Estudios de lingüística inglesa aplicada

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IMPROVING READING STRATEGY KNOWLEDGE IN YOUNG CHILDREN: WHAT SELF-REPORT QUESTIONNAIRES CAN REVEAL

LA MEJORA DEL CONOCIMIENTO DE ESTRATEGIAS DE LECTURA EN NIÑOS: ¿QUÉ REVELAN LOS CUESTIONARIOS DE AUTOEVALUACIÓN?

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In the last 25 years, the topic of learning strategies has attracted a great deal of interest, quite often to analyse the use first (L1) and second language (L2) learners make of these strategies and how they can be helped to improve strategy knowledge. Although it is true that there has been considerable research on strategies, a smaller number of studies have attempted to explore the strategies that learners use in content and language integrated learning (CLIL) contexts, and even fewer when learning a third language (L3). This article seeks to fill that gap by reporting the findings of an intervention study into reading comprehension among young learners of English as an L3 in a multilingual (Spanish-Basque-English) context in the Basque Country.

The study involves a pre-test post-test design, using two intact groups of participants who were in their 5th year of primary education (10-11 years old). One group (n=50) served as the experimental group and the other one as the control group. The experimental group (n=50) received strategic training in reading skills for a period of seven weeks, while the control group did not. Both groups were asked to complete a survey for reading strategies and this was elicited pre- and post-intervention. Findings indicated that those students who were trained strategically in reading reported using an increased number of strategies after the training programme, although those gains were not maintained over time.

Key words: strategy training, reading, English as an L3, content and language integrated learning (CLIL)

En los últimos 25 años, el estudio sobre estrategias de aprendizaje ha sido foco de interés en investigación, sobre todo para conocer el uso que los aprendices de una primera (L1) o una segunda lengua (L2) hacen de esas estrategias, y cómo pueden mejorar el conocimiento de las mismas. Aunque la investigación sobre estrategias de aprendizaje ha sido importante, existe un número mucho más reducido de estudios centrados en contextos de Aprendizaje integrado de contenidos y lengua extranjera (AICLE), y todavía menos en el caso de terceras lenguas (L3). Este artículo busca llenar este vacío al analizar los resultados de un entrenamiento estratégico de comprensión lectora con estudiantes jóvenes de inglés como L3 en un contexto multilingüe (español-euskera-inglés) en el País Vasco.

Nuestro estudio sigue un diseño de pretest-posttest, con dos grupos de estudiantes de 5° curso de Educación Primaria Obligatoria (EPO) (10-11 años), un grupo control (n=50) y un grupo experimental (n=50). Para este estudio, el grupo experimental recibió un entrenamiento estratégico en comprensión lectora durante siete semanas. Ambos grupos, control y experimental, completaron un cuestionario de estrategias lectoras antes y después del entrenamiento. Los resultados señalaron que los estudiantes que recibieron el entrenamiento estratégico confirmaron hacer uso de un mayor número de estrategias lectoras tras la intervención, aunque esa tendencia no se mantuvo a lo largo de los dos años de instrucción.

Palabras clave: *entrenamiento estratégico, lectura, inglés como L3, aprendizaje integrado de contenido y lengua extranjera (AICLE)*

1. Introduction

Since the pioneering work of researchers such as Rubin (1975) and Stern (1975), the topic of language learning strategies (LLS) has attracted a great deal of interest, quite often in terms of analysing the use first (L1) and second language (L2) learners make of these strategies and how they can be helped to improve strategy knowledge. However, the development of LLS research has generated a parallel debate in relation to such domains as strategy definitions, strategies and proficiency, theoretical underpinnings, categorisation, context, teachability, research methodology and analysis (Griffiths & Oxford, 2014).

It is true that although LLS, defined already by Rubin as "the techniques or devices which a learner may use to acquire knowledge" (1975, p. 43), have been subject to controversy in different fields of research, they still attract considerable interest today, primarily because of their potential to improve learning. Specialists in language acquisition have often emphasised the importance of LLS both in the L1 and in the L2 in order to develop language proficiency, as the appropriate use of these strategies can make language learning more effective, more self-directed and, therefore, easier (Oxford, 1990). "One individual-difference variable, L2 learning strategies, has gained increasing popularity among researchers and teachers interested in understanding how languages are learned" (Hsiao & Oxford, 2002, p. 1) and this variable is, in fact, considered one of the most important individual factors in accounting for L2 acquisition (Skehan, 1989). According to Macaro (2006, p. 332), LLS do not simply make learning more efficient, but are "the raw material without which L2 learning cannot take place". Having said that, it needs to be stated that their mastery in an L2 is difficult as it requires "a complex integration of cognitive processes (e.g., memory, attention, speed, automaticity), background knowledge, language knowledge, and an array of component skills and strategies specific for reading comprehension" (Jiang & Grabe, 2011, p. 4).

However, unlike the extensive L1 research on reading strategies, there has been a smaller number of empirical studies in L2 reading contexts, and even less research has been undertaken in relation to third language (L3) reading. Thus, this study aims to fill the gap by investigating the effect of a reading strategy training programme on primary school children learning English as an L3 in the Basque Country. The programme was undertaken during the last two years of primary education, which enabled us to follow our participants longitudinally.

2. Language Learning Strategies and Reading

It is widely accepted that reading involves a basic set of skills that young children need to be equipped with to accomplish the basics of literacy. In order to achieve their reading goals and solve any problems they may encounter, children must possess the ability to use a wide variety of reading strategies in a given context, which will allow them to take responsibility for their own language learning (Anderson, 2002) and, as a result, become more independent language learners (Oxford, 1990; Wenden, 1985).

