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Comparing the effects of L1 and L2 use on vocabulary acquisition



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Background

- Use of the target language became the overarching pedagogical tool following the introduction of the National Curriculum in 1993 and the DES recommendation;

“the natural use of the target language for virtually all communication is a sure sign of a good modern languages course” (DES, 1990: 58)

- Has not resulted in improved language learning or increased motivation (Macaro 2008)
- Anecdotal evidence suggests that the situation has now reversed and lessons are conducted almost entirely in English

Theoretical motivations for the use of L1

- Theory of input and interaction (Krashen's 1985) comprehensible input, Long's 1981) negotiation of meaning, Swain's notion of forced output 1985) – acquisition of vocabulary and grammar achieved through implicit processes stimulated by the L2 interaction
- Theory of memory- interacting in the L2 and making mental comparisons will lead to acquisition (Ellis 2005; Kroll 1993; Libben 2000)
- Theory emerging from literature on codeswitching behaviour among bilinguals- codeswitching seen as one of many communication strategies for expressing meaning
- ➔ the balance of theories suggests the L1 may have a role to play in language learning but admitting it in the classroom may lead to its misuse (Turnbull 2001, Guo, 2007)
- There is a need for research to establish the *principled* use of the L1

Previous Research

- Previous research has examined;
 - Teachers' beliefs about the use L1 (Levine 2003; Macaro 2000)
 - Teacher L1 use: for describing its functions (Macaro 1997, 2001; Macaro & Mutton 2002; Rolin-lanziti & Brownlie 2002)
 - Teacher and student patterns of codeswitching: measuring the amount of L1 use (Neil 1997; Macaro 2001)
- A lack of empirical evidence of the effectiveness or otherwise of L1 use
- Some evidence of short-term limited advantage of L2 paraphrase rather than L1 equivalent in reading comprehension (Meng 2005)
- Qualitative evidence suggests students' strategic reactions enabled assimilation of brief codeswitches into their processing- some evidence of words being processed more deeply when L1 equivalent provided (Guo 2007)

Research Questions

1. Did students who were taught vocabulary benefit?
2. Did students who were taught by L1 translation benefit more than those taught by L2 paraphrase?
3. Were recycled words learnt better than non-recycled and is there a mode of instruction effect?
4. Is proficiency a variable?

Methodology

- Dependent variable – vocabulary acquisition
Independent variable – medium of instruction
- Sample: Experimental N = 216 Control N = 106
 - 4 experimental schools (state secondary)
 - 2 control schools
 - 2 in-tact year 9 classes in each school
- Baseline testing: C-test; listening test; vocabulary knowledge test
- Treatment delivered by teachers

Design

1. Listening comprehension – target words introduced in context
2. Teaching segment- teacher teaches meaning of words in through
L1 equivalent or L2 paraphrase
In phase B groups swap treatment conditions

Phase A

Pre-test

Listening 1: School

Listening 2: Daily routine

Listening 3: Holidays

Listening 4: Free Time

Post-test

Phase B

Pre-test

Listening 1: Family

Listening 2: Restaurant

Listening 3: Town

Listening 4: Home

Post-test

Stimulated recalls

Delayed post-test

Examples

Listening comprehension on Free Time.

- 10 target words, 5 distractors
- Target words divided into 5 recycled and 5 non-recycled words
- Example word: **Peindre**

L1 equivalent (i.e. English translation)

