

# Specific reading at an advanced level: linguistic or strategic competence?

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## Abstract

This paper begins by giving a brief outline of the research carried out into how second language students reach an acceptable level of reading. Based on the theories which suggest that, on the one hand, reading ability depends on linguistic level, and, on the other, that students transfer reading strategies acquired in their mother tongue to reading in the second language, we present a case study carried out with students of Tourism at the University of Las Palmas de Gran Canaria, in order to find out which factors do, in fact, lead to a better level of reading comprehension.

**Key Words:** reading, case study, linguistic competence, strategic competence

## Resumen

Empezamos haciendo un breve resumen de la línea de investigación que se ha interesado por conocer cuáles son los factores que tienen una mayor incidencia a la hora de leer en una segunda lengua. Partiendo de las teorías que sugieren que la capacidad lectora está en estrecha relación con el nivel lingüístico que el alumno tenga y también tomando como referencia las que defienden que el alumno transfiere a la segunda lengua las estrategias lectoras que ya ha adquirido en su lengua materna, presentamos un estudio llevado a cabo con el alumnado de Turismo de la Universidad de Las Palmas de Gran Canaria, con el objetivo de constatar qué factores, de hecho, favorecen un nivel de comprensión lectora más elevado.

**Palabras Clave:** lectura, estudio de casos, competencia lingüística, competencia estratégica

## Introduction

Much research has been carried out to determine which are the most important factors when reading a text in a second language. The first studies from the seventies and early eighties gave rise to two clearly defined approaches. Some (Macnamara, 1970; Clarke, 1979; Cziko, 1980) concluded that the reading level is closely linked to the level of proficiency the student has in the language, while others (Cummins, 1980; Hudson, 1982), held the view that the reading strategies the student uses in his/her native language are applied to reading in the second language.

The first group claimed that it was a matter of lineal development starting by recognising words, then phrases and sentences and finally going on to more advanced reading processes. According to this viewpoint, the skill develops on a par with the linguistic competence the student obtains or, in other words, reading is only a result of the language acquired. Accordingly, in the study made by Clarke (1979), an assessment was made of the competence acquired by certain students both in their mother tongue (i.e. Spanish), and in the second language, which was English. Clarke maintained that reading strategies used in the mother tongue were not put into practice when reading in the second language, leading him to believe that this was caused by a low level of proficiency.

In the other group (Cummins, 1980; Hudson, 1982), it is suggested that the reading strategies already developed in the mother tongue can be transferred to the second language and are used simultaneously with simpler reading processes, in accordance with the student's proficiency in the language concerned. Moreover, it is claimed that as proficiency in the language improves, cognitive processes like prediction can be more readily put into practice. As regards bilingualism, Cummins (1980) distinguishes between cognitive linguistic competence and communication skills which include accent, fluency and sociolinguistic competence. He further claims that cognitive linguistic competence is common to the L1 and L2.

These early studies gave rise to two reading models which are still of prime importance today: *bottom-up* and *top-down*. However, the studies we shall be looking at from now on will lay the foundations for a third model, the *interactive model*, which will be much more flexible and will enable the strategies used in the first two models to be combined (Cornaire, 1991).

Almost all the studies and articles mentioned so far were restricted to theoretical approaches (for example, Cummins, 1980) or to analyses of the results obtained from written tests carried out immediately after the reading of a text (as in the case of Clarke, 1979). From 1985 onwards, however, special attention is paid to examining what happens at the time of reading or, in other words, to the actual process of reading. This new approach makes the research considerably more complex since it involves an analysis of mental processes which are naturally more difficult to observe. Hence, we are forced to resort not only to comprehension tests but also to more complex techniques such as think-aloud protocols (Block, 1986 and 1992; Hosenfeld, 1997), interviews (Auerbach & Paxton, 1997), questionnaires (Padron and Waxman, 1988), and the experimental use of strategies (Carrell et al., 1989).