A number of studies (Anderson, 2002; Mokhtari & Sheorey, 2002; O'Malley & Chamot, 1990; Oxford, 1990; Pressley & Afflerbach, 1995) have shown how one of the key characteristics of skilled readers is their ability to effectively use reading strategies. It has often been claimed that effective language learners apply LLS more regularly, whereas unskilled readers' strategy use is more limited (Nyikos, 1991). Much of the research conducted so far (Anderson, 1991; Gunning & Oxford, 2014; Phakiti, 2003; Ruiz de Zarobe & Zenotz, in press; Sheory & Mokhtari, 2001; Zenotz, 2012) has indeed pointed to a positive correlation between reading strategy instruction (SI) and reading performance.

Furthermore, a great deal of research into reading strategies in L2 has confirmed that the training and scaffolding of these strategies can help develop awareness of the reading process, which can further lead to better reading comprehension (Carrell, Pharis & Liberto, 1989; Gunning & Oxford, 2014; Mokhtari & Sheorey, 2008; Zenotz, 2012). Systematic, mediated learning and effective scaffolding techniques employed by the

teacher and students are necessary in order to develop students' strategic behaviour, preferably with young children (Coyle, 2007). The students need to use and develop a range of strategies so as to become able to communicate in the L2 and to self-regulate their learning using this "extremely powerful learning tool" (O'Malley et al., 1985, p. 43).

Many researchers (Anderson, 1999, 2002; Cohen, 1998; Oxford, 1990) have suggested that teaching learners how to use reading strategies is of prime importance in the classroom. Furthermore, students need to be explicitly taught when to select a particular strategy in a given context in order to make conscious use of them.

> To be effective, metacognitive instruction should explicitly teach students a variety of learning strategies and also when to use them. For example, second language readers have a variety of strategies from which to choose when they encounter vocabulary that they do not know and that they have determined they need to know to understand the main idea of a text. (Anderson, 2002, p. 3)

This is the format that was followed in our research, as will be seen in the methodology section, in order to help students monitor their own language: Students received explicit instruction on how to use these strategies, and which strategy worked in each situation. This way, students would have a greater awareness of the strategies that would keep them on track to meet their learning goals.

Despite the possibilities of this approach, and quite surprisingly, very little of that research on learning strategies has been conducted in content and language integrated learning (CLIL) contexts, where learner strategies can be integrated into the language and content tasks. The research conducted in integrated contexts quite often comes from the USA and Canada in what has been named content-based instruction (CBI) contexts. One of the best-known models is the Cognitive Academic Language Learning Approach (CALLA) developed by Anna Uhl Chamot and Michael O'Malley. CALLA is the handbook for practice that resulted from a body of research on strategy use and the important relationship between students' improved learning outcomes and effective use of learning strategies. As an instructional model, it helps students from

primary classrooms to learn content and language by making use of a wide range of learning strategies at school, and can be used in a variety of contexts such as English as a foreign language (EFL), English as a second language (ESL) or in bilingual classrooms. CALLA-based research found that children improved their understanding of the target language and became more active and, hence, better learners (Chamot & O'Malley, 1994; Chamot, 2007).

Furthermore, emergent research is starting to link LLS not only with language outcomes but also with better academic performance in content areas such as language, arts, mathematics or science (Ardasheva & Tretter, 2013; Martinez-Alvarez, Bannan, & Peters-Burton, 2012). Some of the programmes followed in CALLA and these recent studies were the background for our research in a CLIL context.

In our study, we investigated strategy use in children learning the L3, English, in content lessons, specifically when learning science.

3. Questionnaires as Reliable Tools in LLS Research

One of the main drawbacks when researching language learning strategies is the difficulty in observing learning strategies directly; rather we can only rely on what the language learner says or how he or she behaves. Therefore, the methodology chosen to gather that information is of pivotal importance when interpreting strategy use. The most frequently used method for identifying students' learning strategies is through questionnaires.

Over the years, several questionnaires have been used to conduct research in a variety of contexts, often based on tasks that students have just completed (see Chamot et al., 1999; Rubin & Thompson, 1994, among others). However, one of the most popular questionnaires is the Strategy Inventory for Language Learning (SILL), which has guided considerable research in the area in studies analysing strategy use in relation to such variables as learning styles, proficiency level, motivation, or gender (Green & Oxford, 1995; Olivares-Cuhat, 2002; Oxford & Burry-Stock, 1995; Oxford & Nyikos, 1989; Wharton, 2000). The SILL is a questionnaire devised by Oxford (1990) as a tool to assess the specific LLS used by

students when learning a foreign language. Version 5.1 of the SILL (Oxford, 1990) was designed for native English speakers learning a new language and contains 80 items divided into six scales: 1. remembering more effectively, 2. using your mental processes, 3. compensating for missing knowledge, 4. organizing and evaluating your learning, 5. managing your emotions, and 6. learning with others.

Version 7.0 of the SILL is for ESL and EFL students (Oxford, 1990) and contains 50 items. In both versions, students are asked to evaluate how frequently they employ a certain language learning strategy by responding to the 5-point Likert scale.

The studies which use the SILL have been important in identifying the learning strategies which the more and the less successful language learners use. They have also been helpful in understanding which strategies are used and how they are used in the learning process. However, when dealing with young participants, as is the case with our research, this self-reported questionnaire has proven to be very complex, as it is sometimes difficult to ensure that primary school children fully understand what is being asked. Furthermore, the SILL was originally devised to analyse general learner strategies (Hsiao & Oxford, 2002), and not one particular skill, such as reading.

In order to overcome these drawbacks, other questionnaires have been piloted and tested on children, which is a challenging task. Macaro and Erler (2008) adopted one already devised by Erler (2002), as it had been successfully piloted and used before as part of an exploratory descriptive account of young learners' reading experiences in French. It is shorter than other tests (e.g., the SILL, Oxford 1990) and specifically developed for young learners. This questionnaire had already been compared with other surveys found in Chamot and Keatley (2003), Graham (1997), Macaro (2001), O'Malley and Chamot (1990) and Oxford (1990), and it had demonstrated an acceptable range of reading strategies (Macaro & Erler 2008). Macaro and Erler (2008) introduced slight modifications to the previous one used by Erler (2002). The new version consisted of twelve questions that reported on strategy use and on approaches to reading as perceived by the students. Children were given a choice of 'yes', 'no', and

'sometimes', which was easier for them to complete. This questionnaire was used in our research, although with slight modifications in order to adapt it to our context.

