Experimental evaluation of a virtual program for training in reading for comprehension (E-PELS)

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Abstract

Introduction. The objective of this article is to present the results from the experimental evaluation of a training program in reading for comprehension, consisting of a set of learning strategies and supported by a software application called e-PELS© (Programa Virtual de Entrenamiento en Lectura Significativa - Virtual Training Program in Reading for Comprehension).

Method. The evaluation was carried out through an experimental design with control and experimental groups, both randomly formed. These groups comprised 4th grade elementary students who presented reading comprehension difficulties. The hypothesis subjected to experimental procedure stated that the students who participated (experimental group) in the training program e-PELS would dominate the learning strategies and would significantly improve their reading comprehension competencies, in contrast to those students that did not participate in this training program (control group). The experimental procedure consisted of a pretest and a postest to measure student reading comprehension level in both groups. For this purpose we applied a standardised test for Chilean students, called CLP (Complejidad Linguistica Progresiva- Progressive Linguistic Complexity). Students from the experimental group participated in the training program e-PELS, consisting of 11 two-hour sessions, twice a week, at the School’s computer lab.

Results. Experimental results confirmed the hypothesis; students that participated in e-PELS mastered the learning strategies included in this training programme and significantly improved their reading comprehension level as compared to the control group.

Discussion. Results also show that e-PELS constitutes a concrete, effective, replicable, scalable and low-cost solution that aids the main agent in the formative, learning process—the student—with challenges involved in his/her particular knowledge construction process.

Keywords: Comprehensive reading, learning strategy, experiential learning, cognitive ability, interactive graphic organizer.

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