Generative AI for Multimodal Literacy: Implications for LSP & Learning

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The accessibility of Generative Artificial Intelligence (GenAI) tools has sparked widespread adoption and significant research interest. In this keynote, I draw on findings from my recent studies to explore the implications of GenAI for literacy through the lens of multimodality. I begin by discussing findings from a systematic review of research examining the outcomes and perceptions of teachers and students regarding the use of GenAI for literacy learning. Building on this, I highlight results from a study investigating pre-service teachers' perceptions of GenAI for literacy learning across three educational contexts. These insights are further complemented by another study that examines pre-service teachers' experiences as they engage with GenAI in the context of digital multimodal composing, within a lesson specifically designed to guide and scaffold their use of GenAI. I conclude by discussing preliminary findings from an ongoing study that investigates tertiary students' physiological responses—measured through heart rate variability, skin conductance, and temperature—during online interactions with both an AI chatbot and a human teacher. These responses serve as proxies for affective arousal, interest, and engagement. Synthesising findings across these studies, I reflect on the implications on LSP and learning in the digital age.