

Overview of Mathematics Standards Development

TEXAS: 2010 – 2014

JANE F. SCHIELACK

TEXAS A&M UNIVERSITY

I. Groundwork for Change

Commissioner's Mathematics Advisory Group created in Fall 2010

(13 mathematics educators and mathematicians from Texas)

Charge:

Make recommendations for next generation of mathematics standards in Texas

Commissioner's Draft of the Texas Mathematics Standards reviewed by a National Review Committee and published in April 2011

II. State Board of Education Involvement

Mathematics Expert Reviewers identified in January 2011

(mix of 7 in-state and out-of-state mathematicians and mathematics educators)

Charge:

Review Commissioner's Draft for input to TEKS Review Committee

Review First Draft of Revised TEKS to provide feedback to TEKS Review Committee

IIIa. Revision of the Standards

TEKS Review Committees identified by State Board in May 2011

K-2: 1 univ., 5 teachers, 7 district admin, 2 others; 14/15 SBOE districts

3-5: 0 univ., 2 teachers, 12 district admin, 1 other; 13/15 SBOE districts

6-8: 1 univ., 8 teachers, 4 district admin, 2 other; 14/15 SBOE districts

9-12: 3 univ., 17 teachers, 12 district admin, 10 other; 14/15 SBOE districts

Charge:

Revise current TEKS to next-generation of standards using:

- Commissioner's Draft and Experts' comments

- NCTM Focal Points (K-8) and Focus in High School Mathematics

- Current research in mathematics learning

IIIb. Revision of the Standards

Timeline: 11 months

May 2011: 3 day meeting (Members then sought input from local groups.)

July 2011: 5 day meeting (major writing effort)

October 2011: 3 day meeting (including vertical alignment)

Responsibilities:

Identification of strands

Grade placement of standards

Vertical alignment (formation of topic groups)

Validation as College and Career Ready

IV. Adoption and Implementation

Review by assessment group at state education agency

Review by state education agency for college and career readiness

First reading at State Board, January 2012

Second Reading and Adoption, April 2012

K-8 implemented Fall 2014;

9-12 implemented Fall 2015 if materials available

V. Support for Implementation

Creation of five-year professional development plan, made concurrently with standards revision

Design and implementation of PD for new standards including:

- Side-by-side comparison, current standards to new standards

- Identification of

 - What's new in a grade

 - What's moved to another grade

 - What has been totally removed

VI. Issues that WILL Arise

Staying within the timeline

Managing vertical integration

Making decisions such as:

- How to include mathematical thinking in the standards

- To what extent to include instructional guidance/examples

- How to connect to assessment (both formative and summative)

VII. Suggestions for Improvement

Specific targets for committees, but flexible process to achieve targets

Grade level bands that enhance vertical alignment:

- PreK-1, if there is a PreK

- Grades 2 – 4 (Or K – Grade 4, if no PreK)

- Grades 5 – 8

- Grades 9 – 12

SMALL working groups to produce the writing with input from and feedback to the larger committees