



ICMEE

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ICMEE eWorkshop

Math Numbers and Operations (Grades K-2)

Essential Question: How can mainstream elementary teachers purposefully plan and deliver mathematics instruction that combines rigorous mathematics content with attention to language development and learning strategies?

Guiding Questions:

- **Unit 1:** What do I need to know about numbers and operations as described in the Common Core State Standards to be an effective teacher of multilingual students?
- **Unit 2:** How do I support multilingual learners at different language proficiency levels in learning about numbers, operations and algebraic thinking?
- **Unit 3:** What is the language of numbers, operations, and algebraic thinking that multilingual students need to know?
- **Unit 4:** What strategies can I use to assess what my multilingual students know about numbers, operations, and algebraic thinking?
- **Unit 5:** How can I help my multilingual learners make connections outside of the classroom on numbers, operations, and algebraic thinking?
- **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/>



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