LEE COMPRENSIVA*MENTE* instructional programme: a follow up study

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LEE COMPRENSIVA*MENTE*

INTRODUCTION

Reading is a complex activity, one that involves a range of different skills, processes and types of knowledge (Cain 2010). Reading Comprehension (RC) is the main goal of reading and it involves searching for literal information, making inferences, knowledge and use of text structure, monitoring comprehension and vocabulary aimed at constructing a coherent and integrated representation of text meaning (Oakhill & Cain 2006-2010-2011)

In previous researches, Jane Oakhill and Kate Cain (2007) found that there are three higher level skills and abilities associated with meaning construction that might be causally implicated in general reading comprehension:

• **Inference making:** is the process of going beyond the explicit information to make links between different parts of the text or between the text and general knowledge. The reader is left to fill in details that are not explicitly stated, either by integrating statements within the text or by incorporating general knowledge with textual information (Oakhill & Cain 2007).

• **Comprehension Monitoring:** it is a person's ability to evaluate their comprehension, for example checking whether or not a text makes sense, and to take action if comprehension fails, for instance looking back, re-reading or generating an inference (Cain 2010).

• **Knowledge and use of Text Structure:** knowledge about how the ideas in a text are related is important for constructing a representation of a text´s meaning. Good comprehenders will base their understanding on this knowledge and this will help them to integrate the meaning of the different sentences and construct a meaning-based representation of the text.

An instructional programme in Spanish (Programa LEE Comprensivamente, Gottheil, et als, 2011) was developed based mainly on the findings of the mentioned research (Oakhill & Cain 2007) and its goal was to teach reading comprehension explicitly.

PURPOSE

1) To follow up the effects of the instructional programme in Spanish, six months after it was finished,

2) To measure if benefits persisted over time.

3) To investigate this persistence in each skill: general RC, searching for literal information, monitoring comprehension, inference making and understanding text structure.

Main focus was to follow up:

• the performance on general RC

• the outcomes of higher level specific components of RC developed and trained in the instructional programme

• to evaluate the impact of those skills in general RC measures, if any.

METHOD

PARTICIPANTS:

Two whole class parallel groups were tested (8- 9 years old) 21 children in the control group (CG) and 28 children in the intervention group (IG). Each child was individually tested following schools´ and parents´ written consent. There were no significant differences between both groups when comparing socio economical aspects and parent educational levels.
IG had been previously identified as poor comprehenders.

DESIGN:

A three time period assessment was designed: RC skills were compared in Pre-test Time1(T1); Post test after instruction period, Time 2(T2); and Follow up, Time 3 (T3).
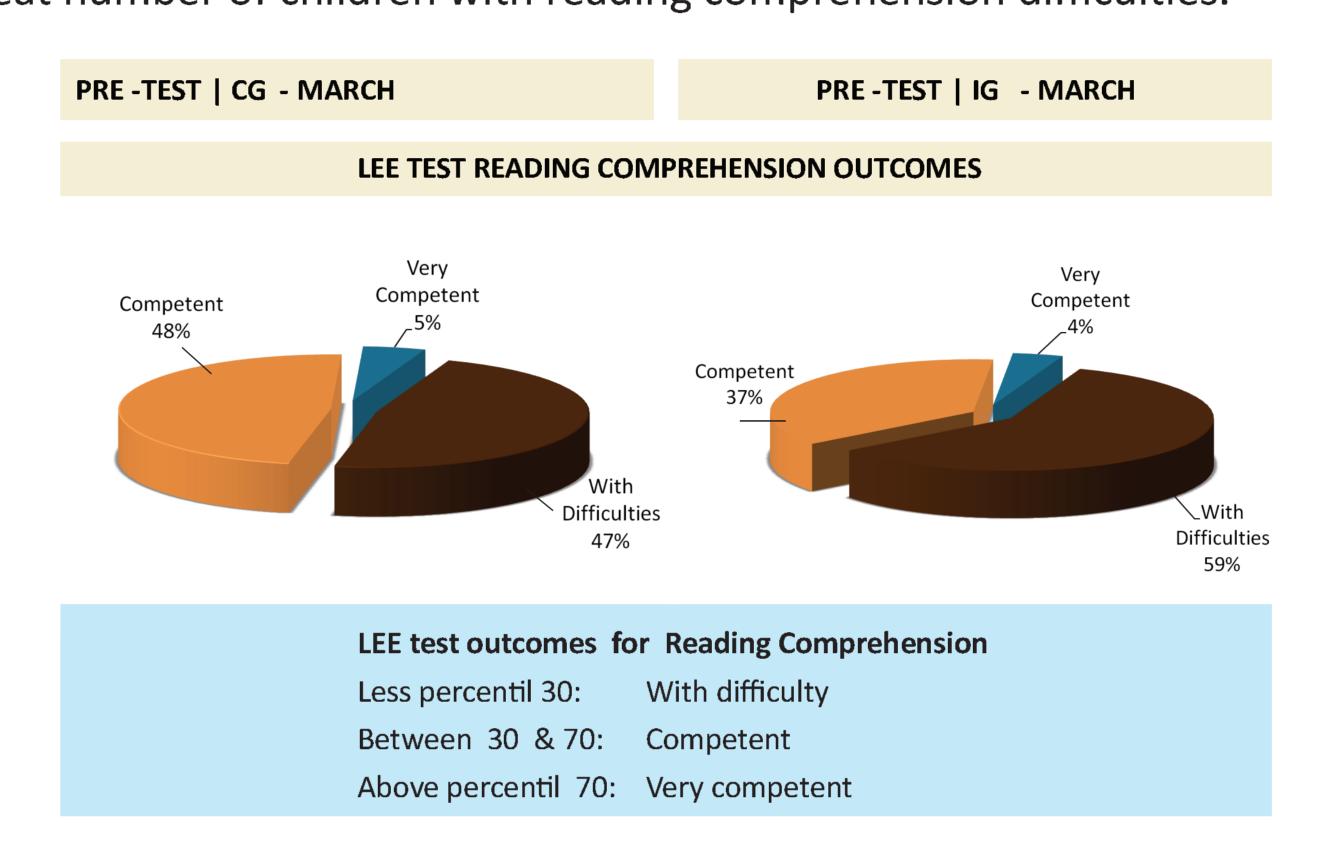
THE FOLLOWING RC SKILLS WERE COMPARED:

* General reading comprehension
* Searching for literal information
* Inference making
* Recognizing text structure and construction of meaning-based representation (main ideas, title, summary)
* Comprehension monitoring (measured through back to text strategy).

