Using practical worksheet to record and examine metacognitive strategies in problem solving.

Summary: We adopted A. Brown’s ["Metacognition, executive control, self-regulation and other mysterious mechanics", in: F. Reiner (ed.) and R. Kluwe (ed.), Metacognition, motivation, and understanding. Hillsdale, NJ: Erlbaum. (1987)] conceptualisation of metacognition to examine how student teachers can be taught metacognitive control while solving mathematical problems. In addition, tasks given to these student teachers were in-built with opportunities for them to be aware of the need for metacognition. We describe the use of the practical worksheet as a way to make visible their metacognition, within the context of solving mathematics problems. Findings suggest that the greater awareness of control due to the use of the practical worksheet contributed to the greater employment of control in subsequent problem solving.

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