

ASSESSMENT OF READING COMPREHENSION IN PRIMARY EDUCATION: READING PROCESSES AND TEXTS

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ABSTRACT: In this paper, the authors evaluate the reading skills of students finishing Primary Education in the Autonomous City of Melilla (Spain), and analyse the relation between the degree of 'reading comprehension' and the different 'reading processes' (literal, reorganizational, inferential and critical), as well as the relation with the texts employed in the study (literary, informative and interpretative). In order to achieve this, empirical-analytical research has been carried out, with an ex-post-facto descriptive study using a sample of 620 Year 6 students from ten schools, to which the ACL-6 test was applied. It is concluded that only 30% of the students surpass the comprehension level corresponding to their age. More than half have difficulty in all the 'reading processes', slightly fewer in the 'literal', and the degree of 'comprehension' is similar in the different types of text worked with, although worse in the 'informative' and 'interpretative'.

KEY WORDS: assessment of reading comprehension, reading processes, types of texts, Primary Education in Spain.

EVALUACIÓN DE LA COMPRENSIÓN LECTORA EN EDUCACIÓN PRIMARIA: PROCESOS LECTORES Y TEXTOS

RESUMEN: En este artículo los autores evalúan la destreza lectora en alumnos que finalizan la Educación Primaria en la Ciudad Autónoma de Melilla (España) y analizan la relación entre el grado de 'comprensión lectora' y los diferentes 'procesos lectores' (literal, reorganizativo, inferencial y crítico), así como la relación con los textos empleados en el estudio (literarios, informativos e interpretativos). Para ello se ha realizado una investigación empírico-analítica, con un estudio ex-post-facto descriptivo con una muestra de 620 alumnos de 6.º curso de diez centros, a la que se le aplicó la prueba ACL-6. Se concluye en que solo el 30% del alumnado supera el nivel de comprensión correspondiente a su edad, más de la mitad tiene dificultad

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en todos los 'procesos lectores', siendo algo menor en el 'literal', y el grado de comprensión es similar en los diferentes tipos de texto trabajados, aunque peor en los 'informativos' e 'interpretativos'.

PALABRAS CLAVE: evaluación de la comprensión lectora, procesos lectores, tipos de textos, Educación Primaria en España

1. INTRODUCTION

'Reading comprehension' is one of the most important skills in a student's school performance. In fact, to a large degree their performance in curricular subjects depends upon it.

Considering this influence, numerous national and international educational studies and assessments have 'reading comprehension' as the subject of study, such as PISA (IE, 2007b, 2010a; INEE, 2013; OECD, 2004; Pajares, 2005), PIRLS (IE, 2007a; INEE, 2012a) or the national general diagnostic assessments (CEE, 2014; IE, 2010b, 2011), whose results have demonstrated the low levels of 'reading comprehension' of Spanish students in general and of students from the Autonomous City of Melilla in particular (Rico-Martín & Mohamedi-Amaruch, 2014).

2. THEORETICAL FRAMEWORK

2.1. Levels of 'Reading comprehension'

Levels of 'comprehension' should be understood as thought processes that take place in reading and that are generated progressively to the extent that the reader employs their prior knowledge. It is important to target 'reading comprehension' strategies from an early age, apart from 'decoding processes' (Mcnamara & Kendeou, 2011).

Despite the fact that many authors have pointed out different 'processes of comprehension' that are involved in reading, those based on Barrett's taxonomy (1968) are the ones employed in the various 'reading comprehension assessments' of the different Spanish national assessment and evaluation institutes (Instituto Nacional de Evaluación y Calidad del Sistema Educativo, INECSE [National Institute for the Assessment and Quality of the Educational System]; Instituto de Evaluación, IE [Assessment Institute]; or the current Instituto Nacional de Evaluación Educativa, INEE [National Educational Assessment Institute]) (INEE, 2012b), to which the 'critical, or evaluative, reading dimension' has been added.

The '*literary level*' or comprehension level of what is explicit in the text is characteristic of the first school years (Vallés & Vallés, 2006). It includes recognition of the components of the text and memory *recall* of its data (Barrett, 1968).

The '*level of reorganization of information*' is reached with the capacity to establish logical connections between ideas. Some researchers include this within 'literal comprehension' (Molgado & Tristán, 2008).

The *'inferential or interpretative level'* is characterized by the reader going beyond the direct meaning of the passage. It implies three cognitive processes: integration of implicit meanings of the text, summary of the main ideas, and creating new meanings when integrating prior knowledge (Vallés, 2006).

