ZMATH 2015c.00054

Gibney, Janette

Provoking mathematical thinking: experiences of doing realistic mathematics tasks with adult numeracy teachers.

Adults Learn. Math. 9, No. 2, 97-115, electronic only (2014).

Summary: This action research project looks at what happened when a small group of adult numeracy teachers with widely different experiences of learning and teaching mathematics explored their own informal numeracy practices and undertook a series of collaborative mathematical tasks. Evidence from qualitative data collected during the enquiry suggests that realistic tasks can provoke a range of mathematical thinking and learning responses which allow us to identify ways in which procedural and conceptual thinking is being used, and to track learning journeys through different stages of problem-solving. Although more experienced numeracy teachers could move between and within their 'real worlds' and 'maths worlds' with intent and ease, others had less integrated experiences, often valuing perceived mathematical powers over their own intuitive powers, with mixed success.

Classification: B50 C29 C39 D59 D49
Keywords: adult education; action research; classroom observations; inservice teacher education; experience reports; realistic mathematics tasks; community of inquiry; adult numeracy teachers; teacher characteristics; mathematical ability; mathematical thinking; subject content knowledge; modes of representation; teacher attitudes; awareness raising; plausible estimates; horizontal mathematisation; vertical mathematisation; creating measures; collaborative classroom
http://www.alm-online.net/images/ALM/journals/alm-ij-volume9-2-november2014.pdf