Using Reading Apprenticeship & Metacognition in a Math Class

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1. **Using RA in a Basic Skills Math class**
* Idea #1: Use RA techniques on everything – especially the textbook. (Heidi uses Think Alouds AND Talk to the Text at the same time…) GOAL: increase student agency and autonomy
* Idea #2: Start with a Personal MATH History (Heidi does Best Class EVER vs. Class From HELL!)
* Idea #3: use Graphic Organizers
* Idea #4: Hands-on learning and Interactive Textbooks
1. **Using RA in a Math class that is specifically for English language learners**
* Idea #1: Using Talk to the Text and Think Alouds to help solve story problems – Barbara’s worksheet
* Idea #2: Math version of an RA Bookmark
* Idea #3: Note taking – changing up the Graphic Organizer for English language learners
* Idea #4: Learning Math Terminology & Applying It To Reading Story Problems Correctly in English
* Idea #5: Defining Question Words in Multiple Languages for Use With Level 1 ESOL Students
1. **Ways METACOGNITION can be incorporated into a math class for increased student success!**
* Idea #1: Some ideas count twice!
	+ Best Class EVER vs. Class From HELL
	+ Personal Math History
	+ Reflection and Proof in the interactive Textbook…
* Idea #2: Brainteasers – get students thinking about HOW they got the correct answer, not just what that answer is…
* Idea #3: Talk about Self-Talk
* Idea #4: Quotes on the syllabus
	+ There is no such thing as a “perfect” learner. There is no such thing as a student who “gets” every subject the first time through...Every student, no matter how bright or how motivated, struggles now and then.
		- * Salman Khan
	+ Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.
		- * Albert Einstein
	+ The “Man in the Arena” Quote from Theodore Roosevelt

Some GREAT Resources that you may or may not have already heard of…

1. Pinterest, especially for interactive textbooks. Seriously…it should count as continuing education credits… You can follow Heidi Sheneberger on it, too. ☺
2. The One World School House by Salman Khan, founder of Khan Academy, ©2012
3. Mindset by Carol Dweck, Ph.D., ©2006
4. Reading For Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms by Ruth Schoenbach, Cynthia Greenleaf, and Lynn Murphy, ©2012
5. Daring Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent, and Lead by Brené Brown, ©2015

