In collaboration with a middle school in St. George, Utah, researchers investigated the benefits of computer-assisted instruction (CAI) for 6th and 7th grade students enrolled in remedial reading classes. In addition to receiving daily instructions with a strong phonics-based reading curriculum, students in the treatment classes also participated in a CAI program called Strategies for Older Students (Lexia Learning Systems, 2001). The program develops phonological analysis and phonics skills for older, struggling readers. Students in the treatment classes used the Lexia Strategies for Older Students as part of their reading instruction, and were compared to students in a control class taught by the same teacher using the same curriculum but without additional support from the Lexia program. All students were pre- and post-tested with selected subtests from the Woodcock-Johnson III Tests of Achievement. In general, students in the treatment classes showed greater gains on various measures of reading than students in the control class. In particular, students in the treatment group showed significantly larger gains in the area of word attack skills. The gains in word attack skills were most pronounced for students in the treatment classes with the lowest pretest scores. These results show that a skills-based CAI program can boost decoding for struggling readers in middle school.

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