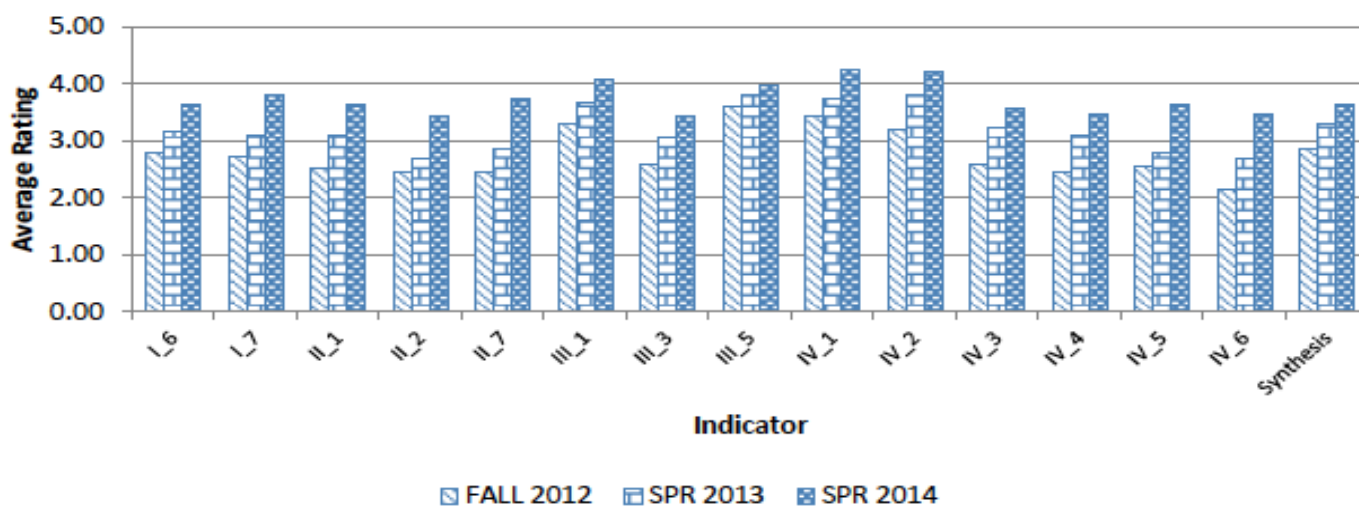


**Change in RAMP-A Teachers' Classroom Practice by Indicator  
(N = 25)**



**A Newsletter for RAMP-A administrators**

**August 2014**

## RAMP-A is making a difference!

As the project leaders of the Riverpoint Advanced Mathematics Partnership – Algebra (RAMP-A) we feel very honored to work with the teachers in this project; they exude professionalism for their teaching, deep caring for their students, and enthusiasm for their own, their colleagues', and their students' learning. These dispositions support the goals of RAMP-A, which are to improve teachers' mathematical knowledge for teaching and pedagogical content knowledge used in teaching the Algebra 1 Common Core State Standards (CCSS), to improve teachers' instructional strategies, their understanding of and ability to teach the Standards for Mathematical Practice, increase principals' and assistant principals' ability to support improved mathematics instruction, and increase students' motivation and interest in mathematics. As required by the funding agencies, OSPI and WSAC, the project includes an external evaluator who collects and analyzes data on our progress toward the goals of the grant. Her analyses and reports have been very helpful to us as we plan the third year. We would be happy to send administrators copies of her most recent report upon request, which shows that teachers are growing in their mathematical knowledge and

pedagogical content knowledge, and are improving their instructional strategies.

Jackie, Janet, Kris, Hyung Sook, and Erik

The graph above shows teacher improvement along several criteria: I Lesson Design, II Implementation, III Math content, and IV Classroom culture. A comparison of the fall and spring Year 1 classroom observation data indicate that teachers were already starting to exhibit important changes in their classroom practices. The change from fall to spring was both statistically and practically significant. The most important gain made by teachers was in fostering a climate of respect for students' ideas, questions, and contributions.

## Year 3 Workshops

So that teachers are not out of their classrooms as much in Year 3 as in Years 1 and 2, we will have 4 one-and-a-half day workshops, each on a Friday and half a Saturday, instead of 6 Friday workshops.

