## RAMP-A

## Continuing to improve

 our teaching and learning togetherJanuary 28, 2016


Figure 1. Average EOC-Algebra scale scores of high school students of RAMP-A teachers and students in comparable schools in spring 2012 and spring 2015.

The state and nation continue to experience a shortage of middle and high school mathematics teachers. Do you have a few students who you think might students who you think might
make good math teachers? Let them know!

Discuss the attributes of a good math teacher with your colleagues (caring about other students, open to learning in new ways, open to to learning in new ways, open to
exploring mathematical ideas,..?). Janet (WSU) and I (EWU) would be happy to talk to students who might be interested in becoming teachers and have them sit in on a class. If you have a few students interested, we can come talk to your class. (caring about other students,

## Recruit Your Students to Become Math Teachers!

## Final Analysis Shows Difference!

As we observed you, worked with you, and saw your passion for kids, we knew that you made a difference in their lives in very important ways. Now, we know that you also made a difference in their mathematics achievement. The external evaluator for RAMP-A, Dr. Cathleen Kennedy, reported, "Analyses of the spring 2012 and 2015 state EOC-1 assessment data indicate a beneficial impact of the program on students of RAMP-A high school teachers. As illustrated in Figure 1, in spring 2015 students of RAMP-A teachers in seven participating high schools (the solid blue line) achieved a higher average scale score than the average scale scores of the seven comparison schools (the small-dashed green line). In spring 2012, before the RAMP-A program launched, the average EOC-1 scale score was 401 points in the RAMP-A schools and 405 points in the matched comparison schools. In spring 2015, the average for students of the same RAMP-A teachers was 426 and the average of the students in the comparison schools was 409. In 2012, comparison students performed better than treatment students, with an effect size (Cohen's $d$ using pooled standard deviation) of $d=-0.09(p=.052)$. By the end of the project, in 2015, treatment students performed better than comparison students, with an effect size of $d=0.33$ ( $\mathrm{p}<.01$ )." Note that middle school students were not included in the analysis because they did not take the EOC 1 in 2015, so there was no comparison data.

## A few more tasks have been added to the RAMP-A website at https://sites.ewu.edu/jcoomes/

# West Valley Uses IXL Math By Christine Scully <br> "The students really like certain aspects, such as the immediate feedback." 

We've been trying out IXL Math (www.ixl.com/math/) in our LAP class. IXL is an online practice website where students login and select topics to practice ranging from Kindergarten to Pre-Calculus.

One benefit of it has been the ability to monitor student progress both in a "Live View" as they work and later. In Live View, the program alerts the teacher to students who currently need extra help. This has been great, because the students don't realize why we stop by and ask how they're doing, just that we happened to stop by when they were struggling.

Students work toward a score of 100 gaining points as they
get correct answers. If they get an incorrect answer, they get a thorough explanation of the mistake and lose a few points.

In addition to using it as extra practice in LAP math, we've used it for students to practice for retakes. For example, I had students in my class reach a score of 80 on each concept to do the retake. The first student who used it finished the practice and nailed a 3 (meeting standard) on her quiz! The students find it frustrating, but in a good way! We've been hearing phrases like, "Well, I'm never going to make that mistake again!"

We haven't been using it for very long, but it seems like it's going to be great! It is

## Flipping the Classroom By Autumn Carper

The idea of a flipped classroom enticed me for years, but the logistics of it were too intimidating to actually try it. Then, just days before the Great Windstorm of 2015, I got a link to an article spouting its benefits from my colleague (and fellow RAMP alum) Sarah Hokonson. With some extra time off to do research and meet up, we decided to give it a shot in the Algebra class that we co-teach. Now instead of taking notes in class, for homework students watch and take notes on videos that I create and upload to youtube. This frees up much more time in class to practice, apply, collaborate, and get help on the content. Most students have been very positive about the change. All it takes is a little more planning ahead, a good microphone headset, the record function on my Smartboard, and a youtube account. If this is something you're interested in trying or learning more about, I would love to talk to you about it! Feel free to email me at autumnc@spokaneschools.org or check out any of the videos I've made by looking up my channel (under Autumn Carper) on youtube.