4th GRADE

CONTROL GROUP N= 21 — INTERVENTION GROUP N= 28

T 1 MARCH 2012 — T 2 JUNE 2012 — T 3 NOVEMBER 2012

PRE-TEST → POST-TEST → FOLLOW-UP

2 month Intervention — 6 months later

TIME 1(T1) PRETEST

There were no significant differences between the intervention (IG) and the control group (CG) in most of the measures applied: Verbal General Ability (Comprehension, Information, Vocabulary and Similarities from WISC III), Raven Matrices and Listening Span Test. Although IG had a great number of children with reading comprehension difficulties.
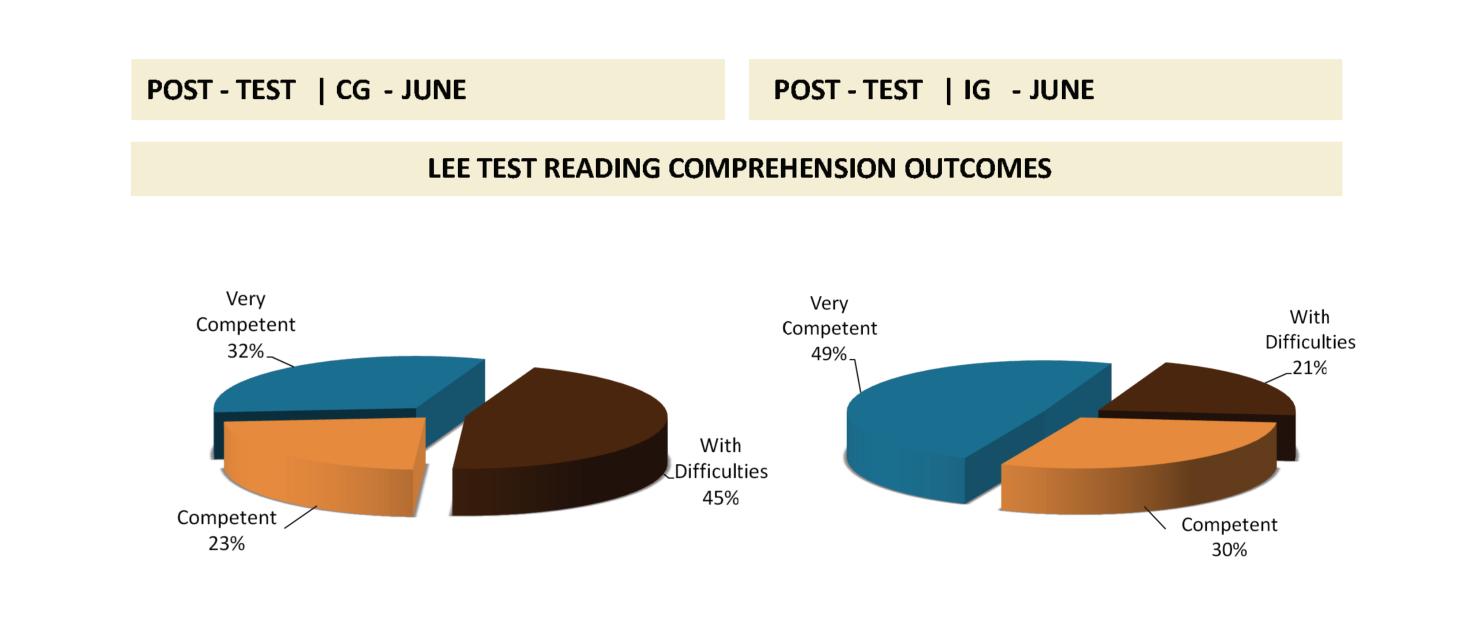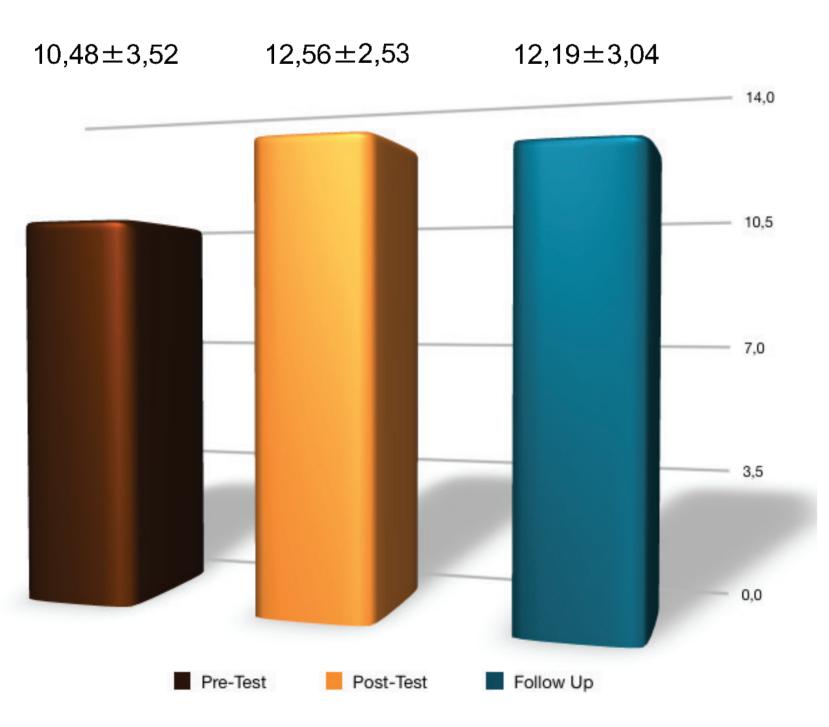
PRE-TEST CG - MARCH — PRE-TEST IG - MARCH

LEE TEST READING COMPREHENSION OUTCOMES

CG: Competent 48%, Very Competent 5%, With Difficulties 47%
IG: Competent 37%, Very Competent 4%, With Difficulties 59%

LEE test outcomes for Reading Comprehension
Less percentil 30: With difficulty
Between 30 & 70: Competent
Above percentil 70: Very competent

INSTRUCTIONAL PROGRAMME:
Intensive training, during 8 weeks, twice a week, 80 minutes each session. Each student worked on his own programme, two experts in RC taught the programme and the teacher of the group, previously trained in the theoretical framework, stayed in the classroom to share and continue with her training.

