

## Interdisciplinary Mathematics and Science (IMS) Learning in the Primary School

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The Interdisciplinary Mathematics and Science (IMS) project\* (<https://imslearning.org/>) is developing and investigating an approach to mathematics and science learning that implements learning sequences in which students' invention and transformation of representational systems in the two subjects can support deeper learning in each. The guided inquiry pedagogy involves students in epistemic practices that approximate those in the discipline, such that concepts that sit at the intersection of the two disciplines (variation, sampling, symmetry, spatial reasoning) are approached from the distinct perspectives of each. The project is tracking students from Grades 1 to 6 from three school contexts longitudinally over 3 years to investigate conceptual and representational competence. Sequences include motion, ecology, astronomy, data modeling, graphing, variability, measurement and spatial reasoning. The presentation will include examples of the interdisciplinary approach, its affordances, and evidence of enhanced student learning.

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