A final note should be made here in relation to questionnaires. The excessive use of questionnaires in language learning strategy research studies has been criticised by some researchers (e.g., Dörnyei, 2005; Gao, 2004; Gu, 2012; Woodrow, 2005), and it may be true that self-report questionnaires can sometimes be unreliable because learners might not accurately recall and report what they have used when answering these questions. However, we agree with Grenfell and Harris (1999) and Macaro (2006) when they state that despite their limitations, self-report questionnaires paint a broad picture of what students do and, furthermore, provide much food for thought. In this study, we used a questionnaire in order to find out the strategies claimed to be used by a population of young students in primary education learning English as an L3 through content-based instruction.

Before describing the methodology, it is necessary to point out a few innovative variables that this study introduces in the area of LLS research, which will hopefully lead to further investigation. Firstly, it uses a fairly large sample of participants (N=100), something which is not particularly common in strategy training programmes due to the difficulty and time required for these types of interventions. Secondly, the participants in this study are primary school children, an age group where once again research is scarce (Macaro, 2007). Thirdly, it studies these participants over a two-year period, where, as Hassan et al. (2005, p. 42) showed after reviewing thirty eight studies on strategy learning and training, "there is a clear lack of measurement of the effect over time in all the studies; none carried out any long-term, follow-up measurement that looked at the duration of the effect of training and this would severely limit any evaluation of effectiveness in terms of cost-benefit for example". This study also aims at analysing the results of the interventions over time.

Finally, it studies the use of reading strategies in English as an L3, where research is almost non-existent, and even more so with a population of children learning English in a CLIL context. Our aim is also

to corroborate previous research that demonstrates that, to be effective, strategy instruction needs to be embedded in content and language lessons so as to develop awareness and to promote autonomy (Chamot & O'Malley 1994; Wenden 1998).

It is with this background in mind that the following research questions were investigated.

4. Research Questions

(i) Can a programme of reading strategy instruction produce changes in the reading strategies claimed to be used by children learning English as an L3 in a CLIL context?
(ii) If there are changes in the strategies claimed to be used, do the effects last over time?

5. Methodology

5.1. Context of the Study and Participants

This study involved a pre- and post-test design using four intact Year 5 and Year 6 classes (age 11-13) at a school in the Basque Country in Spain. The school took part in the Trilingual Education Framework (TEF) implemented by the Department of Education of the Basque Autonomous Community from 2010 to 2014 in order to promote foreign language proficiency in the three languages: Basque, Spanish and a foreign language, usually English. The TEF was introduced at a number of schools in the Basque Autonomous Community starting in the 4th year of primary education (10-11 years) and the 1st year of secondary education (12-13 years). According to the TEF, at least 6 hours a week (20% of the teaching hours) must be taught in each of the three languages (see Ruiz de Zarobe, 2015).

The school where the research was carried out was a private school partly subsidised by the Government. Each class consisted of 25 students, two acting as experimental groups (EG, N=50), which received the strategy instruction, and the other two acting as control groups (CG, N=50). The

social background of the students at the school can be said to be middle class. It was noted that 71% of the participants' fathers and 73% of the mothers had university studies.
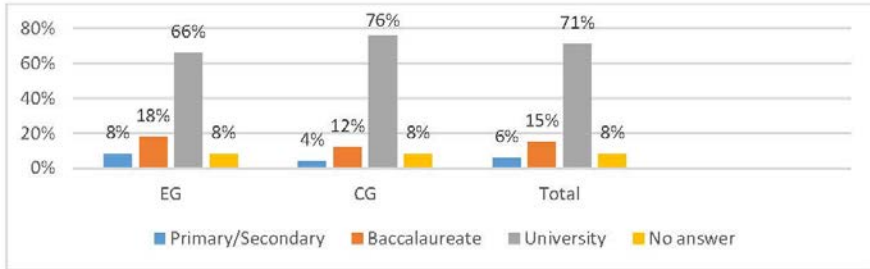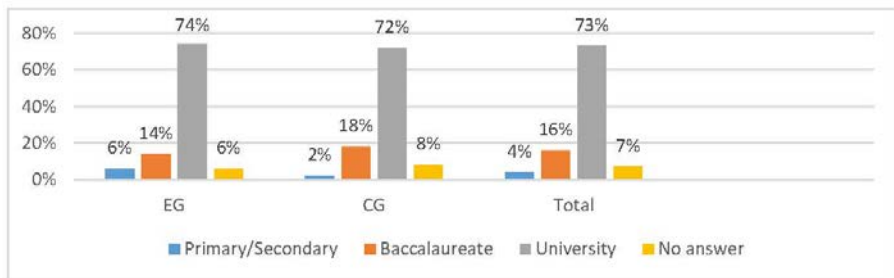

Figure 1. Education of the participants' fathers.

Figure 2. Education of the participants' mothers.

Within the CG and the EG, students used the same coursebooks and were in the same school context. 61% of the sample consisted of girls, and 39% of boys, with no significant differences between the CG and the EG. The students' first language was mainly Spanish, but a high percentage of them used both Spanish and Basque in the school context. Furthermore, they had all been learning English since they were 4 years of age.
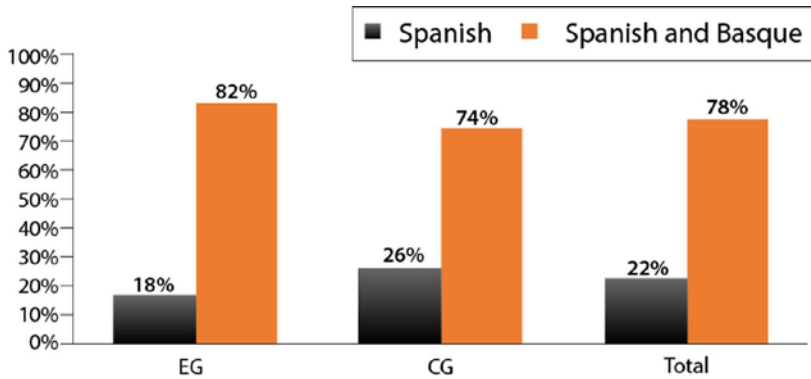
Figure 3. Use of Spanish and Basque in the school context.

