

Collaborative productive practice for professional and personal development

Luc P. Beaudoin (2013). Collaborative productive practice for professional and personal development: Socializing a new deliberate practice framework. Learning Together: Engaging the World. Simon Fraser University. (Conference to be held May 17-18, 2013. Surrey, BC.)

Deliberate practice has been shown to be critical to the development of many types of expertise. Yet, in contrast with students and performance experts (such as athletes and musicians), many knowledge workers do not systematically engage in deliberate practice. I propose a framework for *productive practice* (Beaudoin, in preparation). This form of deliberate practice and test-enhanced learning is designed to enable professionals to systematically select and master target knowledge with information technology. This new framework adapts, integrates and applies research on cognitive skill acquisition (Speelman & Kirsner, 2005) (VanLehn, 1996), expertise (Ericsson, Charness, Feltovich, & Hoffman, 2006), long-term working memory (Ericsson & Kintsch, 1995), knowledge-building (Bereiter, 2002), fluid rationality (Stanovich, 2010), information-processing architectures (self-monitoring, internal motivators, virtual machines (Sloman, 2003)), test-enhanced learning (Roediger, Agarwal, Kang, & Marsh, 2010), and affect (Beaudoin & Sloman, 1993; Hawes, 2011; Ortony, Clore, & Collins, 1988). The framework provides practical guidance on how to use a wide variety of existing cognitive tools (e.g., outlining, tagging and PDF applications) to productively master target knowledge and overcome problems of 'transfer' as described by (Bereiter, 1995) (Wagner, 2006). The productive practice framework offers a research-grounded alternative to professionals who increasingly rely on productivity tools and frameworks such as (Allen, 2001) that (a) have neither been proposed, assessed or integrated in cognitive science; and (b) are not directly targeted at professionals' distinctive and pressing needs for *cognitive* productivity.

Consistent with the theme of this conference, together we will explore collaborative requirements, problems and opportunities for productive practice. We will also relate it to reflective practice (Schon, 1982) and deliberate performance (Fadde & Klein, 2010).

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