

Fostering metacognitive skills: A longitudinal cohort study

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In secondary education there is a great deal of attention paid to fostering effective teaching skills, but less focus on the need to help students develop their learning skills. Metacognitive awareness, which is part of self-regulated learning, includes the domains of knowledge of cognition and regulation of cognition (Flavell, 1979). Students with effective metacognitive skills are more aware of their strengths and weaknesses and strive to further improve their learning skills (Bransford, Brown, & Cocking, 1999). Knowing how to learn, as well as how to regulate one's learning, is closely related to academic achievement (Biggs, 1988).

Metacognitive skills generally increase during adolescence, plateau during early adulthood and then decline in older age (Palmer, David, & Fleming, 2014; Weil et al., 2013). Therefore, intentionally fostering, with the aim of raising metacognitive skill levels during the secondary school years, appears essential.

This longitudinal cohort study uses the Junior Metacognitive Awareness Inventory (Jr. MAI) to measure student metacognitive awareness across Years 7 to 10 in a north Queensland girls' Catholic college (Sperling, Howard, Miller, & Murphy, 2002). Each year cohort completes the Jr. MAI to measure their baseline metacognitive awareness levels at the start of the academic year (Sperling et al., 2002). Teachers at the research school undertook a series of professional development interventions to assist them in integrating metacognitive skills coaching into their lessons. It is hypothesised that student metacognitive awareness skills will improve significantly compared to the baseline results of the cohort one year older.

References

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