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## Keywords:

Interdisciplinary Mathematics & Science, Primary School STEM, Students Constructing Representations

## Learning areas:

Mathematics, Science

## Enhancing Learning through Interdisciplinary Mathematics and Science

This workshop will engage teachers in interdisciplinary activity around the mathematics of measurement, variation and data modeling and the science of flight, using the design of paper helicopters as the context.

This primary school sequence was developed within an Australian Research Council project exploring approaches to interdisciplinary mathematics and science where engagement with concepts in each subject are mutually reinforcing. The approach draws on a guided inquiry approach where students construct/invent, evaluate and refine representations drawing on hands-on activities, reflecting key knowledge building processes in each discipline.

We will explore the activities, and unpack the pedagogy, for the learning potential that is opened up, and present a detailed unpacking of

- a. the learning that occurred in the sequence when we ran it in six Grade 2 classes;
- b. the challenges for teachers in aligning this investigative work with the science and mathematics curricula, and
- c. the potential of the activities, and the approach, for interdisciplinary work at different year levels.

We will introduce participants to the resources available on the project website (<u>https://imslearning.org/</u>), for science/mathematics sequences from Grades 1 through 6.