

Discussion Guide

Episode 7: Anna Bernardo-Bricker on Global Learning and Engineering Education

About Global Learning

Global learning is the process of diverse people collaboratively analyzing and addressing complex problems that transcend borders (Landorf & Doscher, 2015). Among many student learning outcomes, global learning develops:

- **Global Awareness:** Knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems
- **Global Perspective:** Ability to conduct a multi-perspective analysis of local, global, international, and intercultural problems
- **Global Engagement:** Willingness to engage in local, global, international, and intercultural problem solving

About this Episode

Dr. Anna Bricker is a Senior Instructor in FIU's Department of Civil and Environmental Engineering. On this episode, Anna pulls back the curtain on her process for infusing global learning into an engineering course. She shares the challenges she faces balancing global learning, accreditation standards, and technical education, and she honestly assesses her own development as a global learning faculty member. Anna teaches undergraduate and graduate courses including air pollution and air quality, engineering for global sustainability, two environmental engineering laboratory courses, and an online course on indoor air quality. She is passionate about mentoring and inspiring the next generation and received Mentoring Appreciation Awards from the FIU student chapter of the American Society of Civil Engineers in 2013 and 2017. She earned a Ph.D. degree in Civil Engineering from FIU in 2008, an M.S. in Chemistry from the University of Miami in 1993, and a Licentiate degree in

Chemistry from the Universidad Simón Bolívar, Caracas, Venezuela in 1988.

Suggested Learning Outcomes

Upon reflection, listeners to this episode will be able to:

- Define "rubrics"
- Describe the relationship between systems thinking and global learning
- List critical design questions faculty address when developing global learning courses

Discussion Questions

- How does Bernardo-Bricker weave different disciplinary perspectives into her course, e.g. historical, legal, cultural, and economic?
- What challenges, specific to engineering education, does Bernardo-Bricker face in infusing global learning into her course? How are these similar or different to those faced by faculty in other professional or applied disciplines? What about faculty in the pure sciences, social sciences, and humanities?
- How has Bernardo-Bricker resolved her internal debate as to whether global learning should be infused into a course module vs. the whole course?
- How does Bernardo-Bricker scaffold concepts and technical skills in order to build global awareness?
- What aspects of Bernardo-Bricker's collaborative writing assignments make them effective global learning strategies?
- What strategies does Bernardo-Bricker use to develop students' global perspective?
- What does Bernardo-Bricker mean when she says that global awareness is "awareness of self, first, and of one's position in the world?"

Suggested Activities

- Bernardo-Bricker says that sometimes she can tell by a students' facial expression or question that they have developed an increased global awareness. Have listeners read, "[Teacher Observation in Student Assessment](#)" (Maxwell, 2001) and reflect on the relationship between classroom observation and global learning assessment.
- Bernardo-Bricker says that "groups and teams are very different things." Ask listeners to research the conditions and strategies that enable students to form and function effectively as collaborative teams.
- Challenge listeners to use one of these six "[Tools of a Systems Thinker](#)" to develop a global learning assignment for their course.

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About the Podcast

"Making Global Learning Universal" is a collection of conversations about engaging diverse perspectives, collaboration, and complex problem solving in higher education—on campus, online, in local communities, and abroad. Episodes are posted seasonally. Guests are from a wide variety of institutions, geographies, and areas of teaching, research, and practice. All episodes are accompanied by show notes, transcripts, and discussion guides to enhance global learning professional development, leadership, and teacher preparation.

The podcast is hosted by [Stephanie Doscher](#), Director of Global Learning Initiatives at Florida International University and co-author of *Making Global Learning Universal: Promoting Inclusion and Success for All*.

The "Making Global Learning Universal" podcast is produced through a partnership between Florida International University's Office of Global Learning Initiatives, Media Technology Services, and Disability Resource Center.

Episodes, show notes, transcripts, and discussion guides are available at <http://globallearningpodcast.fiu.edu>.

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Listener recommendations

"Making Global Learning Universal" is always looking for new guests to join the show and interesting topics to cover. [Email us](#) to make a suggestion!

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