Books and Articles List

The following list of resources provides a starting point to support your development of learning progressions and unit level progressions.

- *Adding it Up* explores how students in pre-K through eighth grade learn various mathematics topics.

  Download it, or read online for free at http://www.nap.edu/catalog.php?record_id=9822.

- *Developing Essential Understandings* book series is published by the National Council of Teachers of Mathematics (NCTM) (http:// www.nctm.org). Each book provides an overview of a mathematics topic and examines the big ideas and related essential understandings.

  See complete list of available resources at http://www.nctm.org/search/?cp=1&ty=&ky=essential%20understandings&tp=6807&dt=0

- *First Steps Mathematics* is published by the Department of Education Western Australia. Included in the resources are mathematical understandings.

  Portions of the materials can be downloaded or reviewed online for free at http://www.det.wa.edu.au/stepsresources/detcms/navigation/first-steps-mathematics/?oid=MultiPartArticle-id-13603817.

- *How Students Learn* is a teacher-oriented, research-based resource developed by members of the National Research Council's Committee that builds on learning principles discussed by the committee in a previous publication, *How People Learn*.

  The book can be downloaded or read online for free at http://www.nap.edu/openbook.php?record_id=10126.

- *Mathematics Curriculum Topic Study* provides a systematic process and set of tools that links mathematics standards and research to curriculum, instruction, and assessment.

  Additional information about the resource can be found at http://www.curriculumtopicstudy.org/products/mathematics-cts.

- *NCSM Big Ideas Article* was written by Charles Randall and published in the National Council of Supervisors of Mathematics (http://www.mathedleadership.org/) journal in 2005. The paper describes understandings that underlie elementary mathematics, grouping them into categories of big ideas.

  The article can be downloaded at http://www.mathedleadership.org/resources/journalsvol8.html.

- *NCTM Journal Articles* provides numerous articles across K–12 mathematics. With a membership subscription, you can search the online database for topic and grade level specific articles.

The database can be accessed at http://www.nctm.org/publications/default.aspx?id=218.

- *Progressions Documents for the Common Core Mathematics Standards* are narrative documents describing the progression of a topic across a number of grade levels.

  The documents can be downloaded at http://ime.math.arizona.edu/progressions/.

- *Rational Number Project* is a website focused on the teaching and learning of ideas related to rational numbers.

  Links to numerous articles on rational number topics can be found at http://www.cehd.umn.edu/ci/rationalnumberproject/bib_chrono.html.

Keeley, P., & Rose, C. (2006). *Mathematics curriculum: Bridging the gap between standards and practice.* Thousand Oaks, CA: Corwin.

Kilpatrick, J., Swafford, J., & Findell, B. (Ed.). (2001). *Adding it up: Helping children learn mathematics.* Washington, DC: National Academy Press.

National Research Council. (2005). *How students learn: Mathematics in the classroom*. Washington, DC: The National Academies Press.

Charles, R. I. (2005). Big ideas and understandings as the foundation for elementary and middle school mathematics. *NCSM Journal of Mathematics Education Leadership, 8*(1), 9–24.

Rational Number Project. (2002). *Chronological bibliography.* Retrieved from http://www.cehd.umn.edu/ci/rationalnumberproject/bib_chrono.html.