The dates for all teachers are:

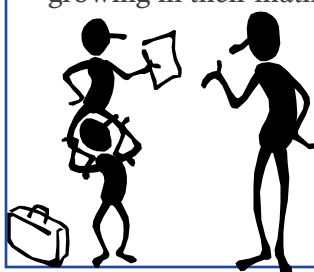
September 26-27

February 2-3

May 1-2

For Spokane School teachers: Oct. 10 and Nov. 15

For teachers in all other districts: Nov. 14-15.



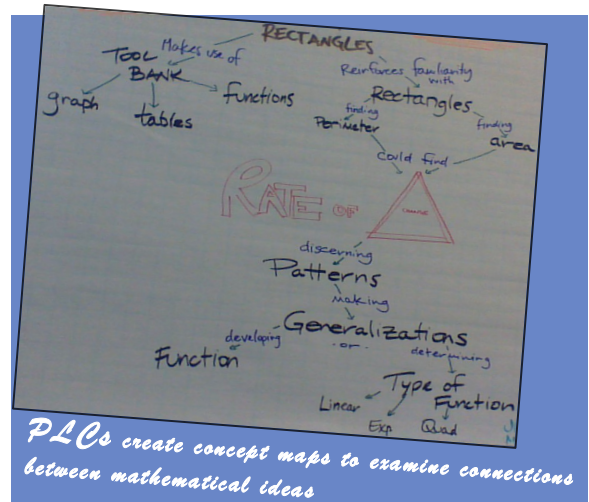
# Year 3 Focus

In the first two years, RAMP-A focused on helping teachers understand the CCSS in depth and develop understanding of how their teaching could support students' coherent learning. Teachers worked in school-based PLCs to plan lessons and implement tasks in their own classrooms in order to connect their learning to their students' learning; they designed formative assessment tools, and examined student work together. They planned and implemented the use of math tasks in ways that support students' use of the standards for mathematical practices. Activities focused on the integration of the coherence of the mathematics and of student learning.

In Year 3, we continue deepening our understanding of the CCSS, the standards for mathematical practices, and how teaching practices can support students' deep and coherent learning of mathematics.

A key activity of the project involves teachers making small changes to their instruction, then reflecting on and sharing how their changes affected student learning and motivation. We continue a 'changes' approach in Year 3, and hope you will talk to your RAMP-A teachers about their changes. In particular, RAMP-A administrators can support their teachers by:

- Meeting with their department or PLC several times a year to learn about needs and challenges, teachers' ideas and goals, or to actively participate in exploring needs, finding solutions, and implementing actions.
- Providing collaborative time for teachers to work together.
- Observing their classrooms and providing individual feedback.
- Encouraging teachers to take risks.
- Providing resources so teachers can learn and implement new ideas.



## RAMP-A is an MSP

The Math Science Partnership (MSP) program is designed to improve the content knowledge of teachers and the performance of students in the areas of mathematics and science by encouraging states, Higher Education, and K-12 to participate in programs that:

- Improve and upgrade the status and stature of mathematics and science teaching by encouraging IHEs to improve mathematics and science teacher education;
- Focus on the education of mathematics and science teachers as a career-long process;
- Bring mathematics and science teachers together with scientists, mathematicians, and engineers to improve their teaching skills; and
- Provide summer institutes and ongoing professional development for teachers to improve their knowledge and teaching skills.

Intersections Student work 2

A line with slope 5 passes through the vertex of this parabola. Does it intersect the parabola in another point (other than the vertex)? If so, find the point of intersection. If not, explain why.

x	line	y	u
-2	-1	-1	0
-1	4	0	3
0	9	3	8
1	14	8	15
2	19	15	24
3	24	24	33

will intersect again at (3, 24)

$$y = (x+1)(x+3)$$

$$(y+1) = 5(x+2)$$

$$y+1 = 5x+10$$

$$y = 5x+9$$

$$(x+1)(x+3) = 5x+9$$

$$x^2+3x+1x+3 = 5x+9$$

$$x^2+4x+3 = 5x+9$$

$$x^2-4x-3 = 5x+9-3$$

$$x^2-4x-3 = 5x+6$$

$$\sqrt{x^2-4x-3} = \sqrt{5x+6}$$

Now, think of all possible lines that pass through the vertex of this parabola. Which lines intersect the parabola again at another point and which ones do not? Explain.

The 2014-15 school year is the last year of RAMP-A funded by the grant, but the work is expected to be sustained by teachers and administrators.

As we progress through this last year, we will provide specific ideas and information that should help administrators further support teacher learning and student success.

The picture on the left shows one of the rich tasks teachers planned and implemented in their classrooms.