Framework to Compare Two Mathematics Textbooks

Huntley, M. A. (2008). A framework for analyzing differences across mathematics curricula. *Journal of Mathematics Education Leadership*, 10(2), 10-17.

CURRICULUM INFORMATION

Title *What is the title of the curriculum?*

Grades What is the target grade range of the curriculum?

Authors

Who are the authors of the curriculum?

Publisher (Year)

What is the name of the publisher of the curriculum and in what year was it published?

Ancillary Materials

What ancillary materials are provided by the publisher?

Context

What was the funding source for the materials? To what extent do the materials align with the NCTM Standards?

CONTENT VARIABLES

Characteristics Unique to *Curriculum 1*

Common Characteristics

Characteristics Unique to *Curriculum 2*

Structural Organization

What are the physical features of the curriculum (e.g., number of units/modules per grade, softcover/hardcover)

Depth/Breadth of Content

Is depth or breadth of mathematical content emphasized and how does this play out (e.g., "layer-cake"/spiral/integrated approach)?

Presentation of Content

How is content presented (e.g., to what extent do students practice problems similar to worked-out examples vs. engage in a sequence of exploratory tasks; to what extent are problems set in realworld contexts)?

Worked-Out Examples *What is the extent of worked-out examples?*

Definitions/Rules

What is the extent of definitions/rules? Where are they located (e.g., embedded in the text, glossary)?

INSTRUCTIONAL VARIABLES Characteristics Unique to Curriculum 1 Common Characteristics Characteristics Unique to Curriculum 2 Instructional Model What, if any, instructional model is explicitly articulated by the curriculum authors? What is the role of direct instruction? Use of Class Time What is a typical lesson like (e.g., to what extent do students explore content, watch the teacher demonstrate procedures, work on computational practice during class time)? Teacher's Role What is the role of the teacher during classroom intention (e.g., to the teacher during classroom)

What is the role of the teacher during classroom instruction (e.g., what extent of scaffolding does the teacher provide)?

Students' Role What is the role of students during classroom instruction?

Use of Small Group Work

To what extent do students work in groups?

Use of Tools

To what extent are students expected to use manipulatives and technology?

Assessment

What are major features of assessment (e.g., forms of assessment, formal/informal, self/peer)?

Homework

What is the frequency and role of homework (e.g., to practice newly-learned material, to review previously-learned material)?