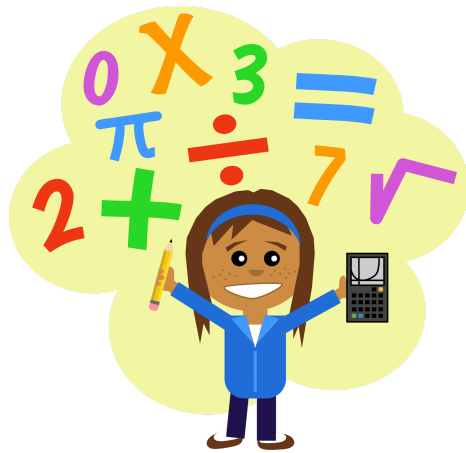


STUDENT ACHIEVEMENT PARTNERS

Building Educator Content Knowledge: Dig into important fraction concepts to increase student achievement



October 15 – November 26, 2019

Registration:

<http://bit.ly/SAP-math-course>

Questions? Please email us minicourses@studentsachieve.net

What do teachers need to understand about fractions to ensure student success in math through high school?

How were you taught fractions in elementary school? Most likely, the way you learned doesn't reflect today's college- and career-ready standards, and what research shows to be the most powerful way to set students up for future success in math.

Fractions are important! One of the more noticeable shifts in college- and career-ready standards was emphasizing how fractions fit into the larger number system. Traditional curricula and instruction, and even current aligned curricula, fail to communicate one of the most critical points about fractions: fractions are numbers. Research has consistently shown the downstream impacts for students of this fundamental oversight in curriculum and instruction. Many students struggle in middle school and high school because of their lack of understanding of basic fraction concepts. To help all students be successful, educators need to relearn fractions!

Format: This will be a virtual learning experience that includes:

- Four units of learning that are each approximately 3-hours in length and can be completed over 6 weeks.
- Opportunities to practice what you're learning with hands-on application through weekly homework.
- Opportunities for collaborative work (feedback, sharing, and discussion).

Who Should Attend: This course would be fabulous to build fraction content knowledge of teachers, instructional coaches, math specialists, and leaders of professional learning. The focus of the course will be on fraction concepts in elementary grades 1 through 5.

Virtual PLC Objectives: In this virtual, self-paced course, we will unpack the definition of a fraction and think about how powerful understanding fractions and how they are built out of unit fractions can be for teachers and their students. Participants in this course will have the opportunity to:

- Learn about fraction concepts.
- Think about the standards and progression of learning in grades 1 through 5 that leads students to math success.
- Do math in order to uncover important ideas.
- Analyze student thinking of the important fraction concepts.

Materials Needed: Computer with internet access.

Platform: Moodle (more information to come).

Participation Certificate: A certificate for 12 hours of professional learning will be given for successful completion of the course.

SAP Facilitator: Jennie Beltramini, Mathematics Specialist, Professional Learning Team

Building Educator Content Knowledge Virtual Math Course Schedule

In this virtual course, participants will complete 4 units of learning across 6 weeks. Each unit will take about 3 hours of time to complete. The course is self-paced, however participants will need to finish the first 2 units by the end of the third week of the course. There will be a pre-assessment due before participants begin the first unit and a post-assessment due after completion of the fourth unit.

Dates	Unit	Content	Components
Oct 15 to Nov 4	One	Understanding fractions as numbers	In each unit, participants will engage in: <ul style="list-style-type: none"> • content learning • interactive tasks • application of knowledge • discussion and reflection
	Two	Reasoning about the value of fractions	
Nov 5 to 26	Three	Comparing fractions; reasoning about magnitude	
	Four	Reasoning about equivalence	