Block (1986) analyses the strategies used by nine university students (3 native speakers, 3 Chinese and 3 Hispanics) who had problems with reading in English. In the case of the six foreign students, their reading skills in their native language were also assessed. By making this contrastive study, the aim of the author is to prove that there is no difference in the use of the strategies employed by native and non-native speakers, leading her to the conclusion that learning to read in a second language must follow different steps to those taken when learning to read in the mother tongue. The work of Padron and Waxman (1988) goes one step further in reconciling the two approaches mentioned above by analysing the reading strategies used by 82 Hispanic students in primary education. The results reveal that, besides the students' level of English, the use of the wrong cognitive strategies interferes with their level of comprehension. In an experimental study carried out at almost the same time (Carrell et al., 1989), it was proved likewise that the use of cognitive strategies enhanced reading performance.

The work which directly confronts the question of whether reading in a second language depends on reading skills or on the level of proficiency is that of Carrell (1991). This experimental study claims that both factors directly affect reading ability, which is a similar conclusion to that reached in a later work (Bernhardt & Kamil, 1995). Yet, what still remained to be determined is how and when reading abilities in the mother tongue are transferred to the second language (Block, 1992), and if it is necessary to have reached a certain level in the second language to be able to put those skills into practice. The research carried out by Lee and Schallert (1997) upholds that an advanced level of proficiency in the second language (threshold

level) is required to be able to make use of reading strategies employed in the mother tongue. Nevertheless, both this work and others of a similar nature have been criticised on the grounds that the texts used were of a high linguistic level, meaning that students at elementary level were unable to apply reading strategies used in their mother tongue (Bamford & Day, 1998).

Reference should be made to two research studies related to the field with which this journal is concerned and which somehow deal with the approaches we mentioned at the beginning. The first study by Mustafa (1998) studies reading for ESP and the importance awarded to reading strategies, while the second study by Ward (1999) maintains that it is the linguistic level that is the determining factor.

Mustafa's study (1998) is part of an ESP project carried out at the University of Science and Technology in Jordan. The project involved several stages including needs analysis of the students and the subject professors, writing materials and their evaluation. On the grounds of the results obtained from the needs analysis, it was decided that the first English course should concentrate on reading and specially on the following reading strategies: identifying topic sentences (skimming), understanding paragraph cohesion, understanding paragraph development, deducing the meaning of unknown words and the rapid location of information in texts (scanning). The students stated that these tasks were required from them when handling specific texts in English in their fields of specialisation. Once the materials were created and implemented, most students (70%) considered them to be related to the other subjects they had to study on their degree courses and deemed them beneficial when dealing with them.

The research carried out by Ward (1999) underlines the importance of the students having a threshold level which is adequate for the reading of texts related to engineering. He considers that vocabulary is the determining factor and suggests that the students should be familiar with at least 95% of the words in order to put reading strategies into practice and so understand the text. His study focuses on pinpointing the number of words necessary to reach that percentage and determining which words the word list should contain. Based on the analysis of specific texts he concludes that the word list should consist of only 2000 word families and that "this vocabulary will clearly have a technical flavour but will contain all the general words (including all function words) necessary" (Ward, 1999: 321).

## The research study

### Objectives

The present study aims to continue the line of research developed in the introduction to this article. Knowing that the subjects of the research are adult students, most of whom have an intermediate to upper-intermediate level of English, our aim is to find out which factors lead to better reading comprehension. It was this objective that brought us to ask the following questions: Which reading strategies are directly linked to a higher level of comprehension in an ESP context? Do reading strategies have a greater influence than proficiency in the second language when carrying out intensive reading of specific texts?

### Subjects

The subjects who took part in the research were 39 Spanish-speaking students from Inglés III, which is the name given to the subject of English in the second year of the degree in Tourism at the University of Las Palmas de Gran Canaria. The students' level of English ranges from intermediate to upper-intermediate, although the students that have come from vocational training courses tend to have lower proficiency levels. This lack of standardisation, in spite of their having completed the first year of English on the degree course (the subjects called Inglés I and Inglés II) is further aggravated by the fact that, although students have failed both these subjects, they are entitled to attend classes of Inglés III and take the exams in those subjects. The data were collected at the end of the first semester. This, in fact, concludes the study of English for the second year as it is not part of the curriculum in the second semester.

### Materials and method of study

As we were interested in observing the link between proficiency, command of reading strategies in the second language and reading competence in texts related to the students' speciality, we used the following tools to obtain the information required for each student.

