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**Denny, Helen**

**Research into teaching problem solving to primary teacher trainees using Schoenfeld's (1985) timeline.**

Adams, G. (ed.), Proceedings of the British Society for Research into Learning Mathematics (BSRLM). Vol. 35, No. 3. Proceedings of the day conference, University of Reading, UK, November 7, 2015. London: British Society for Research into Learning Mathematics (BSRLM). 25-30 (2016).

Summary: Problem solving is at the forefront of Mathematics Education. PISA results show that pupils in Wales have poor problem solving skills. Problem solving skills need to be taught in schools. Teachers and teacher trainees need to be able to solve problems themselves in order to teach problem solving. This small case study focussed on how problem solving can be taught to undergraduate teacher trainees and what impact it had on their own problem solving. A problem solving course was designed and evaluated. Problem solving skills were analysed, by pre and post investigations, using *A. H. Schoenfeld's* [Mathematical problem solving. Orlando, FL: Academic Press (1985; ME 1986a.01069)] timeline. Problem solving can be taught subject to certain factors e.g. knowledge of heuristics, subject knowledge. The teacher trainees' problem solving skills changed from a novice like approach to an expert like approach with respect to Schoenfeld's [loc. cit.] timelines. This was useful in small group situations depending on whether the students worked co-operatively or collaboratively.

*Classification:* D59

*Keywords:* preservice teacher education; problem solving; educational research; case studies; teacher observations; teacher trainees; Schoenfeld timeline; reading; analysing; exploration; planning; implementation; verification; teacher intervention; group work; collaborative work; cooperation

<http://www.bsrlm.org.uk/IPs/ip35-3/BSRLM-IP-35-3-05.pdf>