TIME 2 (T2) POST TEST:

Immediately after finishing the programme, children were tested again (WISC III –Vocabulary, LEE test Reading Comprehension and monitoring comprehension).

POST - TEST CG - JUNE — POST - TEST IG - JUNE

LEE TEST READING COMPREHENSION OUTCOMES

CG: Very Competent 32%, Competent 23%, With Difficulties 45%
IG: Very Competent 49%, Competent 30%, With Difficulties 21%

TIME 3 (T3) FOLLOW UP:

Six months after the instructional programme had finished, the IG was evaluated again in RC skills in order to compare their performance between Time 1, Time 2 and T3. In this occasion another LEE test text was used.

RESULTS

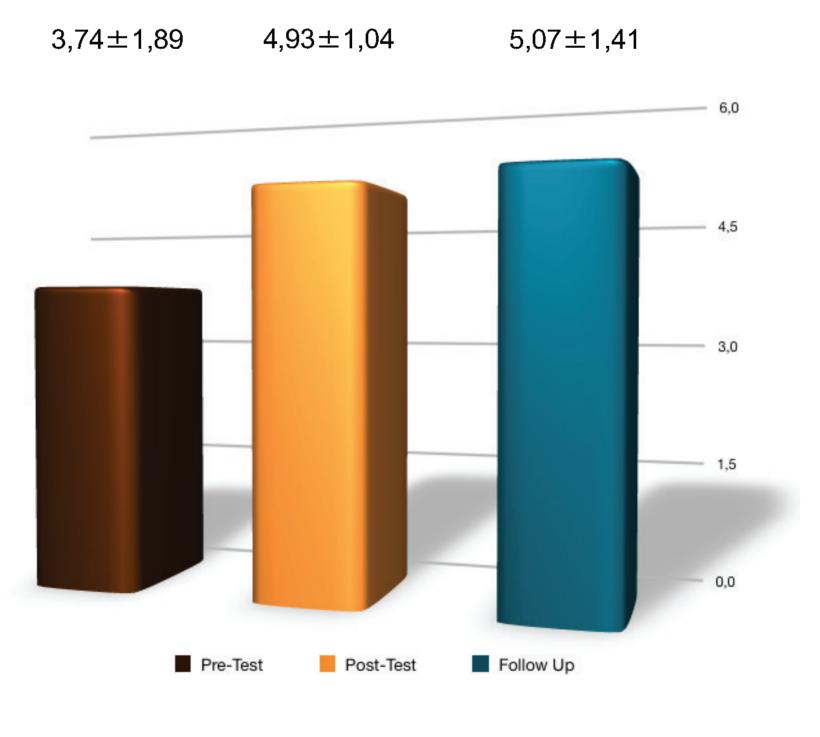### READING COMPREHENSION