The *'critical or evaluative judgement level'* requires an evaluative process of the ideas read, for which the reader compares them with external criteria (teacher, authorities) or internal criteria (own experience). It demands a more profound cognitive processing of the information in order to give judgements on reality, facts and opinions.

Lastly, the *'level of reading appreciation'* arises from the author of the text's influence on the reader, who should be capable of reflecting and expressing his/her sensations after reading (Molgado & Tristán, 2008). The strategies of this level entail the reader's objective distancing, critical evaluation and appreciation of the impact of certain textual characteristics (irony, humour, etc.).

The PISA and PIRLS reports mentioned in the introduction highlight the five 'processes' that, from least to highest performance range, would constitute the basis of full 'comprehension' of a text. These assessments demonstrate that if only the first three processes are considered, Spanish students attain the average of the rest of the students from the OECD and even slightly surpass it (Carabaña, 2008). But they also reveal that, regarding the remaining two processes, the scores drop notably, which indicates that these two important skills –to reflect upon and critically evaluate the content and the form of a text– are not sufficiently developed.

2.2. *The types of texts*

In the Primary Education stage, texts of different typology (literary, expository, informational or educational) are worked with using a methodology that includes actions before, during and after the reading to improve 'reading competence' in the face of the greater comprehension difficulties of some texts compared to others.

In the area of the 'textual genres' dealt with in this study, the *'literary text'* presents situations that can prove to be clichés for the readers, who have a prepared mental model that updates itself to assimilate a new text. Thus the textual structures are basic for the understanding of 'literary texts', leaving prior knowledge in second place. With 'informational texts', on the other hand, it is this prior knowledge that makes their interpretation possible. It follows that 'literary texts', above all 'narratives', should in general be simpler to understand (Alonso, 2005).

Moreover, *'expository texts'* set out different aspects on various topics of interest to the students, and so allow an understanding of certain motivations of society. In fact, these texts are the most frequent in the school, because with them the academic content of subjects such as natural sciences or social sciences is presented, as Roehling, Hebert, Ron Nelson and Bohaty (2017) point out, these authors explain that this entails more difficulty in the 'comprehension' of an 'expository text' –informational– because the reader has to be constantly developing their capacity for analysis and criticism to uncover the truth of the text; in contrast, faced with another 'narrative', the same

capacities can also be developed but the reader does not have to be so alert to the possible veracity reflected in the text.

Aside from this, Peña-López (2011) indicates another textual difference:

1. *'Continuous texts'*, organized into paragraphs: narrative, exposition, description, argumentation, instruction, document or record and hypertext.
2. *'Discontinuous texts'* refer to charts, graphs... and have a very different layout of information to 'continuous texts', meaning that reading them cannot be done linearly.

The instrument employed in this study to assess 'reading comprehension' resorts both to the genres mentioned and to 'continuous and discontinuous texts'.

3. OBJECTIVES OF THE STUDY

The objectives of this study are to establish the degree of 'reading comprehension' held by the students finishing Primary Education in the Autonomous City of Melilla, to analyse their 'reading level' in the different 'dimensions' or 'processes' of this skill, and to check which type of text they understand best.

4. METHODOLOGY

Design. An empirical-analytical investigation has been carried out, with an ex-post-facto descriptive type study, widely used in the educational field (Rodríguez & Valdeoriola, 2009). The variable studied is the level of 'reading comprehension', including the 'dimensions of the reading' and the 'textual types'; and the gender of the students has also been taken as an independent variable.

Sample. By means of a non-probabilistic, intentional type sampling of 1130 students in the 6th Year of Primary Education [equivalent Year 7 in the UK], which made up the number invited for the sample, and which ended up being reduced to a final sample of 612 students from ten schools (52.8% male; 47.2% female), having ruled out the A.N.E.A.E. (Alumnado con Necesidades Específicas de Apoyo Educativo-Students with Special Educational Needs) and those centres that declined the invitation.

Instrument. After a bibliographical revision on 'reading comprehension assessment' tests, ACL-6 –*Avaluació de la comprensió lectora* [Reading Comprehension Assessment] (Català, Català, Molina, & Monclús, 2008)– was chosen, given its characteristics, its high degree of reliability (KR-20 = .761 in the original test, α = .737 in the pilot study of this investigation, and α = .803 in the study that is the subject of these pages) and its suitability for applying it to a large number of participants. Moreover, the test's design allows it to reflect the skills involved in the 'reading comprehension', which gives it validity, even more so when it has been evaluated by experts and applied in numerous centres and in different editions.