In order to obtain data which reflected their level of proficiency in English, they were administered a written test and an oral test, both of which were focussed on English for Tourism. Apart from writing tasks, the former test included other questions to measure the grammatical, lexical and functional abilities of the students. Some examples of the questions are: "Write a short description of a famous monument", "Put the jumbled adjective phrases in the correct order", "Fill in the gaps with one word", "Write a dialogue between the clerk in the Tourist Information Office and a tourist who wants to visit York Minster". The oral test consisted of two parts. The first part was a listening comprehension test on two texts, one on visiting the southwest of Ireland and another on the Euphorian Islands. The second was a personal interview based on subjects related to tourism as well as on general topics.

The tasks were set to measure the students' command of reading strategies; they were also based on texts related to their field of study, i.e. tourism (excerpts can be seen in the appendix). After analysing different types of strategies and checking which ones are most frequently used in secondary education, we opted for four texts in all. We were well aware from our experience with that particular group of students that they were familiar with two of the strategies (skimming and scanning) at lower levels, while the other two, although not unfamiliar, had been used less frequently (guessing the meaning of unknown words and understanding the use of referents). In the case of the skimming exercise, we used a text which gave details of a travel insurance asking the students to match a series of headings with the suitable paragraph in the leaflet. The scanning activity was carried out on four advertisements for different resorts and the students were required to answer a series of questions such as: "Which holiday would you recommend for someone who likes museums?" For the other two strategies (guessing and referents), we used texts from tourist brochures on different cities and they were asked to find words, which we knew they were unfamiliar with, from the definitions provided. In the case of the referents, they were required to answer the question: "What do the following words refer to in the text?"

Finally, we designed comprehension tests which would enable us to determine the students' level of intensive comprehension, again using texts specific to their studies. In order to achieve this, we designed two different tasks. The first, which was of an intermediate level, presented the students with seven short texts on different means of transport in large cities. One sentence was removed from the middle of each text. The seven sentences, plus a distractor, were given in a different order and the students had to



These first descriptive data confirm several factors which we had foreseen when designing the different tests. The reading strategies that were most familiar to the students (skimming and scanning) scored much higher than those which they were less familiar with (guessing the meaning of unknown words and the referents). As expected, the advanced specific reading text was difficult for most of the students. This is reflected in the lower mean scores which are considered insufficient. Likewise, it can also be noted that the results of the intermediate specific reading test, although better, were lower than those obtained in the written and oral test.

Besides, it should be noted that there are two standard deviations which are far greater than the rest. These are found in the advanced reading text (3.4006) and in the task involving the referents (2.5430). They also coincide with the lowest mean scores, both of which are the only ones below five.

Once the descriptive data had been obtained, we went on to the second part of our analysis, in which our aim was to study the possible links between linguistic competence, strategic competence and specific reading comprehension.

Bearing in mind that the variables we used were quantitative and that what we wished to examine was the possible relation between them, we decided to use the SPSS statistics package and, in particular, the Pearson correlation test since this is the one commonly employed in applied linguistics research. With this test we would obtain the correlation coefficient<sup>1</sup> and the Sig. (bilateral)<sup>2</sup>.

We shall begin by presenting the results obtained when a comparison was made between the variables showing linguistic competence (the written and oral tests) and the two showing the level of specific reading comprehension (intermediate and advanced).

Specific reading comprehension	Linguistic competence	
	<i>Written Test</i>	<i>Oral Test</i>
<b>Intermediate</b>		
Pearson correlation	.035	.138
Sig. (bilateral)	.832	.439
<b>Advanced</b>		
Pearson correlation	.539**	.268
Sig. (bilateral)	.000	.099

Table 3. Correlations between specific reading comprehension and linguistic competence



In table 3 we can see that the only correlation reflected is between the mark obtained by the students in the written exam and the advanced reading test (.539). This correlation is positive and significant at the 0.01 level (a higher level than that usually required for research of this nature, which only requires a level of 0.05).

Let us now look at the possible correlations between the variables that measure the students' strategic competence and their specific reading comprehension.