Peindre = to paint, as in to paint a picture

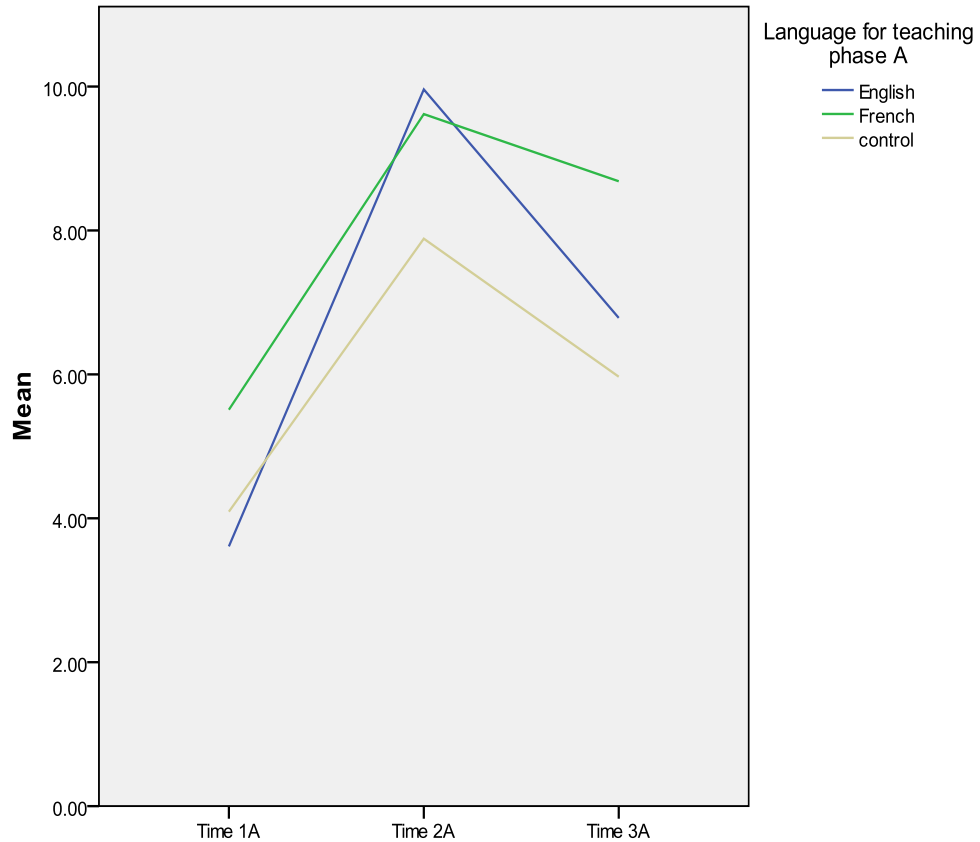
L2 context (i.e. French translation)

Faire une image avec des couleurs. Les artistes, par exemple Monet ou Picasso, aiment peindre.

[Trans: To make a picture/image with colours. Artists, like Monet or Piscasso, like to paint].

