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Creating the conditions for children to persevere in mathematical reasoning.

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Summary: This paper reports on the findings from a small-scale intervention study that explored developing perseverance in mathematical reasoning in children aged 10–11. The interventions provided children with representations that could be used in a provisional way and included opportunities and time to generalise and to form convincing arguments. This enabled the study group to persevere in their mathematical reasoning, from making trials and testing conjectures to forming generalisations and convincing arguments. The children reported pride in their understanding. A tentative framework describing these interactions is proposed.

Classification: C30 C20

Keywords: educational research; research lessons; intervention study; mathematical reasoning; perseverance; affective variables; affective response; cognitive objectives; representation; generalisation; convincing
<http://www.bsrlm.org.uk/IPs/ip35-3/BSRLM-IP-35-3-04.pdf>