Specific reading comprehension	Strategic competence			
	<i>Skimming</i>	<i>Scanning</i>	<i>Guessing</i>	<i>Referents</i>
<b>Intermediate</b>				
Pearson c.	.341*	.358*	.096	.266
Sig. (bilateral)	.033	.025	.559	.102
<b>Advanced</b>				
Pearson c.	.140	.104	.184	.410**
Sig. (bilateral)	.395	.530	.262	.010

Table 4. Correlations between specific reading comprehension and strategic competence

The results obtained in table 4 are, to say the least, unexpected. We presumed that we would find correlations between all the reading strategies and the specific reading comprehension tests but there are, in fact, only three correlations. We shall begin by mentioning the one which was significant at the 0.01 level. Again it is the most difficult reading test that presents a very significant correlation and in this case with the students' capacity to understand which words or expressions the referents are related to (.410). This data, together with what we have already looked at, shows how important it is to have a good level of proficiency in the second language in order to be able to understand a text of an advanced level. It is also interesting to note that there is no correlation between the results obtained for the advanced reading and the skimming and scanning strategies. There is, however, a correlation between the intermediate reading and those strategies (.341 and .358). In the latter case, the correlation is significant at the 0.05 level.

Besides the correlations shown in tables 3 and 4, there is another correlation which we have not presented, as it is not the object of our study but that, nonetheless, we consider worthy of mention. This correlation, which can be seen in table 5, is significant at the 0.05 level and occurred between the skimming and scanning data

(.397), showing that those who made good or poor use of one of these strategies obtained a similar result in the other.

		skimming	scanning	guessing	referents
<b>skimming</b>	Pearson c. Sig. (bilateral)				
<b>scanning</b>	Pearson c. Sig. (bilateral)	.397* .012			
<b>guessing</b>	Pearson c. Sig. (bilateral)	.255 .118	.142 .388		
<b>referents</b>	Pearson c. Sig. (bilateral)	.219 .180	.290 .074	.289 .075	

Table 5. Correlations between the reading strategies

If this correlation is worthy of mention, even more so is the absence of a statistically significant correlation between the marks obtained in the intermediate and advanced specific reading tests (.133). As we have already mentioned, the mean obtained in the intermediate reading test was 5.423 against 4.230 obtained in the advanced reading. These means suggested to us that the mark obtained by each student would always be higher for the test that was considered easier. This was the case for 29 out of the 39 students. Of those 29, twenty obtained a mark of two points or over. A case which stands out is that of a student who obtained the following marks:

Student number	Written test	Oral test	Interm. reading	Advanc. reading	Guessing	Referents	Scanning	Skimming
14	4.50	5.00	10.00	0.00	7.00	2.50	9.00	10.00

Table 6. Scores obtained by student number 14

This is an extreme case of a student with a low proficiency level, as is shown by his having obtained a low mark in the written test and also in the test of the referents. However, he has a command of the strategies of skimming and scanning and guessing the meaning of unknown words, which means that he obtains maximum marks in the intermediate reading test. Yet these strategies are of no use to him when faced with the advanced text in which he does not answer a single question correctly.

Even more interesting is the number of students who obtained high marks in the most advanced reading test: ten in all. Of these, seven got a mark which is at least three points higher than that obtained in the intermediate reading test.

Student number	Written test	Oral test	Interm. reading	Advanc. Reading	Guessing	Referents	Scanning	Skimming
5	6.30	6.00	7.00	10.00	7.00	5.00	10.00	6.50
6	9.30	7.00	3.00	10.00	9.00	7.50	4.50	8.00
7	8.10	9.00	5.50	10.00	7.00	10.00	10.00	10.00
18	8.80	10.00	1.50	10.00	10.00	5.00	10.00	8.00
23	6.90	7.00	7.00	10.00	7.50	10.00	10.00	7.50
28	5.90	6.00	4.00	7.50	6.00	4.00	8.00	6.00
36	5.90	4.50	4.00	10.00	4.50	5.00	7.00	6.00

Table 7. Marks for the seven students who obtained higher marks in the advanced reading test than in the intermediate test

As we can see in table 7, the results obtained in the advanced reading test are almost all maximum scores, while in the other reading test, which was supposed to be easier, four students were unable to score even half marks. In order to attempt an explanation for these data, we studied the survey put to the students after they did the advanced reading test. As we have explained above, they were asked three multiple choice questions aimed at finding out the following: how they did the test, the way in which they read the text, and how they dealt with unknown words. When the replies given by these seven students were compared with the 29 who obtained lower marks in the advanced reading test, we see in table 8 that the results are similar for the first and last questions. However, the second question shows the opposite. The question was: How did you read the text? Of the seven students, four of them did it word by word reading the whole text, while three read it superficially to get the main idea. In the group of 29, only eleven chose the first option and 18 the second. Only 38% of the students who got worse results read the text thoroughly, a percentage which rises to 57% for those who managed to improve their performance and get maximum marks. This type of reading (bottom-up) may well be the cause of the worst results obtained by the group of seven students in the intermediate task which required a more general approach, since students had to replace a sentence which had been removed from each paragraph, meaning a word for word reading could give rise to comprehension problems.