10,48±3,52   12,56±2,53   12,19±3,04

Pre-Test   Post-Test   Follow Up

1) A significant improvement was found in the Intervention Group related to General RC measures between T1 and T2 (p< .01) and between T1 and T3 (p<.05) but not between T2 and T3
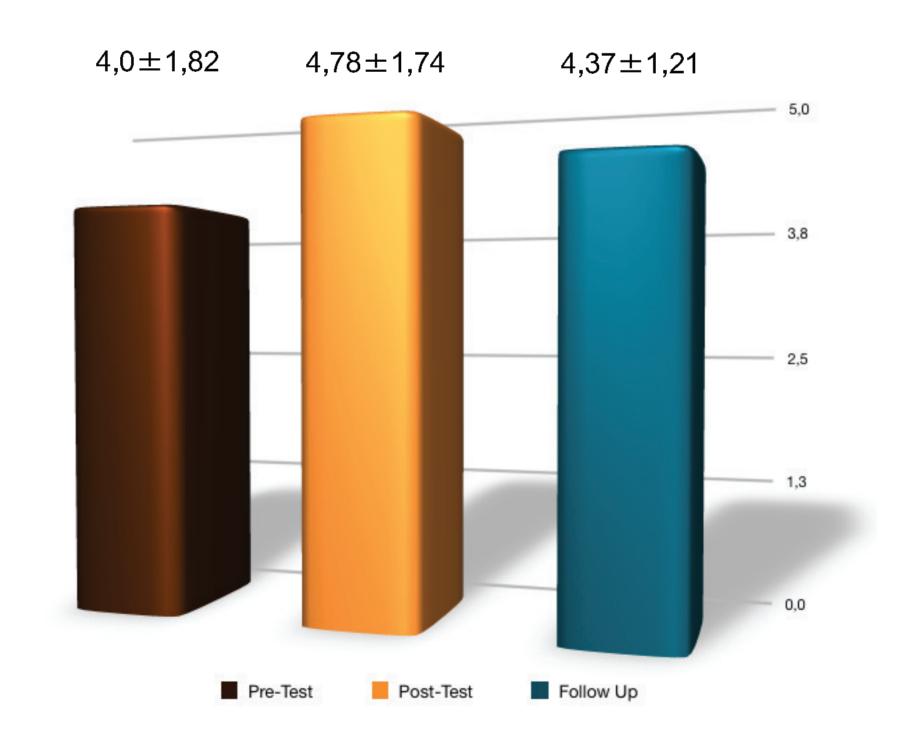
LITERAL INFORMATION

3,74±1,89   4,93±1,04   5,07±1,41

Pre-Test   Post-Test   Follow Up

2) In the case of specific comprehension sub-skills measures, like searching for literal information and making inferences, the results were similar:
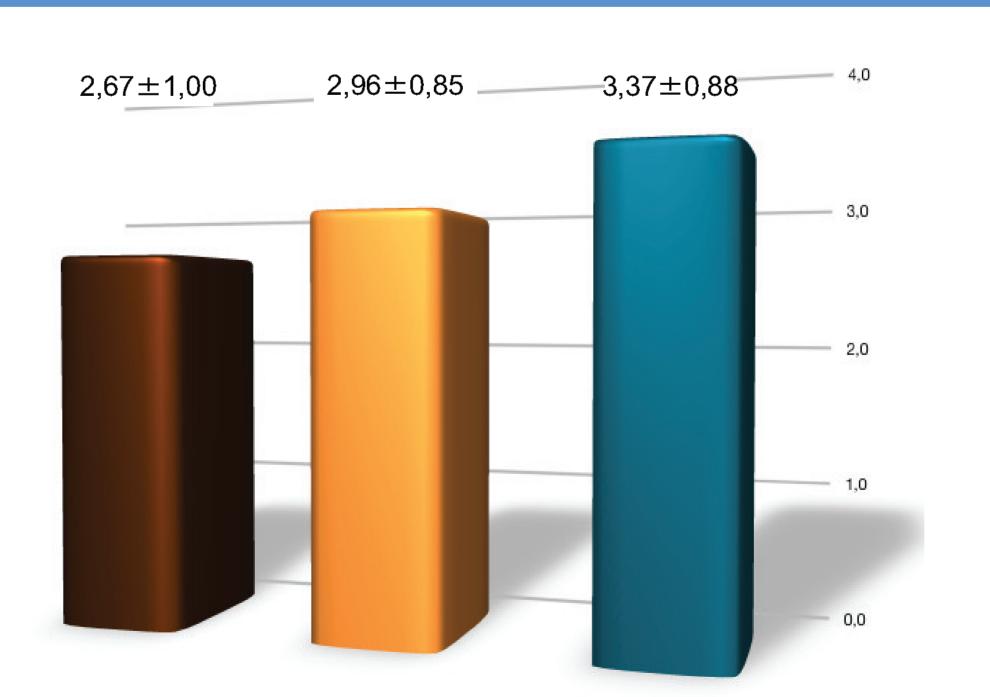
Searching for literal information: there was a significant improvement in the measures between T1 and T2 (p< .01) but not between T2 and T3 (p= 0.99).

