



Course Overview

This course is part two of a two course series on Mastering Language for Career and College Readiness, focusing on Elementary Mathematics. While part one of the series focused on reading and speaking the language of mathematics, this course builds on those concepts and places an emphasis on constructive conversations and writing in math. Learners must take the first part of the series (ELL108.1) before enrolling in this course.

The Common Core State Standards for Mathematics are notable for raising the rigor of student language demands during math instruction. Students are expected to understand complex problems, engage in constructive classroom conversations about math, and clearly support their reasoning with evidence.

In this course, teachers will be provided with a range of practical tools for gathering and analyzing language samples that show how students learn and what support they need in elementary math classrooms. These tools can support formative assessment and instructional planning. Focal topics in this course include developing students' language for engaging in the eight Common Core mathematical practices, fostering constructive conversations, and communicating evidence and reasoning. This course will also enable teachers to collaborate with other educators and build professional relationships that result in an online community focused on improving students' abilities to use rich academic language to learn and show learning of mathematical skills and concepts.

While the course is intended specifically for those who teach English learners and students with disabilities, the content of this course is equally applicable to teaching all students who are challenged by the academic uses of language in math instruction.

Course Goals:

- Better understand the role and types of language in mathematics learning
- Become familiar with how Common Core Math Practices are involved in developing fluency in the language of math
- Learn how to assess students' uses of language in order to provide appropriate mathematics instruction
- Develop teacher practices and instructional activities that foster students' mathematical language in two areas: constructive conversations and writing
- Collaborate with and learn from other mathematics educators to build an online community focused on language in math learning

Throughout the course, opportunities are provided for you to connect your learning across sessions and to explicitly consider the implications of your learning for your classroom practice.

Goals & Purpose

Session 1 – Constructive Conversations in Math

- Observe and analyze math conversations between students in order to gain insight into how student-to-student conversations can be powerful ways to develop language thinking skills and content understanding
- Recognize the features and skills of constructive math conversations
- Take steps to design instruction that improves students' math conversation skills.

Session 2 – Writing with the Language of Math

- Recognize the cognitive processes and linguistic processes involved in developing writing skills in the math classroom
- Identify a particular area/aspect of the language of math upon which to focus and cultivate expertise
- Share learnings and insights regarding course learnings with team members through presentations that can be shared with colleagues
- Build math educator education skills and identify next steps for working together as an online community.

Throughout the course, opportunities are provided for teachers to connect their learning across sessions and to explicitly consider the implications of that learning for classroom practice. Teachers will also be able to revisit their work and reflections by viewing their individual Course Portfolios.