

Coach John Wooden's thoughts on improving his teaching skills:

"When you improve a little each day, eventually big things occur...Not tomorrow, not the next day, but eventually a big gain is made. Don't look for the big, quick improvement. Seek the small improvement one day at a time. That's the only way it happens - and when it happens, it lasts." (p. 143) In *Wooden: A lifetime of observations and reflections on and off the court* by Wooden & Jamison (1997)

RAMP-A

An (interactive) Newsletter for RAMP-A Administrators

Fall 2014

Modeling good teaching with adaptive PD

The key shifts in the Common Core State Standards (CCSS) from previous standards are *focus*, *coherence*, and *rigor*, along with *mathematical practices* all students should acquire. As we've worked with teachers to increase understanding of the standards, we have focused on understanding them in light of the shifts. For example, in response to data early in the project, many of our activities have focused on developing teachers' awareness of and strategies of how to use students' prior knowledge when teaching new ideas to create coherent development of the standard. We continue to use data to identify how to support teachers' deeper understandings of the shifts and strategies to apply them in their classrooms.

In addition to bringing intuitions, experiences, and prior knowledge, students bring important natural tendencies such as noticing, generalizing, and creativity that are at the heart of the human activity of mathematics. The Standards for Mathematical Practices (SMP) describe proficiencies of students who have honed these tendencies to develop understandings and procedural fluency in mathematics. Project teachers have been working on improving their own understandings of the SMP and how to help students develop them.

Jackie, Janet, Kris, Hyung Sook, and Erik

Helping Parents understand the shifts

Jo Boaler, a Mathematics Education Professor at Stanford University has a 20-minute YouTube video for parents explaining why the US needs the Common Core State Standards. The video can be found at:

<http://youcubed.org/parents/2014/why-we-need-common-core-math/#more-37>

Boaler also wrote *What's Math Got To Do With It?* a book that gives ideas on how to help children love math.

Are your teachers making changes?

Hiebert (2013) describes three reasons why mathematics teaching has been so hard to change:

- 1) There has been a lack of agreement on well-defined learning goals for students.
- 2) Policy-makers and researchers assume *teachers* and *teaching* are synonymous, which leads to focusing on teacher characteristics rather than specific skills and knowledge used in teaching.
- 3) Mathematics teaching is a cultural activity, shaped by and reinforced by culture to remain the same even though new expectations for student learning requires new teaching strategies.

Hiebert explains that implementing the CCSS is a step in the right direction for agreement on well-defined learning goals; that good teaching can be learned if teachers slow down to study their teaching and students' learning; and, we strive to understand the systemic and cultural forces keeping us from making the changes we need to make to improve learning.

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. The remaining dates and places are:

- Oct. 10 (Spokane PS only: Water Resource Center)
- Nov. 14 (all other schools only: Water Resource Center)
- Nov. 15 (Everyone: Riverpoint SAC 241)
- February 6-7 (Everyone: TBA)
- May 1-2 (Everyone: TBA)
- Summer Institute: June 23-25 (NEWESD Conference Center).

Sustainability and Scale

When thinking about sustaining the benefits realized from our PD efforts, we need to think both about sustaining the changes in instruction that were started during the PD, but also about sustaining the professional learning. Here are a few questions we are thinking about, and would like you, as our partners, to think about:

How could the TPEP be used to support improved teaching?

How do we help teachers at an impasse when they don't think the new ideas will work in their classroom or with particular classrooms of students?

Why do some teachers continue implementing the changes, while others go back to previous practices?

How much time is spent on teacher learning in their buildings?

Does the whole math department see and own the problem of struggling learners, or is this just the problem of the few teachers tasked with teaching struggling learners? (Finding solutions to the problems of motivating and teaching students challenged by difficulties with mathematics or motivation will also help all students!)

High quality PD is not enough – going to scale with improved teaching and learning requires aligning the entire system. We must:

- Have a good sense of where we are trying to go,
- Understand the current system in relation to that vision,
- Use strategic leadership to move the system forward,
- Develop human resources for scaling up,
- Develop infrastructure for scaling up,
- Create a system for maintaining quality in scaling up

We must be collaborative, patient, persistent, and reflective. As Wooden indicated, we need to improve a little each day.

PLCs

For their RAMP-A homework, teachers were expected to use a Ten-Minute Talk in their classrooms and then discuss within their PLCs how students responded to the Ten-Minute Talk. You might want to ask your RAMP-A teachers if you can observe and talk about a Ten-Minute Talk with them, and offer to take notes and give feedback on what you observed.

How teachers have discussions in their PLCs can make a big difference to their learning. In general, their conversations need to include teaching, mathematics, and student learning. For example, if they only talk about how to teach mathematics, they are missing the key idea of how students may be learning the mathematics. For an excellent description of how collaborative activities like planning and looking at data can be deepened to support professional learning and support teacher talk within PLCs, see Lani Horn's 24-minute video at <https://www.youtube.com/watch?v=-X3KvkTY-bA>)

In this video Horn shows strong and weak examples of planning, and of looking at performance data. She also provides suggestions for facilitating to improve teacher discussion in PLCs.

Six RAMP-A schools received a STEM-PD grant! In 2013 Washington STEM launched a program called STEM-PD to address the challenge of ensuring all teachers receive high-quality professional development. Through STEM-PD, pilot schools have been exploring ways to use technology to give teachers an array of professional learning experiences, experiences that are often lacking or insufficient in most PD plans due to logistical or financial constraints. The technology being used allows teachers to take ownership of their professional development. It offers opportunities to watch models of best practices, record and watch videos for self-reflection, and receive personalized feedback. In addition, the technology enables job-embedded real-time coaching. The result is rapid implementation of new teaching practices.

Washington STEM is accepting applications to give 8 more schools this opportunity!