	7 students	29 students
<b>Question 1. What order did you follow?</b>		
A. As I read each paragraph I decided which was the right title	1 (14%)	5 (17%)
B. I read the titles and tried to find the right paragraph	1 (14%)	3 (10%)
C. I used both methods	5 (71%)	21 (73%)
<b>Question 2. How did you read the text?</b>		
A. I read it all through word by word	4 (57%)	11 (38%)
B. I skimmed over it to get the general idea	3 (43%)	18 (62%)
<b>Question 3. What did you do when you came across words you weren't familiar with?</b>		
A. I attempted to guess their meaning	3 (43%)	14 (48%)
B. I skipped over them as they didn't prevent me from understanding the overall meaning of the paragraph	4 (57%)	15 (52%)
C. I got stuck	0 (0%)	0 (0%)

Table 8. Comparison between high and low scoring groups in the advanced reading text

## Summary and conclusions

While former research upheld that an adequate level of proficiency in the second language (threshold level) was required to be able to make use of reading strategies already used in the mother tongue, we consider that the present study reveals new data which defines this even more clearly. As our students are undergraduates, they have at least an intermediate level enabling them to make use of reading strategies such as skimming and scanning. However, when these students are confronted with a text which is way above their L2 level, the use of those strategies stops being significant and they depend yet again on their L2 proficiency. In other words, according to the data we have obtained from this study, we cannot talk about a standard threshold level which is necessary to make significant use of some reading strategies. It will depend on the degree of difficulty of the task involved since it is that which enables the student to make use of strategies like skimming and scanning or not. Besides, this data is even more unexpected if we take into account that the strategies of skimming and scanning only require the student either to get a general idea of what the passage is about or to extract specific information from it without understanding all of it. Nevertheless, our data proves that these strategies can only be put into practice when the level of the text is slightly higher than that of the student.

The results also seem to indicate that when the reading text is advanced, the students who rely on a bottom-up reading obtain better results than those who choose a top-down reading. Likewise, the students who make use of the former model obtain

worse results when faced with a task which, although easier, requires a more overall reading.

We would like to conclude by pointing out that, although the data we have presented should be considered a mere case study, it appears to show a series of tendencies that require further study involving the participation of larger groups of students. We believe that studies like ours may complement previous research yielding new results which may lead to a better comprehension of the complex phenomenon of reading strategies.

Our study clearly shows that the factors determining how students read in a second language cannot be summed up from a single point of view. The data here presented underline the necessity to take into account both the level of the reader's language and the level of the text, apart from the strategies the reader prefers to use and which best suit the task involved.

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1. This is the figure we obtain by applying a formula to two sets of data to test whether or not they are associated. If the variables are highly positively correlated, the figure we obtain will approach 1. If there is no relationship whatsoever, the figure will approach zero, and if there is a strong negative correlation, the figure will approach -1.
  2. The Pearson test also gives the probability (Sig. bilateral). When it is less than 0.05, it can be deduced that the correlation is statistically significant.

