SELF-REGULATION LEARNING THEORY: THE EFFECTS OF METACOGNITIVE SCAFFOLDING ON STUDENT METACOGNITION AND MOTIVATION

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Australian educational institutions are currently facing a decline in upper secondary science course enrolments and perform one-and-three-quarter school years lower in science compared to higher performing countries (Australian Council for Educational Research [ACER], 2018; Kennedy et al., 2014). Furthermore, increased access to information results in new demands of actively acquiring and adapting existing knowledge more rapidly, which increases the responsibility of educational institutions to promote the development of proactive learners, who practice “self-regulated learning” (OECD, 2003). The Self-Regulated Learning Theory (SRLT) argues that successful learners rely on internal regulatory skills and become self-sufficient through refining and regulating their cognitive, motivational, and metacognitive knowledge (Schraw et al., 2006).

This study investigates successful learning through the SLRT, specifically focusing on Metacognition and Motivation knowledge and practices of senior secondary chemistry students in NSW. Throughout the course of a term, students engage with various data collection instruments (pre- and post-Metacognition and Motivation questionnaire, integrated Metacognitive Scaffolding Interventions in the form of reflection tasks, and post-intervention focus group interviews).

This presentation will outline how Metacognitive Regulation and Motivation change, or stay the same, during a term. It will also give insight into student perceptions of their metacognitive practices and motivations. Finally, it will compare this knowledge with academic performance to consider the influences of cognition on the self-regulation of chemistry students.

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