5.2. Instruments and Treatment Procedure

For this research, a quasi-experimental pre-test post-test design with two experimental groups (EG) and two control groups (CG) was adopted. The EG received instruction on task-based reading strategies using Chamot's (2001) taxonomy in CALLA instruction. The task-based learning strategies focus on how students can use their own resources to learn most effectively. That is, they make use of their own resources and, by paying attention to what they already know, they take greater responsibility for their own learning. Some of the strategies in Year 5 included: 'Activating background knowledge', 'making predictions', 'guessing from context', 'observing the layout of the text' and 'paying attention to the type of text'. In Year 6, the second year of training, the focus was on critical literacy and critical thinking, but a review of the strategies used during the previous year was also carried out. Among the strategies for Year 6 we included: 'Identifying the main ideas', 'distinguishing fact from opinion', 'discovering the author's intentions' and 'distinguishing true from false'. The participants in Year 5 were followed longitudinally in Year 6 and were, therefore, the same participants for both years.

In both years, the same procedure was followed for strategy instruction based on previous training instruction research (Chamot, 2005; Grenfell &

Harris, 1999; Macaro, 2006; O'Malley & Chamot, 1990; Oxford, 1990). The sequence of steps for strategy instruction was as follows: 1. raising awareness of strategies and strategy use, 2. presenting and modelling of the new strategy, 3. general practice of the new strategy through whole class, 4. pair or group work, 5. focused practice with gradual withdrawal of the scaffolding and 6. evaluation of the effectiveness of strategies (e.g., diary completions).

This strategy instruction procedure was carried out explicitly in line with the view held by scholars such as Cohen 1998, O'Malley and Chamot 1990, Oxford 1990 and Wenden 1987, 1998, when they claim that overt instruction is necessary for the strategies to develop efficiently. Two researchers were in charge of the training, which took place in the school setting, within the students' regular English lessons. Each training session lasted approximately 60 minutes, and each week one intervention was undertaken for a total of 7 weeks.

The importance of the two final steps of the programme should be emphasised: Gradual withdrawal of the scaffolding and evaluation of the strategies. These steps give learners the opportunity to monitor and evaluate strategy use in contextualised tasks in order to learn how to use them effectively and, thus, acquire autonomy. If we do not follow these final steps, the training procedure can become too teacher-centred (Oxford, 1990), where teachers are in charge of every single step of the intervention.

In order to measure whether the programme of reading strategy instruction could bring about changes in the reading strategies claimed to be used by English as an L3 learners, we used the questionnaire for reading strategies adapted from Erler (2002) and Macaro and Erler (2008), introduced in the section above. Although both questionnaires demonstrated an acceptable range of reading strategies (Macaro & Erler, 2008), our questionnaire contained twenty questions, rather than twelve, to adapt it to the reading strategy programme followed by the researchers in the classroom. Cronbach's Alpha reliability for this version was .71 (see Appendix).

The questionnaire, which was administered in Spanish in order to be fully understood by all children, started with the question:

'When I see an English text of several sentences or paragraphs, I...'

And then several answers were provided, such as:

1. Wait and see if the teacher says what it means.
2. Try to understand each word.
3. Scan for words that look familiar and try to guess the meaning of the text from them.

Some of the statements that were included in our questionnaire were added to adapt it to our context and our training procedure. These included statements such as:

4. I pay attention to words like "because" which help me to anticipate that an explanation is coming.

5. I look at the text type (e.g., a story, a science text, etc.).

The possible answers to the survey included the choice of 'yes', 'no' and 'sometimes', which were more appropriate for children as they could more reliably report their strategy use both before and after the reading strategy instruction protocol.

There were also two open questions to gather qualitative information:

6. Which of these strategies do you use most often?

7. I use other strategies/tricks to understand better what I read. Which ones?

Both the CG and the EG completed the questionnaire in the pre- and post-test phases, which took place a week before and after the intervention starting in 2011, and otherwise received the usual curriculum for the 5th (5 EPO) and 6th (6 EPO) year of primary education. The EG, however, also followed the training procedure described earlier, which consisted of

seven sessions, and spanned three months each year (from March to May). The training procedure was undertaken in English but sometimes the L1 (Spanish) was used in cases where comprehension was more difficult. The CG, which did not carry out the strategic training, followed a different procedure. Specifically, the CG underwent computer-based pronunciation training with custom-designed discrimination/identification and listen-and-repeat practice activities, and hence, was in no way aware of any kind of learning strategy intervention. The test was implemented at four different stages: In Year 5 at the start of the intervention (March, henceforth Time 1) and then at the end of the training procedure in the first year (May, henceforth Time 2); in Year 6 at the beginning of the intervention (March, henceforth Time 3) and at the end of the training procedure in the second year (May, henceforth Time 4).

6. Results

Our first research question centred on whether a programme of reading strategy instruction could bring about changes in the strategies claimed to be used by these primary school children learning English as an L3.

Research question 1:

(i)　　Can a programme of reading strategy instruction produce changes in the reading strategies claimed to be used by children learning English as an L3 in a CLIL context?

　　　In order to answer this question, the scores obtained by the learners in Year 5, the first year of the intervention, with a CG of 50 subjects and an EG of the same size were analysed.

