Does computer-aided instruction improve children's cognitive and non-cognitive skills?

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Abstract

This paper examines the causal effects of computer-aided instruction (CAI) on children's cognitive and noncognitive skills. We ran a class-level clustered randomized controlled trial at five public elementary schools with a total of 1,600 students from G1 through G4 near Phnom Penh, Cambodia. Treatment students scored 0.66 standard deviation higher in IQ than control students over just a three months. After three months, we randomly reassigned students either into treatment or control classes for eight months. After the intervention is over, we find initial gains further boosted for students who were continuously assigned into treatment classes and faded to about one third but still significantly remained for students who were reassigned into control classes. IT is also found that CAI improved noncognitive skills, such as motivation and self-esteem.

Keywords: computer-assisted instruction, cluster-randomized controlled trial, noncognitive skills
JEL classifications: I21, I25, I30

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