INFERENCE MAKING

4,0±1,82   4,78±1,74   4,37±1,21

Pre-Test   Post-Test   Follow Up

Inference making: same results were found, significant differences in the measures between T1 and T2 (p < .05), but not between T2 and T3 (p = .75).

TEXT STRUCTURE

2,67±1,00   2,96±0,85   3,37±0,88

Pre-Test   Post-Test   Follow Up

3) Related to knowledge of text structure and comprehension monitoring results were different:

Knowledge and comprehension of text structure (title and summary) showed no significant improvements between T1 and T2 (p = .60), but they were significant between T1 and T3 (p < .05), as well as between T2 and T3 (p<.05).

MONITORING

2,44±1,74   2,15±1,41   3,52±1,53

Pre-Test   Post-Test   Follow Up

Comprehension monitoring showed no significant improvements between T1 and T2 (p = .74), but it was significant between T1 and T3 (p < .05), as well as between T2 and T3 (p < .01).

4) The Control Group did not show significant improvements.

DISCUSSION

1. A significant improvement in general RC measures is observed between T1 and T2 after the intervention programme application.

2. Follow up study shows that Reading Comprehension skills acquired during the training programme were sustained over time. A large number of the IG students had reading comprehension difficulties at the pre test (T1). Their performance improved to become a competent group in RC (T2) and to remain with a competent performance in RC over time (T3).

3. Comprehension Monitoring and Understanding text structure measures showed significant improvements between T2 and T3. Both skills developed significantly across time and may have become stronger strategies at reinforcing general reading understanding. Based on J. Oakhill and K Cain (2004, 2006, 2011) it seems to appear a pattern that suggests that RC might help strengthen the development of higher level skills and vice versa.

Some arising questions for future researches:

1. Further investigations will be necessary to evaluate this promising results in larger populations .It would be of great help to increase the sample in training group and the follow up group.
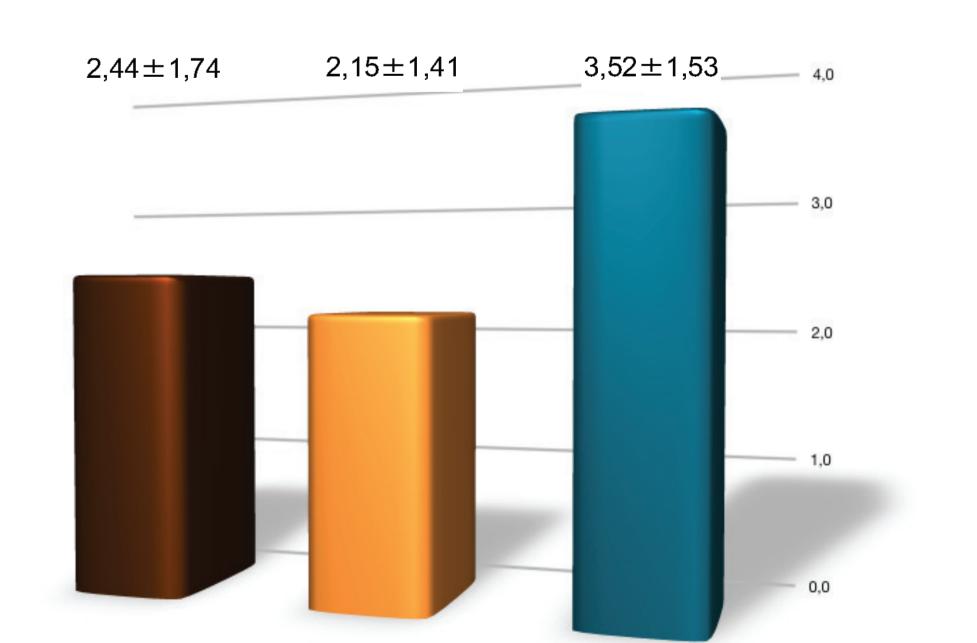
2. It would be interesting to compare the results of RC in students that have been working with experts in RC (as in this study), with the results in students taught by teachers not specifically trained.

3. It would be interesting to compare the results of the above with those of a group not working specifically on RC strategies.

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