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## **Speaking Points**

Alignment of Content to Texas Standards Professional Development **Rigor and Critical Thinking** Instructional Materials in the Classroom **Open Educational Resources** 

### Alignment of Content to Texas Standards







#### Side-by-Side TEKS Comparison

	Rinewfordge and Skill Statument/Student Expectation (an adopted in 2017)	Shallont Expectation including Original "Such As" Mahaman
(7)	Number and operations. The shadned applies mathematikal process shadards to represent and compare whete manifers and another kand inferencings related to place value. The student to separated to:	
(2)(1)	represent a number on a subtler line as being between here consecutive multiples of 20, 300, 1,000, or \$10,000 and use works to describe relative size of numbers to order to round where multiples, and	responsed, a insertiget pill a namber free so being between her consequences where mail places of 125, 1000; 10,000; or 161,000 and see words such as "since of "so and set," "so allocate" are "so marks" to describe relative since of number; on dender to round whole tombers, and
00	Aumber and operations. The student applies mathematical process standards to represent and explain fractional units. The student is expected to:	and the second se
11861	solver problems invations partitioning an object or a set of infjects, among face of more recipients using partition representations of fractions, with despinionators of 2, 3, 4, 6, and 8,	where parallelines involving parallelining an industry of a set of objects among fails or more receptories using parallelining responses balances of its actions with Secularizations of 2, k. 4, h, and 8 month or their charteness than the matching
ciciare)	compare two fractions having the same transmission or decommentary or problems by reasoning about their sizes and pathway the conclusion using symbols, workly, objects, and pathway the	compare two functions starting the second proof there also a deconvention in problems (and problems, secrets, elseries, and participant the construction using problems, enorthy, elseries, and participant economic scales are compared to a secret a provide proceeding a caracter for in departy among from proops of expendit proceeding as caracter for departy among from proops of expendit among more provide.
(4)	Number and operations. The student spotes reatherhood process standards to develop and use strategies and methods for whole number compositions in order to lober professing with efficiency. The inducts is expected to	and the subscription of th
14803	determine a quartered using the relationship between multiplication and duration; and	Browning attain and division such as the goritant of ell a Brown the found by detainments what for the readers 42 allows wurtighted to X, and

TEKS with "Such As" Statements



Interactive Mathematics Glossary

## **Professional Development**

- Clarify standards
- Model practices
- Provide sample resources





Educators build anchor charts to understand strands within the mathematics TEKS.

## **Professional Development**



Professional Development has dramatically changed from one week in August, one day in October and February, to responsive, on-going, mentoring and support from Instructional Leaders including Content Coaches.

> Quality Professional Development mirrors quality classroom instruction.

## Professional Development

- 1. Did the **professional learning experience** build capacity for critical thinking **in lesson design**?
- 2. Did the **professional learning experience** develop new lines of inquiry?
- 3. Are there opportunities for **teachers** to make their thinking visible?
- 4. Are there opportunities to broaden the perspective of the conversation with authentic audiences from around the world?
- 5. Is there an opportunity for **teachers** to create a contribution (purposeful work)?
- 6. Does the **professional learning experience** demo "best in the world" examples of content and skill?

Adapted from *Transformational 6* by Alan November bit.ly/transformational6

## **Rigor and Critical Thinking**

## Rich Tasks:

- Low Floor, High Ceiling
- Mathematical Discourse
- Authentic Experience
- Use tools, organize ideas, analyze relationships, and other process standards

### Instructional Materials in the Classroom

Educators have access to limitless resources. We provide clarity and build capacity so they may create and curate quality content for their students.



## TASA on iTunes U

62 course resource collections Free of charge to Texas educators

## TASA on iTunes U: Course Resource Collections

designed to foster creativity, collaboration and critical thinking skills in an engaging, digitally rich learning



### TASA on iTunes U: Course Resource Collections





## 8 Mathematics Teaching Practices

- Establish mathematics goals to focus learning.
- Implement tasks that promote reasoning and problem solving.
- Use and connect mathematical representations.
- Facilitate meaningful mathematical discourse.
- Pose purposeful questions.
- Build procedural fluency from conceptual understanding.
- Support productive struggle in learning mathematics.
- Elicit and use evidence of student thinking.

## Next Five Years

- Provide clarity to a vision of high quality teaching and learning
- Support local school districts as they work to interpret and organize the Texas standards into a manageable curriculum
- Consider emphasis on the 8 Mathematical Teaching Practices