

Hannum, W. H. (2007). When computers teach: A review of the instructional effectiveness of computers. *Educational Technology, 47*(2), 5-13.

While computers are widely used in education, their effectiveness remains in question. Meta-analyses typically show small to moderate effect sizes from computer use while showing larger effect sizes from other instructional variables. This article suggests that using empirically-validated instructional variables will increase the impact from teaching with computers. Adding computers without attention to the design of the instruction produces little gain in learning outcomes.