	Pre-test		Post-test	
	CG	EG	CG	EG
	Mean	Mean	Mean	Mean
	(S.D.)	(S.D.)	(S.D.)	(S.D.)
Questionnaire for	5.88	5 .63	6 .26	6 .10
reading strategies	(1.34)	(1.21)	(.96)	(1.78)
Differences		-1.11 (.26)		-.34 (.73)
Z *(p)*				

Table 1. Initial and final results between CG and EG in the questionnaire for reading strategies (scores and U Mann-Whitney test). Year 5.

Note: Maximum possible score = 10.

Table 1 shows the mean values, the standard deviation (SD) as well as the non-parametric Mann-Whitney test to check statistical differences between the CG and the EG at both time points. A non-parametric test was considered the most suitable test due to the results obtained in the Kolmogorov-Smirnov test of normality. Although the questionnaire was a 20-item test, which was scored 0 (no), 0.5 (sometimes) or 1 (yes), we are presenting scores out of ten for easier reference.

As can be seen from the table, there are no statistically significant differences between both groups in the pre-test and the post-test. However, if we analyse how both groups progressed, some statistical differences in the way the EG progressed can be identified in Table 2, with gains in the post-test.

	Progression	
	Control	Experim.
	Z (p)	*Z (p)*
Pre-test /Post-test	-1.89 (.06)	-2.36 (.01)

Table 2. Comparison of the progression between CG and EG in the questionnaire for reading strategies (Wilcoxon test). 5 EPO

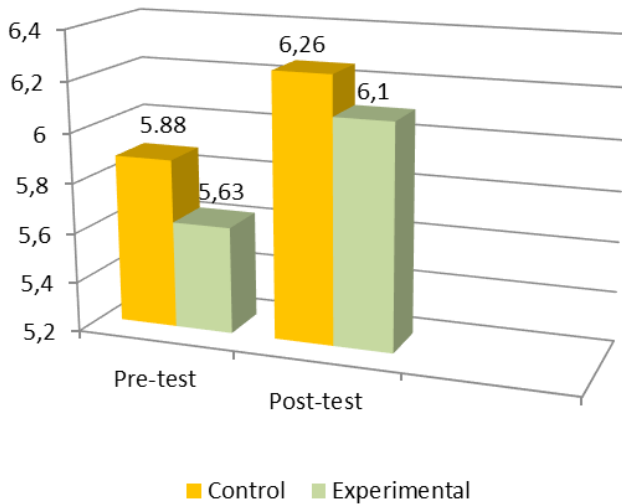Figure 4 shows these same results in a clearer way by means of a bar graph.

Figure 4. Initial and final results in the questionnaire for reading strategies. Year 5.

Our second research question was concerned with whether the changes in strategy use could last over a period of two years.

Research question 2:

(ii)   *If there are changes in the strategies claimed to be used, do the effects last over time?*

Table 3 provides the results for both groups at the two time points in Year 6, the second year of the intervention. As can be seen, in the Year 6 pre-test, Time 3, although the EG has higher scores than the CG, these differences are non-significant. In the Year 6 post-test, Time 4, the CG performs slightly better, but once again there are no significant differences according to the Mann-Whitney test.

	Pre-test		Post-test	
	CG	EG	CG	EG
	Mean	*Mean*	*Mean*	*Mean*
	(S.D.)	*(S.D.)*	*(S.D.)*	*(S.D.)*
Questionnaire for	5.70	5 .80	5 .88	5 .79
reading strategies	(1.08)	(1.35)	(1.17)	(1.45)
Differences		-.56 (.57)		-.67 (.49)
Z *(p)*				

Note: Maximum possible score = 10.

Table 3. Initial and final results between CG and EG in the questionnaire for reading strategies (scores and U Mann-Whitney test). 6 EPO

Taking these results into account, the way the groups had progressed was analysed to check if there were any differences between them. Table 4 shows the progression between Time 3 and Time 4. Results show that the progression made by the EG is not significantly different from the gains made by the CG. No statistical differences were found either in the way both groups progressed at the two time points.

	Progression	
	CG	EG
	Z (p)	*Z (p)*
Pre-test / Post-test	-.77 (.44)	-.15 (87)

Table 4. Comparison of the progression between CG and EG in the questionnaire for reading strategies (Wilcoxon test). 6 EPO
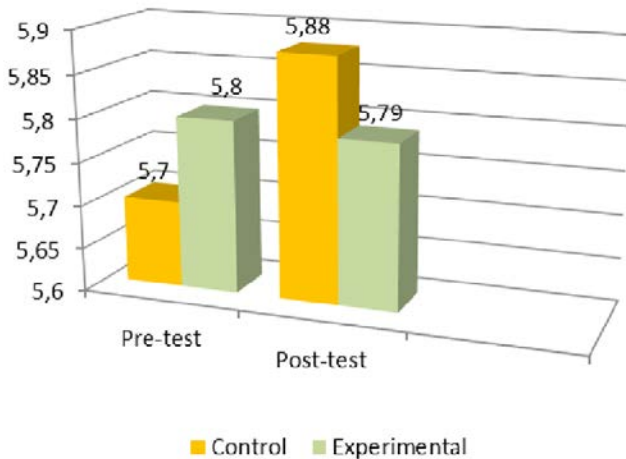
Figure 5. Initial and final results in the questionnaire for reading strategies. Year 6.

In sum, our results show that the EG outperformed the CG in progression during the first year of the intervention, Year 5, in the use of strategies according to the questionnaire for reading strategies. However, in the second year of the intervention, there were no statistically significant differences between both groups at Times 3 and 4.

7. Discussion and Conclusion

The aim of the present study was to investigate whether a programme of reading strategy instruction could bring about changes in the strategies used by primary school children learning English as an L3 in a CLIL context. This intervention also aimed to see if the treatment had longitudinal effects over a two-year period.

