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From problem posing to posing problems via explicit mediation in grades 4 and 5.

Singer, Florence Mihaela (ed.) et al., Mathematical problem posing. From research to effective practice. New York, NY: Springer (ISBN 978-1-4614-6257-6/hbk; 978-1-4614-6258-3/ebook). Research in Mathematics Education, 195-213 (2014).

Summary: Drawing upon cultural historical activity theory (CHAT) perspectives, in this chapter we portray a classroom practice of problem posing that evolved with a cohort of students across Grades 4 and 5 in Sweden. In line with a language and literacy pedagogy, the classroom practice in which students utilised textbook vocabulary handed out on slips of paper (*lappar* in Swedish) advanced through three distinct stages namely: formulating written questions, problem posing as dyads and actively posing problems to one another. Mediated explicitly by *lappar*, such a practice provided social and public opportunities for students to attribute personal meaning and make conscious use of words in semiotic activity, as well as appropriate cultural meaning and valid norms of use. The increasing gain and display of agency by students in this practice, informed by student(s)-acting-with-*lappar*-as-mediational-means as unit of analysis, was indicative of their self-regulation, volition and independence. Developmental in approach, such classroom practice was born through teacher-researcher collaboration.

Classification: D52 D53 D42 D43 C72 C73

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