Regarding its characteristics, the ACL-6 test is designed to assess 'reading comprehension' in Spanish Year 6, with ten short texts of diverse typologies (narrative,

expository, poetic, and of data interpretation or discontinuous texts) and with answers to 36 dichotomous items that bring together the four basic ‘dimensions of reading comprehension’ (literal, inferential, reorganization of information, and critical or judgemental) and their strategies for approaching the texts (Barret, 1968; Cooper, 1986; Johnston, 1989; Pérez Zorrilla, 2005; Rello Segovia, 2017).

In the case of Melilla, for the pilot study of this investigation the texts ACL6.7a-b and ACL-6.9 were adapted to the local context, a modification of the test that did not affect its reliability (Rico-Martín & Mohamedi-Amaruch, 2014).

The results analysis is carried out by means of direct scoring intervals or correct answers corresponding to scales of one to ten, as Table 1 shows.

Scale	Correct Answers	Interpretation
1	0-8	Very low levels
2	9-10	
3	11-13	Low level
4	14-16	Moderately low level
5	17-19	Levels within normality
6	20-21	
7	22-24	Moderately high levels
8	25-27	
9	28-30	High level
10	31-36	Very high level

Table 1. Values of the ACL-6 one-to-ten scale and their interpretation (adapted from Català et al., 2008: 72).

5. RESULTS

The analysis of the gathered data was performed with the help of the IBM SPSS Statistics 20. Firstly, descriptive statistics was used to describe the participating sample, the variables and the results obtained (frequencies, percentages, measures of central tendency and dispersion). Similarly, inferential statistics was used, which enabled bivariate analysis. Moreover, the number of participants favoured the use of parametric statistics. The significance value observed is less than 0.05.

5.1. Test results according to the ACL-6 texts

The results average was 13.68 points, a low value considering that the scoring can go from 0 to 36. Of the 612 participants, 69.9% were found to be at low levels of ‘reading comprehension’ (from 1 to 4 on the one-to-ten scale), 18.9% presented middling values (5 and 6) and only 11% attained the higher levels (from 7 to 10), global results that

reflect that almost 70% of the students present a degree of ‘reading comprehension’ below the average expected for their school year.

5.2. Test results according to the ‘reading comprehension processes’

The ACL-6 questions required diverse levels of ‘comprehension’ by the reader, and the results of the study with regard to them did not reach 50% in the scoring, as can be seen in the percentage of correct answers in Table 2.

Levels of Reading Comprehension	% errors	% correct
Literal comprehension	56.26	43.73
Reorganization of information	69	30.9
Inferential comprehension	62.47	37.52
Critical comprehension	62.1	37.9

Table 2. Global test results based on the ‘comprehension processes’.

Literal Comprehension. This level is assessed by means of eleven questions on the recognition and recall of data from the texts. According to Table 3, the low percentage of ‘literal comprehension’ attained by the students is more influenced by the type of text: question 12 (ACL-6.4) obtained the lowest percentage of correct answers with only 26%, while question 6 (ACL-6.2) gained 80.9% correct answers. The texts with interpretation of charts obtained the lowest scores.

Literal Comprehension			
Text Type	Item	% errors	% correct
Narrative	4	55.2	44.8
Expository	6	19.1	80.9
Interpretation of charts	11	65.8	34.2
	12	74	26
	13	66.3	33.7
	14	66.7	33.3
	23	59.8	40.3
	25	44.8	55.2
	26	47.1	52.9
Interpretation of data	31	45.8	54.2
	32	74.3	25.7
Global average		56.26	43.73

Table 3. Test results according to ‘literal comprehension processes’.

Reorganization of Information. In the ‘informational texts’ the students had to summarise and rewrite ideas. In the ‘literary texts’ the task was basically to classify the text’s information. The global percentage of correct answers is 30.9%, with the worst results in the expository texts (items 29 and 35) (Table 4).

Reorganization of Information			
Text Type	Item	% errors	% correct
Expository	5	78.6	21.4
	7	36.6	63.4
	28	75.3	24.7
	29	85.6	14.4
	35	87.1	12.9
Poetic	10	55.6	44.4
Interpretation of charts	24	64.9	35.1
	27	69	30.9
Global average		69	30.9

Table 4. Test results according to the ‘reorganization of information processes’.

