

Designing a Pedagogical Program to Support Spatial Reasoning in the Primary School

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This presentation provides an overview of the development and implementation of a Spatial Reasoning Mathematics Program (SRMP) in Grades 3 to 4, drawn from a larger study of spatial reasoning and mathematics learning*. Classroom teachers are integral to the development and implementation of the SRMP, supported by the project team and professional learning. Key components of the SRMP connect students' experiences of 2-dimensional and 3-dimensional patterns and structures with spatial reasoning tasks. These tasks focus on collinearity, transformation, perspective taking and mapping. Students are assessed on spatial reasoning, general mathematics ability and pattern and structure, as well as tracking of individual profiles of learning. Preliminary findings of the project will be reported.

References

Mulligan, J. T., Woolcott, G., Mitchelmore, M. & Davis, B. (2018). Connecting mathematics learning through spatial reasoning. *Mathematics Education Research Journal*, 30(1), 77-87. <https://doi.org/10.1007/s13394-017-0210>

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