practice. Identifying and sharing positionality empowers students to recognize that these concepts may be viewed through an unintentionally biased lens. It assists students in recognizing that people with different identities could interpret these concepts in another way.
		- Example of one way to introduce positionality in the classroom:
			* Write the question on the board for the entire class: “What does positionality mean?”
			* Split students into groups of three or four students to discuss what this term could mean. Students will brainstorm and write the words/phrases onto Post-it notes to create a Mind/Brain Map. Students do not put their names on the notes. (15 mins).
			* During this time the instructor(s) will mingle with the groups to get a sense of what students are thinking, offering no judgment or confirmation of their thinking.
			* Students will put the Post-it notes on the whiteboard.
			* As a group, the instructor will work through each note in discussion with the students.
			* If the students understand what positionality is, they can move on to the next section. If not, together with the students a definition will be created.
		- For more information see
			* [Diversity Equity and Inclusion (DEI) Education Tips (Brown, 2022)](https://www.mitemmc.org/monthly-tips/positionality-intersectionality-and-privilege-in-health-professions-education-research/#:~:text=The%20ways%20that%20differences%20in,shaped%20by%20socially%20constructed%20positions)

Feel free to contact us with any questions, requests, or concerns! We would also love to hear from folks using these resources in your classrooms, so please reach out if you do. Our most up-to-date email and affiliations can be found at the ORCID profiles below.

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