## 7 Education as a hope in uncertain times Thessaloniki 22-26 August 2023

## **Learning to Master Writing:** Coping with the Cognitive Demands of Writing Processes

Writing, as a component of literacy, offers possibilities for independent personal development. It allows individuals to acquire knowledge and culture, and corollary to better comprehend the surrounding world and therefore to emancipate from instrumented ideology (Nussbaum, 2012). However, mastering writing requires long and explicit instructions. International and national assessments demonstrate that composing texts remains a challenge for students: more than half of primary and secondary students do not meet the expected proficiency levels in writing (Jiménez, 2018). Designing instructions that foster learning to write is therefore essential.

Writing instructions that are the more efficient rely on development of self-regulation skills (e.g., Graham et al., 2012). Why are such techniques so efficient? In this keynote, I will adopt a cognitive perspective to explain why efficient management of the writing processes is central for skilled writing.

Writing involves many cognitive processes that make heavy demands on working memory. Thus, a common claim in writing research since the 1980s is that writers are cognitively overloaded (Flower & Hayes, 1981). Obviously, this is particularly the case for young students learning to write. However, this also occurs in skilled writers who exhibit high cognitive effort when composing texts. One goal to reach is therefore to minimize the demands that writing places on working memory on the one hand to allow fluent processing (Olive, 2014), and on the second hand for allowing interactions between writing processes in working memory. Such interactions have been shown to be fundamental for efficient and fluent writing (McCutchen, 1988, 2000). In that frame, I will first describe how working memory intervenes during writing. Second, I will address how novice and skilled writers regulate writing processes. Finally, I will describe how executive functions contribute to such regulation (Olive, 2021, 2022; Limpo & Olive, 2021).



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