



Landscapes of Learning Mathematics: Professional Development for NYS Master Teachers, P-8 Teachers, Coaches & Supervisors

The Western Region of the New York State Master Teacher Program is excited to offer our sequence of courses in the mathematical landscapes of learning series that focuses on the big ideas, strategies, and models related to the development of understanding of fractions across the elementary and middle school grades. The content will be situated within a landscape of learning framework¹ that is based on the premise that student's mathematical thinking develops in a multitude of ways beginning with contexts or concrete tasks followed by pictorial representations and culminating in abstract perspectives. Exploration of NYS Next Generation Standard strands across the grade levels will provide opportunities for participants to share their grade level expertise and to enhance their understanding of the coherent development of topics along the K – 8 spectrum. Each participant will receive a CTLE certificate for 12 hours of professional development. First-time participants will also receive a set of six dry-erase boards (24x32) for small group work presentation.

This minicourse will meet for two weeks on Tuesdays and Thursdays at Buffalo State, from 5:00 - 8:00 PM. We will provide food so please join us at 4:30 before the session begins to allow time to eat.

Landscapes III: Reasoning with Fractions Science and Mathematics Complex 259

**October 15, 17, 22, 24
4:30 PM - 8:00 PM**

The content in Landscapes I & II will be the basis for development of ideas central to the focus of Landscapes III. That said, new participants are welcome! We will build on previous work with multiplication and division as we explore changes to traditional instruction on fractions that were a central focus in the Common Core standards. For example, we will explore the conception of fractions as measures, unit fractions as building blocks for fractions and whole numbers through the processes of partitioning and iterating, and the conceptual underpinnings of fraction arithmetic. We will also examine how models such as number bonds, ratio tables, bar models and area models naturally extend from whole numbers to fractions.

There is no cost for this workshop! The workshop is open to all P-8 teachers, coaches, and administrators/supervisors as well as NYS Master Teachers.

Seating is limited so please register soon at

<https://wnymasterteachers.wufoo.com/forms/rtvfigc11bjiba/>

**Questions? Please contact the Western Region of the
NYS Master Teacher Program at msmt@buffalostate.edu**

¹ The landscape model is based on the work of Catherine Fosnot as documented in her *Young Mathematicians at Work* series.