Inferential or Interpretative Comprehension. This level requires processes of integration, summary and elaboration of the information that is read. Table 5 reflects the students’ difficulties at inferring information from any type of text.

Inferential Comprehension			
Text type	Item	% errors	% correct
Narrative	1	67.2	32.8
	3	80.2	19.8
	15	77.1	22.9
	16	8.4	51.6
	18	50.8	49.2
	19	39.4	60.6
	20	71.7	28.3
Poetic	8	51	49
	9	67.2	32.8
Expository	30	69.1	30.9
	34	53.1	46.9
	36	61.3	38.7
Data interpretation	33	475.7	24.3
Global average		62.47	37.52

Table 5. Test results according to the ‘inferential comprehension processes’.

Critical Comprehension. The test of ‘critical comprehension’ consisted of four items in ‘narrative text’. Once again, negative values in the form of errors predominate (Table 6).

Critical Comprehension			
Text Type	Item	% errors	% correct
Narrative	2	83.2	16.8
	17	53.3	46.7
	21	47.2	52.8
	22	64.7	35.3
Global average		62.1	37.9

Table 6. *Test results according to the ‘critical comprehension processes’.*

5.2 Test results according to ‘textual typology’

Table 7 reflects how there are barely any differences between the ‘comprehension of literary, expository and interpretative texts’. In the latter two the results were slightly worse. Nevertheless, these are not the desired results for the three types of texts for students in Spanish Year 6, since the percentage of correct answers has not reached 50% in any of them.

Text Type	% errors	% correct
Literary text	60.8	39.18
Informational text	62.86	37.13
Interpretative text	62.85	37.15

Table 7. Results of the ACL-6 test according to ‘text type’.

Concerning the ‘literary texts’, the average percentage of correct answers for the ‘poetic texts’ (42%) was greater than that for the ‘narrative texts’ (38.46%), while in the comparison between ‘interpretative texts’ with ‘discontinuous’ fragments, the students’ level of ‘reading comprehension’ was better in those that contained charts or graphs (37.33% correct) than in those with data tables (34.73% correct).

5.3. Results according to the ‘gender variable’ together with the ‘reading comprehension’ index

If the results are compared by student ‘gender’ according to the different levels of ‘comprehension’, we observe what is gathered in Table 8.

ACL-6 Levels	1-2 (very low)	3 (low)	4 (moderate low)	5-6 (medium)	7-8 (moderate high)	9 (high)	10 (very high)
Male students	36.7%	21.6%	15.8%	14.2%	8.9%	2.4%	0.3%
Female students	30.1%	19.7%	15.2%	24.2%	9.0%	1.7%	0%

Table 8. Results in ACL-6 levels according to ‘gender’.

The female students are located in the range of results between a minimum score of 4 and a maximum of 29, while the male students lie between 2 and 32. In broad percentages, 74.1% of the boys and 65% of the girls do not attain the median level in ‘reading comprehension’. Only 14.2% of the boys and 24.2% of the girls are in what should be the normal range. The boys, however, have a slightly greater representation in the higher levels, with 11.6% compared to 10.7% of the girls.

According to these data, the statistic *t* of Student reflects significant differences in the ACL-6 test results with regard to student ‘gender’ ($t = -2.07; p = .039$), the girls obtaining a better global score ($\mu_{\text{girls}} = 14.20; \mu_{\text{boys}} = 13.21$).

6. DISCUSSION

6.1 ‘Reading comprehension’ according to ACL-6

There are many theories and studies that try to analyse the phenomenon of ‘reading comprehension’ and its ‘assessment’, and this study bases itself upon the assessment designed in the work of Català *et al.* (2008).

The analysis of the ACL-6 test results revealed an average of 13.68 points, a similar value to the 13 points resulting from the pilot investigation (Rico-Martín & Mohamedi-Amaruch, 2014). Nevertheless, this figure is almost six points lower compared to the results obtained by Català *et al.* (2008), which gained an average of 19.2 points. Table 9 reflects the comparison of the three studies mentioned.

Indicator	Results from Català <i>et al.</i>	Results from pilot study	Results from current study
Sample examined	641	53	612
Average score	19.2	13	13.68
Minimum score	3	4	2
Maximum score	34	28	32

Table 9. Comparison of Results in the ACL-6 Tests.

What stands out from the data analysis is that practically 70% of the students present a degree of 'reading comprehension' lower than the level corresponding to their school year, being in the low levels of 'reading comprehension' (from 1 to 4 on the one-to-ten scale).

