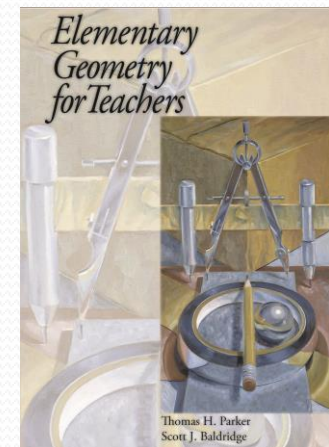
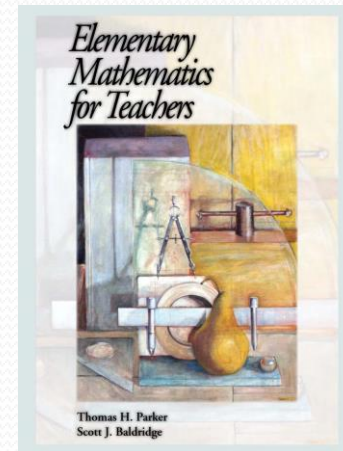


Teacher Preparation at LSU and how it helped in Designing a PK-12 Curriculum

Scott Baldridge
Associate Professor of Mathematics
Lead Author and Mathematician, Eureka Math
Louisiana State University

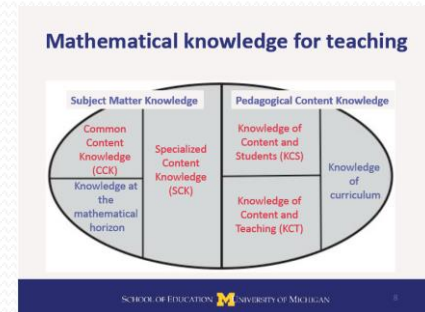
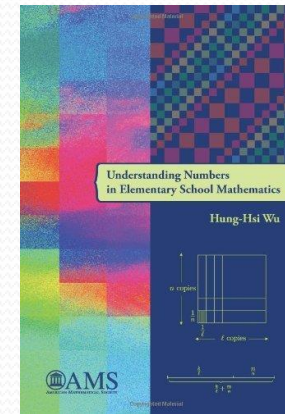
We Embedded Self-Study Professional Development into the K-12 Curriculum Based Upon What We Learned from:

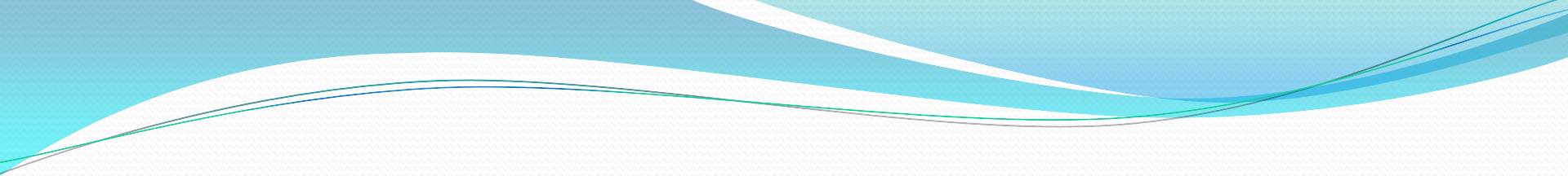
- LSU Math 1201: Elementary Mathematics for Teachers
by S.B. and Thomas Parker
- LSU Math 1202: Elementary Geometry for Teachers
by S.B. and Thomas Parker



We Embedded Self-Study Professional Development into the K-12 Curriculum Based Upon What We Learned from:

- Understanding Numbers in Elementary School Mathematics
by Hung-Hsi Wu (and his website)
- Mathematical Knowledge for Teaching
Deborah Ball and Hyman Bass
- Still many, many others...





Why?

A Story of Units, Ratios, and Functions

- Please write this web address down!

www.engageNY.org/mathematics

- It contains a complete*, free, online PK-12 mathematics curriculum
- The commercial version is called *Eureka Math* and is available at CommonCore.org

Designed “Baked” into the Curriculum to help Teachers Develop PCK/MKT:

- Definitions and Descriptions

“Latin” term: *School Mathematics Definitions*

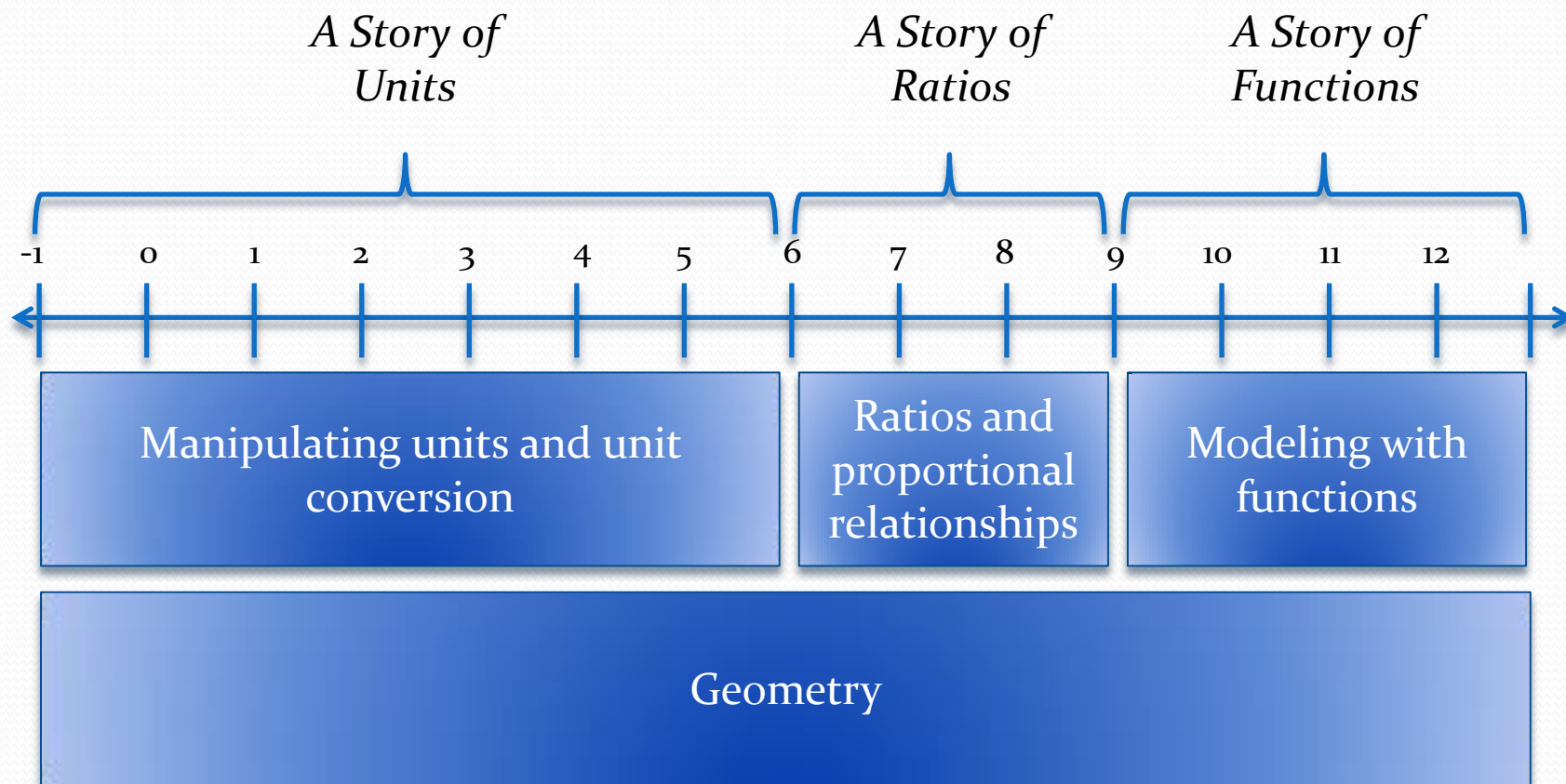
- Basic Facts

“Latin” term: *Axioms and Theorems*

- What terms does a given term inherit?

“Latin” term: *Object Oriented School Mathematics*

A Story of Units, Ratios, and Functions



What teachers see in the curriculum that helps them develop PCK/MKT:

- Small Number of Models
 - “Latin” term: *Geometric Figures*
- Emersion in a Story
 - “Latin” term: *Coherence*
- Teacher Vignettes (PK-5) and Question/Response (6-12)
 - “Latin” word: *Standards for Mathematical Practice*

What teachers see in the curriculum that helps them develop PCK/MKT:

- Teaching Sequences

“Latin” term: *Progressions for CCSS in Mathematics*

- Teacher’s Solutions

- “Latin” term: *Classroom Artifacts*

