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Research Update
Center for Technology in Learning

Preschool Use of Educational Video and Games Prepares Low-Income Children for Kindergarten

Low-income children were better prepared for success in kindergarten when their preschool teachers incorporated educational video and games from public media into their lessons. A new study commissioned by the Corporation for Public Broadcasting and conducted jointly by the Education Development Center and CTL researchers at SRI International found that preschool children's literacy skills—knowing letter names and sounds, and understanding basic concepts about stories and printed words—increased when their teachers incorporated video and games. Teachers in 80 preschool classes in New York City and San Francisco added a special curriculum that included active video viewing and hands-on play with letters, sounds, and books.

Children with the most to learn in the study gained the most, learning an average of 7.5 more letters than children in a comparison group during the brief, intensive curriculum. This research was conducted as part of the evaluation of the Corporation for Public Broadcasting's Ready to Learn initiative. Learn more about the study and check out the article, "Pre-K Lessons Linked to TV Produce Gains in Literacy, Study Says" in *Education Week.*

SRI Studying the Effectiveness of Online Learning for K-12 Students

SRI is conducting a coordinated set of experiments and quasi-experiments that examine the effectiveness of online learning for secondary school students. Online learning, an approach that uses the Internet to deliver instruction, is a growing phenomenon in the US and around the world. The set of studies underway at SRI address a need for better understanding the effectiveness of online learning, particularly for K-12 students. A recent meta-analysis of the online learning literature conducted by SRI for the U.S. Department of Education found that very few rigorous studies examine K-12 student learning online. The study also found that online instruction results in student learning outcomes that are not only just as good as those of conventional face-to-face instruction but in fact slightly better. However, the lack of studies including K-12 students makes it difficult to generalize these findings to K-12 populations.

Evaluation of Evidence-Based Practices in Online Learning

CTL Highlights:

- SRI researchers have contributed to a series of research notes on technology in the mathematics classroom that have become the most utilized research resource on the Texas Instruments education web site.

- Microsoft <u>announced</u> a new multinational program of Innovative Teaching and Learning (ITL) Research led by SRI. In ITL Research, a team of international collaborators will explore the factors that support successful innovation in teaching and learning around the world.

- Learn how technology enables collaborative learning of mathematics in the new journal article "<u>Scaffolding group explanation and feedback with handheld technology: impact on students' mathematics learning.</u>"

- CTL launched its Technical Report Series with "<u>Some Economic Consequences of Improving Mathematics Performance.</u>" CTL staff partnered with leading economic researchers Henry M. Levin and Clive R. Belfield to produce the report, which examines how improving mathematics performance has economic consequences through raising high school graduation rates.

Don't Miss Our June Research Update Featuring Principled Science Assessment Design for Students With Disabilities

<u>Learn</u> more about SRI projects designing and developing large-scale science and mathematics items that reflect the principles of universal design for learning (UDL) in our June issue. These UDL-infused items are for use with general education students, students with high incidence disabilities and those with significant cognitive disabilities.

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