



DSD Teaching & Learning

# ELEMENTARY MATH ENDORSEMENT PROGRAM

Are you looking to develop your teaching practice and content knowledge in math? Earn your elementary math endorsement! Tuition is sponsored by Davis School District and is free to Davis School District Educators\*. This program consists of 6 courses over the span of 2 years. These classes are typically held once a week for 3 hours after school from 4:15-7:15. Applicants are asked to commit to the full program and make arrangements to be available in order to apply.

Program benefits include:

- Free tuition for DSD employees\*
- Earn 18 graduate-level credits from Weber State University (3 credits per course completed)
- Instructors include Weber State University faculty members and other math instruction experts
- Develop math pedagogy and math content knowledge

\* Cohort members must purchase their own textbooks and pay a \$40 registration fee to WSU per course. Non-DSD employees pay \$350 to the Teaching and Learning department per course.

Numbers & Operations

Spring 2019

Rational Numbers &  
Proportional Reasoning

Summer 2019

Data Analysis &  
Problem Solving

Fall 2019

Algebraic Reasoning

Spring 2020

Assessment &  
Interventions

Summer 2020

Geometry &  
Measurement

Fall 2020

For more information contact

Margo Hammond

[mhammond@dsdmail.net](mailto:mhammond@dsdmail.net)

801-402-5251

# Elementary Mathematics Endorsement Course Overview for Teaching K-8

## Numbers and Operations (Spring 2019)

*Dates & time: Thursdays, January 10 - April 18, 4:30-7:20*

*Location: TBD*

Develop a comprehensive understanding of our number system and relate its structure to computation, arithmetic, algebra, and problem solving. Course topics will include number, number sense, computation, and estimation through a coordinated program of activities that develop number concepts and skills. Special attention in this course will be given to how children learn and connect the fundamental concepts of number systems, children's developmental trajectories in the mathematical content of number and operations, how children construct their understanding of various number systems and arithmetic, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Standards for Mathematical Practice.

## Rational Numbers and Proportional Reasoning (Summer 2019)

*Dates & time: twice weekly (days TBD), April 30-June 13, 4:30-7:20*

*Location: TBD*

To provide practicing teachers a deeper understanding of rational numbers, operations with rational numbers, and proportionality, and instructional strategies to facilitate the instruction of this content for elementary students.

## Data Analysis and Problem-Solving (Fall 2019)

*Dates, times, and location TBD.*

This course will develop a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions orally to the whole class, and write up detailed solutions. This course will also provide practicing teachers a deeper understanding of probability and data representation and analysis. Special attention in this course will be given to children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Standards for Mathematical Standards.

## Algebraic Reasoning (Spring 2020)

*Dates, times, and location TBD.*

To provide practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students.

## Assessment and Intervention (Summer 2020)

*Dates, times, and location TBD.*

To provide practicing teachers a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. Teachers will learn to screen students for mathematics problems or potential mathematics problems, diagnose students' mathematics strengths and needs, and monitor students' progress to ensure students will make optimal progress in mathematics. Teachers will also learn procedures for managing and analyzing assessment data.

## Geometry and Measurement (Fall 2020)

*Dates, times, and location TBD.*

To provide practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to how children learn and connect the fundamental concepts of geometry and measurement, children's developmental trajectories in this mathematical content, how children construct their understanding of various geometric concepts, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Standards for Mathematical Practice.