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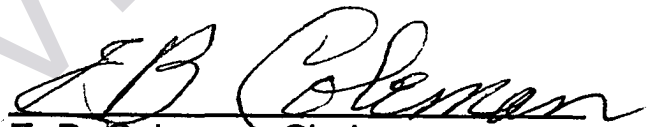
PREVIEW

**REDUCING THE LAG BETWEEN  
SPEECH AND LITERACY**

**TAE SAN CHOI**

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APPROVED:



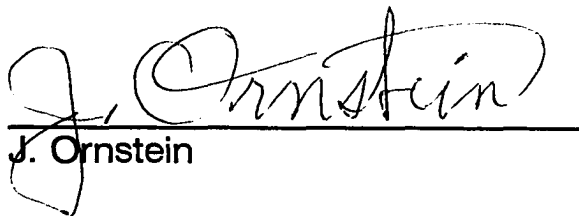
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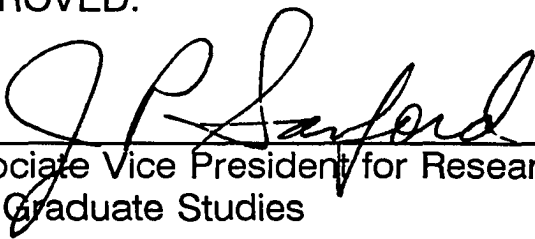


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**REDUCING THE LAG BETWEEN  
SPEECH AND LITERACY**

**by**

**TAE SAN CHOI**

**THESIS**

**Presented to the Faculty of the Graduate School**

**The University of Texas at El Paso**

**in Partial Fulfillment**

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**MASTER OF ARTS**

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PREVIEW

This thesis was submitted to the committee on July 5, 1993.

## **ABSTRACT**

This thesis is one in a series wherein the long-range objective is to produce materials that will reduce (or eliminate) the 3- to 5-year lag between speech and literacy. Babies teach themselves spoken language spontaneously. There are no biological reasons why they should be unable to teach themselves visual printed language at much the same age. Previous studies have begun to create a stair-case of reading materials engineered to match children's developing language competencies. These materials teach each reading concept with a set of exemplars of near-minimal size. This is accomplished for the first concept -- that different printed configurations signal different meanings -- with a pictography of ionic words like "egg" whose configurations chance to look like what they mean. The strategy is applied in turn to each concept in the hierarchy of reading concepts. By the level of narrative concepts, facilitation has accumulated to the point that it is possible for children to read meaningful stories on the first day of instruction.

Further facilitation is added by a videogame keyboard that applies the principle that makes it possible for bright Korean children to learn their phonics in a single day, namely, visual dimensions of the to-be-learned printed language are set parallel to articulatory dimensions of the already-familiar spoken language. In Experiment 1, twenty 3- to 4-year old children were taken up this staircase of materials. In Experiment 2, a single 4½-year-old girl is being taught with the organized keyboard.

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