

The development of a spatial reasoning assessment interview in the primary grades

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This presentation provides an overview of the development and trialling of a Spatial Reasoning Assessment interview for Grades 3 to 5, integral to a large study, *Connecting Spatial Reasoning with Mathematics Learning**. The assessment extended the Pattern and Structure Assessment (PASA) interview to items on rotation, partitioning of shapes, recording pathways and perspective taking. Trials were conducted by the research team with two cohorts of Grade 4 students (n=46; n=62) at each of two school schools respectively. Analysis of students' explanations and drawn responses was based on assigning a level of spatial reasoning development that included increasing levels of spatial structuring and conceptual understanding. Preliminary findings of the assessments 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>

*Australian Research Council Discovery Grant No. DP170101588 *Connecting Spatial Reasoning with Mathematics Learning 2017-2019*.