In order to analyse the effect of the programme, two groups of students were compared, one acting as CG and another one as EG. Both groups completed the same pre- and post- tests, the only difference between them being the reading strategy instruction performed on the EG over a seven-week period. The pre-tests carried out during Time 1, Year 5, showed that there were no significant differences between the CG and the EG. Our Time 2 results, after the interventions, revealed that both groups progressed. However, the evolution of the EG was statistically significant, compared to that of the CG, whose gains were non-significant. Therefore, the intervention had a positive effect on the number of strategies claimed to be used by the learners, following the questionnaire on reading strategies.

However, during the second year of the intervention, no differences were found between both groups at the two time intervals (Time 3 and Time 4), and no differences were found either in the progression of both groups. The reason for this may be related to the nature of the intervention itself. In the first year, the EG received task-based reading strategy instruction, which was more closely related to the questionnaire on reading strategies. Some of the questions in the survey were based on the strategies explicitly taught in the classroom during this first year.

Let us take the example of questions e and i (see Appendix):

e. I guess from the pictures what the text is about.

i. I look at titles and subtitles.

These questions are related to one of the strategies taught during the first year of the intervention: 'observe the layout of the text'.

Another example is question r:

r. I look at the text type (a story, a science text, etc.).

This is closely related to the strategy: 'pay attention to the text type', which had been practised in class using different activities involving several text types.

Here is one such example, below:

TEXT 4: It's _____

Volcanoes in Our World

There are over 1,000 volcanoes in our world. These volcanoes can be active, dormant or extinct. Active volcanoes are those that have erupted within recent history, dormant volcanoes are those which have not erupted in recent history, and extinct volcanoes are those which have been deemed to have not erupted in the last 10,000 years, or are thought to have experienced shifts in lithospheric plates to move them away from any possibility of future eruptions.

Volcanoes are both a hazard to people on earth, and help them. Short-term hazards are balanced by the overall value of geologic forces that happen which protect the long-term stability of the planet.

In this example, students were asked to perform different tasks, first in groups and then as a whole class. This particular task asked them to tick the box they considered correct (in some cases more than one answer is possible).

	TYPE OF TEXT				
	A TEXT IN A NOVEL	A TEXT IN A TALE	A TEXT IN A TEXTBOOK	A PIECE OF NEWS IN A NEWSPAPER	AN AD
FACT					
FICTION					
NARRATION					
DESCRIPTION					

This intervention helps students realise that it is easier to understand a text once they know the text type because they can then predict the type of information in that text, whether it is fact or fiction, or recognise the possible text patterns subsequently used in class.

However, in the second year of the programme, although these task-based strategies were reviewed in class, most of the training was on critical reading, which was not part of the questionnaire as such. This might lead us to think that SI may be effective in the short-term, rather than in the long-term (Hassan et al., 2005), unless these strategies are fully controlled. It seems that training language learners may be effective, but it is less evident whether the effects of the training persist longitudinally. It might be the case that strategies need to be practised and refined over time in order to become automatised and have long-lasting effects. How long must that training last? The answer probably depends on the specific mechanisms of the different training types and on students' increasing awareness of those interventions. As Hassan et al. (2005) maintain:

> It seems reasonable to assume that, if a strategy training intervention is demonstrated to be effective, the learner somehow incorporates it into their learning mechanisms and that it is compounded along with their other learning experiences and capacities. However, it remains unclear from a research point of view whether this is or is not the case, and the cost-

effectiveness of any intervention will remain unsure without longer-term follow-up studies. (p. 67)

In our case, after a two-year intervention, no differences were found in the strategies claimed to be used by these young students.

Another factor which may have influenced these results is the students' age, being young learners of 10-12 years of age. It may be that if our students had been older, the longitudinal effects could have lasted longer. As Ardasheva et al. (2017) claim:

> Older, more mature individuals are more likely to be in control of their learning behaviors and, therefore, are more likely to benefit more from SI with explicit focus on self-regulated learning. This developmental readiness may be a natural confound in how prevalent is the incorporation of an emphasis on self-regulated learning in SI interventions. (p. 568)

Peacock and Ho (2003) conducted a study which investigated the use of fifty L2 learning strategies by over 1,000 students across eight disciplines—building, business, computing, engineering, English, mathematics, primary education, and science—in a university in Hong Kong. In this study, they also found that older students used significantly more strategies than did younger students. These findings may once again be attributed to increasing cognitive maturity, as older students can increasingly perform more academically demanding tasks.

These results complement previous research in the area with a more reduced sample (Ruiz de Zarobe & Zenotz, 2015), where it was demonstrated how strategy training had a significant impact on the children's development of reading competence. However, the SI programme did not have a positive effect on the number and types of strategies used by the EG. In the present study, with a larger sample, the gains are significant in the first year of the intervention, where the programme on reading strategies was more closely related to the questions themselves, but not during the second year, where the training focused on other aspects of reading, notably critical reading.

Some of these results are in agreement with previous research (Dhieb-Henia, 2003; Kusiak, 2001; Salataci & Akyel, 2002), which

confirmed how strategic reading does not only rely on the number and types of strategies used by our participants, but also on the metacognitive use of these strategies (Carrell, 1998). Readers' awareness of the reading process and their capacity to monitor it can become a relevant factor in LLS research.

In the same vein, this study has also shown that through explicit strategic instruction, students may begin to realise that reading is an active process, where different strategies can be at their disposal to help them understand and make sense of what they read. This teachability component is very important in helping L2 and L3 learners make the best use of the reading process by using effective reading strategies. Learning strategies, used in conjunction with other techniques, may prove to be a very resourceful tool for learners. Their use might require time and effort in order to be fully comprehended and used independently but, once this is achieved, strategy use can be rewarding and even more so when used with other languages present in the curriculum as is the case of multilingual contexts.

