

## ICMEE eWorkshop

# 21st Century STEM Learning, Language and Culture (Grades K-12)

**Essential Question:** How can language and culture be used to anchor 21st century STEM learning?

**Guiding Questions:**

- **Unit 1:** How do the Next Generation Science Standards cultivate learning, language development and cultural competency?
- **Unit 2:** Which cross-cutting concepts in science have parallel language conventions? How can they be used to leverage learning?
- **Unit 3:** How can strategies for technical communication be used to promote science learning practices?
- **Unit 4:** How do the core idea criteria statements support interdisciplinary literacy for students?
- **Unit 5:** How can technology be used to enhance language and content literacy for multicultural students?
- **Unit 6:** Answer the Essential Question.

## What is an eWorkshop?

Our eWorkshops are innovative online multi-media resources available free of cost to professional learning communities of educators who wish to collaboratively inquire into and improve their practice with bi/multilingual learners.

eWorkshops are inquiry oriented and are guided by an essential question and a guiding question for each of the six units in an eWorkshop. Each unit follows the same three-part learning cycle that we call *Explore*, *Make-It-Work*, and *Share*. In *Explore* participants spend 30-60 minutes exploring new ideas, content, concepts or perspectives. In *Make-It-Work*, participants are offered a minimum of two designed and completely supported options of how to make the new learning from *Explore* work in an actual classroom context. *Make-It-Work* takes around one hour of a participant’s time and always has a “You Make-It-Work” option, which gives participants the flexibility to design their own approach or tweak one of the options we offered. Finally, participants *Share* their learning either in our online space (a threaded discussion) or Face-toFace. Share usually takes 30-60 minutes of a participant’s time meaning that completing the three-part learning cycle of each unit takes about three hours. eWorkshop participants who complete all six units can receive a certificate of completion as well as use their work towards a course that will earn them one graduate level credit at the University of Nebraska Lincoln. To learn more about our eWorkshops, please visit: <https://cehs.unl.edu/icmee/>