## REFERENCES

- Auerbach, E. R. & D. Paxton (1997). "It's not the English thing: bringing reading research into the ESL classroom". *TESOL Quarterly* 31: 237-261.
- Bamford, J. & R. R. Day (1998). "Comments on Jeong-Won Lee and Diane Lemonnier Schallert's 'The Relative Contribution of L2 Language Proficiency and L1 Reading Ability to L2 Reading Performance: A Test of the Threshold Hypothesis in an EFL Context'. Two Readers React...". *TESOL Quarterly* 32: 747-749.
- Bernhardt, E. B. & M. L. Kamil (1995). "Interpreting relationships between L1 and L2 reading: consolidating the linguistic threshold and the linguistic interdependence hypotheses". *Applied Linguistics* 16: 15-34.
- Block, E. (1986). "The comprehension strategies of second language readers". *TESOL Quarterly* 20: 463-494.
- Block, E. (1992). "See how they read: comprehension monitoring of L1 and L2 readers". *TESOL Quarterly* 28: 319-343.
- Carrell, P. L., Pharis, B. G. & J. C. Liberto (1989). "Metacognitive strategy training for ESL reading". *TESOL Quarterly* 23: 647-678.
- Carrell, P. L. (1991). "Second language reading: reading ability or language proficiency?". *Applied Linguistics* 12: 159-179.
- Clarke, M. A. (1979). "Reading in Spanish and English: evidence from adult ESL students". *Language Learning* 29: 121-150.
- Cummins, J. (1980). "The cross-lingual dimensions of language proficiency: implications for bilingual education and the optimal age issue". *TESOL Quarterly* 14: 175-187.
- Cziko, G. A. (1980). "Language competence and reading strategies: a comparison of first- and second-language oral reading errors". *Language Learning* 30: 101-114.
- Cornaire, C. (1999). *Le point sur la lecture*. Paris: CLE International.
- Day, R. R. & J. Bamford (1998). *Extensive Reading in the Second Language Classroom*. New York: Cambridge University Press.
- Hosenfeld, C. (1997). "Aspects psycholinguistiques: Lire dans una langue étrangère" in C. Blanche-

- Benveniste & A. Valli (eds.). *L'intercompréhension: le cas des langues romanes*, 129-139. Paris: EDICEF.
- Hudson, T. (1982). "The effects of induced schemata on the 'short-circuit' in L2 reading performance". *Language Learning* 32: 1-30.
- Lee, J.-W. & D. L. Schallert (1997). "The relative contribution of L2 language proficiency and L1 reading ability to L2 reading performance: a test of the threshold hypothesis in an EFL context". *TESOL Quarterly* 31: 713-739.
- Macnamara, J. (1970). "Comparative studies of reading and problem solving in two languages". *TESOL Quarterly* 4: 107-116.
- Mustafa, Z. (1998). "Reading for Science and Technology in a foreign language: students' evaluation of formal instruction on reading strategies". *Reading in a Foreign Language* 11: 225-238.
- Padron, Y. N. & H. C. Waxman (1988). "The effect of ESL students' perceptions of their cognitive strategies on reading achievement". *TESOL Quarterly* 22: 146-150.
- Ward, J. (1999). "How large a vocabulary do EAP engineering students need?" *Reading in a Foreign Language* 12: 309-323.

## Appendix

### 1. Excerpt of task used for skimming

Match these headings with the paragraphs in the text: a. Curtailment; b. Delayed baggage; c. Loss of deposit or cancellation, etc.

Paragraph 1. Sometimes your journey may have to be cancelled for reasons beyond your control. If this happens, you are eligible to make a claim.

### 2. Excerpt of task used for scanning

Scan the advertisements and decide which holiday or holidays you would recommend for someone who: likes wild animals, likes museums, has young children, etc.

### 3. Excerpt of task used for guessing the meaning of unknown words

Find words in the text which mean: people who travel long distances to and from work; pushed into a small space; connections, etc.

### 4. Excerpt of task used for stating what certain words refer to.

Decide what the following words refer to in the text: *this* (in line 19); *it* (in line 44), etc.

### 5. Excerpt of task used for intermediate specific reading comprehension

Read the text and insert the sentences provided in the correct place: a. Getting there means choosing between an efficient underground system or being stuck in traffic jams for much of the journey; b. Most city dwellers bought a second car, etc.

Text E. it is ten kilometres from my house in the Stockholm suburbs to the office in the city centre where I work. [ ] For me, public transport wins hands down. If I leave home ...

### 6. Excerpt of task used for advanced specific reading comprehension

Read the following passage and choose the most appropriate title for each paragraph: Travelling Made Easier; How Things Went Wrong; The Very Latest Technological Experience, etc.

Text A. Last week I checked in for an early-morning flight to Paris while sitting in the bath. This unlikely feat – quite possibly a world first – was performed using an Internet-connected Wap phone.