Acknowledgments

References

Anderson, N. J. (1991). Individual differences in strategy use in second language reading and testing. *Modern Language Journal, 75*, 460–72. https://doi.org/10.1111/j.1540-4781.1991.tb05384.x

Anderson, N. J. (1999). *Exploring second language reading: Issues and strategies*. Boston: Heinle & Heinle.

Anderson, N. J. (2002). *The role of metacognition in second language teaching and learning*. ERIC Digest, EDO. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.

Ardasheva, Y., & Tretter, T. R. (2013). Contributions of individual differences and contextual variables to reading achievement of English learners: An empirical investigation using hierarchical linear modeling. *TESOL Quarterly*, *47*, 323–351. https://doi.org/10.1002/tesq.72

Ardasheva, Y., Wang, Z., Adesope, O. & Valentine, J. C. (2017). Exploring effectiveness and moderators of language learning strategy instruction on second language and self regulated learning outcomes. *Review of Educational Research, 87*, 3, 544-582. https://doi.org/10.3102/0034654316689135

Carrell, P. L. (1998). Can reading strategies be successfully taught? *Australian Review of Applied Linguistics, 21(1),* 1-20. https://doi.org/10.1075/aral.21.1.01car

Carrell, P. L., Pharis, B.G. & Liberto, J.C. (1989). Metacognitive strategy training for ESL reading. *TESOL Quarterly, 23*, 647-678. https://doi.org/10.2307/3587536

Chamot, A.U. (2001). Teaching learning strategies in immersion classrooms" *The elementary immersion learning strategies resource guide* (2nd ed.) [Online]. Available: http://www.nclrc.org/eils.

Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics, 25*, 112–130. https://doi.org/10.1017/S0267190505000061

Chamot, A. U. (2007). Accelerating academic achievement of English language learners: A synthesis of five evaluations of the CALLA model." In J. Cummins & C. Davison (Eds.), *The International handbook of English language Learning*, *Part I* (pp. 317–331). Norwell, MA: Springer.

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. White Plains, NY: Addison Wesley Longman.

Chamot, A.U. & Keatley, C. W. (2003). *Learning strategies of adolescent low-literacy Hispanic ESL students*. Paper presented at the 2003 Annual Meeting of the American Educational Research Association, Chicago, IL.

Chamot, A. U., Barnhardt, S., El-Dinary, P. B., & Robbins, J. (1999). *The learning strategies handbook*. White Plains, NY: Longman.

Cohen, A. D. (1998). *Strategies in learning and using a second language*. London: Longman.

Coyle, D. (2007). Strategic classrooms: Learning communities which nurture the development of learner strategies. *Language Learning Journal*, *35(1),* 65–79. https://doi.org/10.1080/09571730701315774

Dhieb-Henia, N. (2003). Evaluating the effectiveness of metacognitive strategy training for reading research articles in an ESP context. *English for Specific Purposes, 22*, 387- 417. https://doi.org/10.1016/S0889-4906(03)00017-6

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition.* Mahwah, N.J.: L. Erlbaum Associates.

Erler, L. (2002). *Reading in a foreign language: Near-beginner adolescents' experiences of French in English secondary schools*. Unpublished Doctoral Dissertation, University of Oxford.

Gao, X. (2004). A critical review of questionnaire use in learner strategy research. Prospect, *An Australian journal of TESOL, 19 (3),* 3-14.

Graham, S. (1997). *Effective language learning.* Clevedon: Multilingual Matters.

Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL,* 261–297. https://doi.org/10.2307/3587625

Grenfell, M., & Harris, V. (1999). *Modern languages and learning strategies in theory and practice.* London: Routledge.

Griffiths, C., & Oxford, R. L. (2014). The twenty-first century landscape of language learning strategies. *System, 43,* 1–10. https://doi.org/10.1016/j.system.2013.12.009

Gu, Y. (2012). Learning strategies: Prototypical core and dimensions of variation. *Studies in Self-Access Learning Journal, 3(4),* 330-356.

Gunning P., & Oxford, R. L. (2014). Children's learning strategy use and the effects of strategy instruction on success in learning ESL in Canada. *System, 43*, 82–100. https://doi.org/10.1016/j.system.2013.12.012

Hassan, X., Macaro, E., Mason, D., Nye, G., Smith, P., & Vanderplank, R. (2005). *Strategy training in language learning: A systematic review of available*

research. London, England: Research Evidence in Education Library, EPPI-Centre, University of London.

Hsiao, T.Y & Oxford, R. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *The Modern Language Journal, 86*, 368-383. https://doi.org/10.1111/1540-4781.00155

Jiang, X., & Grabe, W. (2011). Skills and strategies in foreign language reading. In Y. Ruiz de Zarobe & L. Ruiz de Zarobe (Eds.), *La lectura en lengua extranjera* (pp. 2-31). London: Portal Education.

Kusiak, M. (2001). The Effect of metacognitive strategy training on reading comprehension and metacognitive knowledge. *EUROSLA Yearbook,* 255–74. https://doi.org/10.1075/eurosla.1.19kus

Macaro, E. (2001). *Learner strategies in second and foreign language classrooms.* London, England: Continuum.

Macaro, E. (2006). Strategies for language learning and for language use: Revising the theoretical framework. *The Modern Language Journal*, *90* (3), 320-337. https://doi.org/10.1111/j.1540-4781.2006.00425.x

Macaro, E. (2007). Language learner strategies: Adhering to a theoretical framework. *Language Learning Journal,* 35 (2), 239-243. https://doi.org/10.1080/09571730701599245

Macaro, E., & Erler, L. (2008). Raising the achievement of young-beginner readers of French through strategy instruction. *Applied Linguistics, 29*, 90–119. https://doi.org/10.1093/applin/amm023

Martinez-Alvarez, P., Bannan, B., & Peters-Burton, E. E. (2012). Effect of strategy instruction on fourth grade dual language learners' ability to monitor their comprehension of scientific texts. *Bilingual Research Journal*, *35*, 331–349. https://doi.org/10.1080/15235882.2012.734005

Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education*, *25*, 2–11.

