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Improving the Vocabulary of Children with Hearing Loss

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The goal of this study was to test the effectiveness of a Language Wizard/Player with Baldi, a computer-animated tutor, for teaching new vocabulary items to children with a hearing loss. Eight students with hearing loss, between the ages of 6 and 10, were tested and trained for about 20–30 minutes a day, 2 days a week for about 10 weeks on three categories of eight words each. The design of the experiment was based on a within-student multiple baseline design in which all three categories of words were continuously being tested while one of the categories was being trained. Knowledge of the words remained negligible without training and learning occurred fairly quickly for all words once training began, reaching asymptotic levels in each category. Knowledge of the trained words did not degrade after training once these words ended and training on other words took place. Finally, retention was nearly perfect, as indicated by a reassessment test 4 weeks after the experiment.

Introduction

The purpose of this study was to test the effectiveness of a Language Wizard/Player with Baldi, a computer-animated tutor (Bosseler & Massaro, 2003; Massaro, 2002) for teaching new vocabulary items to children with hearing loss. It is well known that children with hearing loss have significant deficits in both spoken and written vocabulary knowledge (Breslaw, Griffiths, Wood, & Howarth, 1981; Holt, Traxler, & Allen, 1997). One reason is that these children tend not to overhear other conversations because of their limited hearing and are thus shut off from an opportunity to learn vocabulary. The children with hearing loss often do not have names for specific things and

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