

Math Modeling and Cultural/Community Social Justice Contexts Selected Resources

Major Report:

GAIMME: *Guidelines for Assessment and Instruction in Mathematical Modeling Education, Second Edition*, Sol Garfunkel and Michelle Montgomery, editors, COMAP and SIAM, Philadelphia, 2019.

<https://www.siam.org/Publications/Reports/Detail/Guidelines-for-Assessment-and-Instruction-in-Mathematical-Modeling-Education>

Elementary

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Middle School/High School/Teachers

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MATH MODELING RESOURCE WEBSITES:

Mathematical Modeling with Cultural and Community Contexts (M2C3)

Active NSF research project focused on teaching and learning with math modeling grades 3-5.

<https://sites.google.com/qc.cuny.edu/m2c3/>

Immersion Project:

Elementary math modeling project funded by NSF

<http://nsfimmersion.onmason.com/>

Stepping Stones Modeling Project

<http://www.indiana.edu/~hmathmod/projects.html>

40 modeling projects have been written and tested by high school teachers under the direction of university mathematics and education professors.

CPALMS (Several Modeling Eliciting Activities in various content areas including math, science and STEM)

<http://www.cpalms.org/Public/>

Case Studies for Kids

Purdue Engineering modeling eliciting activities based on the work of Dick Lesh. Problem activities explicitly designed to help middle school students develop conceptual foundations for deeper and higher order ideas in mathematics as well as other disciplines.

<https://engineering.purdue.edu/ENE/Research/SGMM/CASESTUDIESKIDSWEB/resources.htm>