Mokhtari, K., & R. Sheorey, (Eds.). (2008). *Reading strategies of first- and second language learners: See how they read.* Norwood, MA: Christopher-Gordon.

Nyikos, M. (1991). Prioritizing student learning: A guide for teachers. In L. Strasheim (Ed.). *Focus on the foreign language learner: Priorities and strategies* (pp. 25-39). Lincolnwood, IL: National Textbook.

Olivares-Cuhat, G. (2002). Learning strategies, writing textbooks and achievement in the Spanish classroom: A case-study. *Foreign Language Annals, 35(5),* 561-570. https://doi.org/10.1111/j.1944-9720.2002.tb02724.x

O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning, 35*, 21-46. https://doi.org/10.1111/j.1467-1770.1985.tb01013.x

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition.* Cambridge, England: Cambridge University Press. https://doi.org/10.1017/CBO9781139524490

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know.* New York, NY: Newbury House.

Oxford, R. L., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *The Modern Language Journal*, *73*, 291–300. https://doi.org/10.1111/j.1540-4781.1989.tb06367.x

Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System, 23(1),* 1–23. https://doi.org/10.1016/0346-251X(94)00047-A

Peacock, M., & Ho, B. (2003). Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics*, *13*, 179–200. https://doi.org/10.1111/1473-4192.00043

Phakiti, A. (2003). A closer look at gender and strategy use in L2 reading. *Language Learning*, *53*, 649–702. https://doi.org/10.1046/j.1467-9922.2003.00239.x

Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Lawrence Erlbaum associates.

Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, *9*, 41–51. https://doi.org/10.2307/3586011

Rubin, J., & Thompson, I. (1994). *How to be a more successful language learner.* Boston, MA: Heinle.

Ruiz de Zarobe, Y. (2015). Basque Country: Plurilingual education. In P. Mehisto & F. Genesee (Eds.), *Building bilingual education systems: Forces, mechanisms and counterweights* (pp. 97-108). Cambridge: Cambridge University Press.

Ruiz de Zarobe, Y. & Zenotz, V. (2015). Reading strategies and CLIL: The effect of training in formal instruction, *Language Learning Journal*, *43 (3),* 319-333. https://doi.org/10.1080/09571736.2015.1053284

Ruiz de Zarobe, Y. & Zenotz, V. (in press) Learning strategies in CLIL classrooms: How does strategy instruction affect reading competence over time? *International Journal of Bilingual Education and Bilingualism.*

Salataci, R. & Akyel, A. (2002). Possible effects of strategy instruction on L1 and L2 reading. *Reading in a Foreign Language, 14,* 1–17.

Sheorey, R. & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System, 29*, 431–49. https://doi.org/10.1016/S0346-251X(01)00039-2

Skehan, P. (1989). *Individual differences in second language learning*. London: Arnold.

Stern, H. H. (1975). What can we learn from the good language learner? *The Canadian Modern Language Review, 31,* 304-318.

Wenden, A. (1985). Learner strategies. *TESOL Newsletter 19 (5),* 1-7.

Wenden, A. (1987). Incorporating learner training in the classroom. In A.

Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 159-168). Englewood Cliffs, NJ: Prentice-Hall.

Wenden, A. (1998). Meta-cognitive knowledge and language learning. *Applied Linguistics*, *19 (4),* 515-537. https://doi.org/10.1093/applin/19.4.515

Wharton, G. (2000). *Language learning strategy use of bilingual foreign language*

learners in Singapore. Language learning, *50* (2), 203-244. https://doi. org/10.1111/0023-8333.00117

Woodrow, L. (2005). The challenge of measuring language learning strategies. *Foreign Language Annals, 38*, 90–100.   https://doi. org/10.1111/j.1944-9720.2005.tb02456.x

Zenotz, V. (2012). Awareness development for online reading.   *Language Awareness 21 (1-2),* 85-100. https://doi.org/10.1080/09658416.2011.639 893

Appendix

Name:

Year:

<u>READING STRATEGY QUESTIONNAIRE</u>

READ THE FOLLOWING QUESTIONS AND TICK ONE OF THE THREE OPTIONS: YES, NO or SOMETIMES

When I see an English text of several sentences or paragraphs, I:

	YES	NO	SOMETIMES
a. wait for the teacher to explain the text	☐	☐	☐
b. try to understand each word	☐	☐	☐
c. scan for words that look familiar and try to guess the meaning of the text from them	☐	☐	☐
d. scan for words that look like Spanish or Basque and try to guess the meaning of the text from them	☐	☐	☐
e. guess from the pictures what it is about	☐	☐	☐

f. try to find the main ideas in the text ☐ ☐ ☐

g. scan for the most important facts ☐ ☐ ☐

h. read and reread more than once ☐ ☐ ☐

i. look at titles and subtitles ☐ ☐ ☐

j. stop to think what I have just read ☐ ☐ ☐

k. knowing what the text is about helps
me tounderstand the most difficult parts ☐ ☐ ☐

l. underline what I think is important ☐ ☐ ☐

m. think of what is coming next ☐ ☐ ☐

n. look up the words that I need in the dictionary ☐ ☐ ☐

p. ask a friend what it means ☐ ☐ ☐

q. wait and see if the teacher says what it means ☐ ☐ ☐

r. look at the text type (a story, a science text, etc.) ☐ ☐ ☐

s. pay attention to words like "because" which
help me to anticipate that an explanation is coming ☐ ☐ ☐

t. pay attention to words like "therefore" which
help me to anticipate that a consequence is coming ☐ ☐ ☐

u. when I don't understand a word, I look at a
part of it (beginning, middle, ending) to guess ☐ ☐ ☐
what it means

v. Which of these strategies do you use most often? ☐ ☐ ☐

w. I use other strategies/tricks to understand ☐ ☐ ☐
better what I read. Which ones?