

## ABSTRACT

Ways in which students' understanding of printed text can be facilitated by the incorporation of computer technology in the delivery of comprehension instruction and practice.

Astra Lois Babb

This dissertation examined the efficacy of incorporating computer technology into students' comprehension of printed text. The purpose of the investigation was to explore whether the metacognitive strategies of two protocols, namely, "Questioning the Author's" Modelling and Queries, incorporated with computer technology would facilitate students' ability to comprehend printed text.

The methodology employed to gather data in this study included classroom observation, Queries, Modelling and computer technology. The study represented further work on the research undertaken by Beck, McKeown, Hamilton & Kukan (1991) and it has implications for teacher training as well as for students who experience difficulty with reading comprehension. The sample for this study included an experimental and a control group and both of these groups were instructed with Queries and Modelling. However, the experimental group received further treatment with a computer software which I designed. This independent variable contained glosses, sound, graphics and hyperlinks designed to enhance reading comprehension.

The findings indicated that the incorporation of computer technology into reading instruction had a positive effect on the experimental group's comprehension of printed text. In addition, the results of a paired sample t-test indicated that within the experimental and control groups there is a pre-test/post-test difference between the performances of both of these groups and that the significance is less than .05. The experimental group performed better in the post-test than in the pre-test,  $p=.01$ . Similarly, the control group performed better in the post-test than in the pre-test,  $p=.037$  but the performance of the experimental group was better than the performance of the control group. Based on these results the Null Hypothesis is rejected and the Alternative Hypothesis accepted.

**Keywords:** Astra Lois Babb; Questioning the Author; Queries; Modelling; Comprehension; Computer Technology.