

Use of Computers in Instruction Article 2

Goldberg, A., Russell, M., & Cook, A. (2003). The effect of computers on student writing: A meta-analysis of studies from 1992 to 2002. *Journal of Technology, Learning, and Assessment*, 2(1) Available from <http://www.jtla.org>

Meta-analyses were performed including 26 studies conducted between 1992–2002 focused on the comparison between K–12 students writing with computers vs. paper-and-pencil. Significant mean effect sizes in favor of computers were found for quantity of writing ($d=.50$, $n=14$) and quality of writing ($d= .41$, $n=15$). Studies focused on revision behaviors between these two writing conditions ($n=6$) revealed mixed results. Others studies collected for the meta-analysis which did not meet the statistical criteria were also reviewed briefly. These articles ($n=35$) indicate that the writing process is more collaborative, iterative, and social in computer classrooms as compared with paper-and-pencil environments. For educational leaders questioning whether computers should be used to help students develop writing skills, the results of the meta-analyses suggest that on average students who use computers when learning to write are not only more engaged and motivated in their writing, but they produce written work that is of greater length and higher quality.