

## eCALLMS 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 eCALLMS eWorkshop?

eCALLMS eWorkshops have been designed as innovative and interactive multimedia resources for professional learning communities to collaboratively engage with. All of the eWorkshops seek to support improved classroom practices for teachers across grade levels and content areas as they work with bilingual students. The eWorkshops are flexible in that they can be started at any time convenient for the group taking them and they are either very low cost or free (where grant funding is available). Upon successful completion of the eWorkshop, participants may receive a certificate of completion documenting 12 professional development contact hours.

The 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 about 30 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-to-Face. Share usually takes around 30 minutes of a participant's time meaning that completing the three-part learning cycle of each unit takes about two hours.

**NOTE:** The eCALLMS project officially ended in August 2016. The work on these eWorkshops is continuing with the ICMEE project out of the University of Nebraska Lincoln. Please see <http://cehs.unl.edu/icmee/> for more information or to enroll.