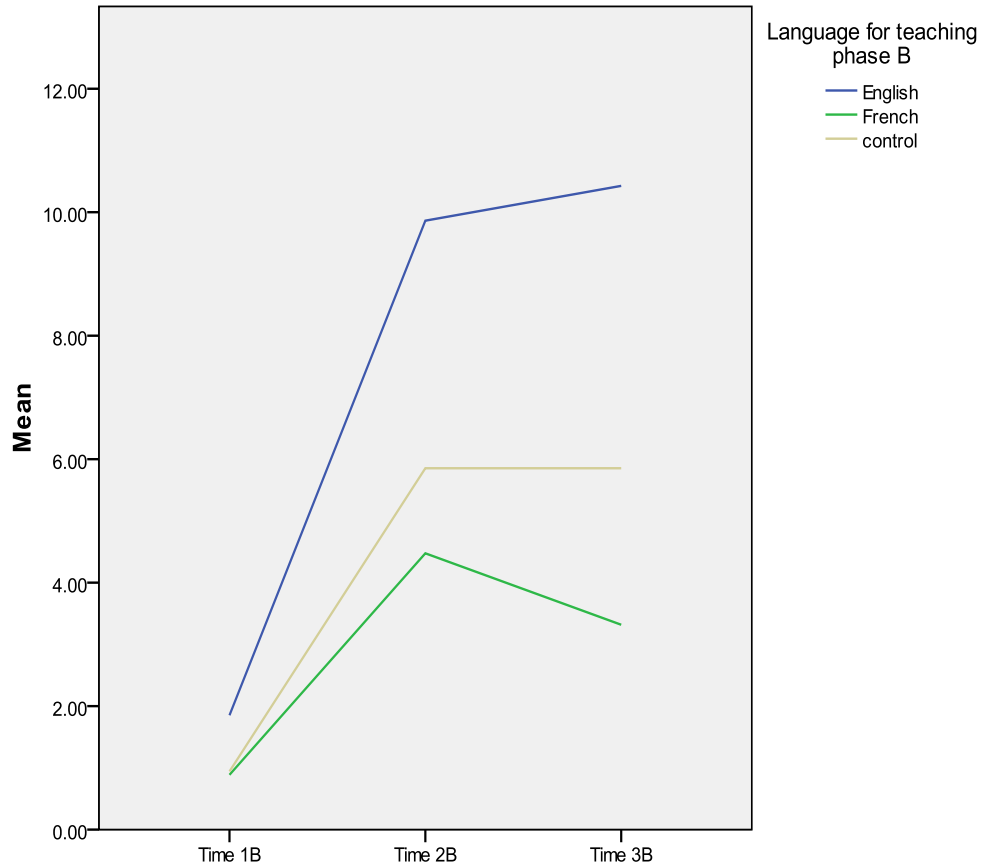
Results: Phase A

Mean L1 equivalent scores for phase A (subset of items tested at 3 time points)



Results: Phase B

Mean L1 equivalent scores for phase B (subset of items tested at 3 time points)



Quantitative Findings

1. Did students who were taught vocabulary benefit?

ANCOVA test showed no overall effect for intervention (i.e both conditions together) versus control

2. Did students who were taught by L1 translation benefit more than those taught by L2 paraphrase?

- L1 translation group significantly outperformed the L2 paraphrase group on word meaning at post-test phase A ($p = .004$), at post-test phase B ($p = .000$) and at delayed post-test B ($p = .034$)
- L1 translation also significantly outperformed the controls at both post-tests (A, $p = .022$, B $p = .002$) but not at the delayed post-test.
- At delayed post-test A the L2 paraphrase group significantly outperformed the L1 translation group ($p = .033$).

Quantitative Findings

3. Were recycled words learnt better than non-recycled and is there a mode of instruction effect?

- Repeated measures ANOVAs and paired samples t-tests showed that students in both treatment groups performed better on recycled than non-recycled items at post-tests A and B
- There were significant overall effects at post tests A and B for mode of instruction and word type (recycled or non-recycled).
- Post tests A and B: L1 translation gained significantly more for recycled items than L2 context and controls.

4. Is proficiency a variable?

- Pearson's correlations tests showed some associations between proficiency and vocabulary gains scores but no clear patterns could be established

Qualitative Findings

- Students employ a range of strategies for deciphering meaning;
 - Looking for associations with other known French words
 - Key word strategies
 - Sounding out the word
 - Use of meta-linguistic cues
- **By far** the most common was looking for similarities with English words
- Students preferred the L1 translation or a combination of the two types of treatments.

Example: target word *une séance*

- *Recording: une séance*
- *Teacher: Une séance. On va au cinéma et le film est à 8 heures par exemple, on peut dire que la séance du film est à 8 heures.*
- Yeah this one I really wasn't particularly sure of as I was pretty sure it wasn't sort of talking to the dead or anything like that. Something cinema so something like seeing a film at the cinema at 8 o'clock. So it might be something like a viewing or viewing of a film. I'm not sure something to do with seeing.

Example: target word tranquille

- *Recording: tranquille*
- *Teacher: peaceful*
- Yeah actually that sounded quite close kinda like tranquil. It's like the English. Like ehm I don't know like peaceful. Yeah so that so it kind of reminds you of ehm quiet parks and things ehm. So yeah. I quite like the words that kind of sound the same in English and French.It's easier it's kind of easier to kind of ehm... remember.....Especially if like ehm kind of ehm... describing something that you kind of remember then it sticks in your head a bit more.

Conclusions

- Students performed better in the immediate post-tests when given the explanation in their L1 (English).
- Long-term benefits (delayed post-test) did not show any clear pattern – L2 context better in phase A, L1 equivalent at phase B (these are the same pupils so possible school effect).
- Learners performed better on items they heard twice (i.e. in two different listening comprehension tasks).
- Learners mainly rely on cues from English when confronted with new vocabulary items.

Thank you

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