The results reveal a great deal of similarity with those obtained by Spain in PISA 2009 (IE, 2010a) and PISA 2012 (INEE, 2013), in the latter of which 18% of Spanish students did not reach an acceptable 'reading level' (inferior or equal to 2), and in the case of the Melilla study, the results are disturbing, given that 33.7% are at an insufficient level (1-2 on the one-to-ten scale). Moreover, if it was considered worrying that according to PISA 2012 only 8% of the students attained level 5 (high performance), then it is even more so in the context of Melilla, where that percentage drops to 2% attaining ACL-6 levels of excellence (9-10 on the one-to-ten scale).

Regarding the PIRLS studies, both in 2006 (IE, 2007a) and in 2011 (INEE, 2012a), with very similar results, Spanish students showed a slightly higher level than the international average with 513 points and the following distribution: there was a not excessive but improvable percentage of students in the lower levels (28%), an ample proportion in the intermediate levels (41%), but a limited number in the higher levels (31%, compared to 46% from the average of European countries). These results are differentiated, to a certain extent, from those obtained in the present investigation: 33.7% of students in low levels, a high proportion in intermediate levels (55.1%), but only 11% in the higher levels, where the two types of studies diverge the most.

6.2 The 'processes of reading comprehension'

Looking at the 'reading dimensions' evaluated, more than half of the Year 6 students have problems understanding the 'text literally', despite being the most basic 'reading dimension'. In 'inferential comprehension', 62.47% of students have difficulties when it comes to establishing logical connections between the data given by the text for its interpretation. Furthermore, the differences between 'inferential and critical comprehension' are small.

At this point it is important to point out that, given its importance in reading development, it is ‘inferential reading’ to which most attention is dedicated in Spanish ‘reading comprehension assessments’ (IE, 2009b; INECSE, 2005), because it is deemed characteristic of an expert reader (Mcnamara & Kendeou, 2011).

On the other hand, the inability of more than 69% of the students to reorganise the information read (‘interpretative reading’) is noteworthy: indeed, it is the least developed skill of these students, although close to that reflected in ‘inferential and critical comprehension’.

These values are in agreement with the results obtained in the study carried out in a public school of Melilla, where ‘literal comprehension’ achieved the best scores (38% correct answers) and the ‘reorganization of information’ the worst (31%) (Rico-Martín & Mohamedi-Amaruch, 2014).

In another study, Vázquez (2006) obtains similar results using the same ACL-6 test with a group of 70 Mexican students in Primary Year 6, showing lowest-level scores in ‘interpretative and critical reading dimensions’.

The results of the Mellilla study also agree with the results obtained by Carreño (2000) and Ecurra (2003) with students of the same level. In both works, performance in the ‘literal and inferential dimensions’ is significantly lower than expected for Year 6.

Nevertheless, these results differ from the values obtained by Pérez Zorrilla (2002), in whose study the lowest percentage of correct answers by the students was in ‘literal comprehension’ (41%) and the highest in ‘reorganization of information’ (55%).

As for other studies whose results contrast with ours, Marzuca (2004) and García (2009, cited in Romero Murillo, 2012: 8) obtained high results in ‘reading comprehension’ levels.

When comparing the ‘reading dimensions’ encompassed in PIRLS (IE, 2007a), in 2006 the performance of Spanish students was slightly higher in ‘evaluative reading’, whereas in the 2011 assessment (INEE, 2012a), the better performance was in ‘inferential reading’. However, the differences are minimal between both dimensions in the two assessments. These PIRLS values differ from those attained in the present study, in which the performance of the Melilla students is higher in ‘literal reading’, while the least developed dimension is ‘reorganization of information’.

In the 2013 General Diagnostic Assessment in the Autonomous Community of Melilla (CEE, 2014), the results referred to the ‘reading processes’ obtained by Spanish Year 4 Primary students, and here a gradation in difficulty can be appreciated. According to the analysis of these data, the dimension found most simple by the students, with 35% correct answers, was the ‘approximation and identification of information’, which proved to be easier than integrating and synthesising information, with 30% correct answers. In third position came ‘organization of information’, with 20% correct answers, and most difficult was ‘reflexion and evaluation’ of the texts read –the dimension that makes one a competent reader– with only 15% correct answers. Nonetheless, if we compare these results with those attained by the students participating in our study, we confirm that ‘approximation and identification of information’ and ‘literal comprehension’ are the simplest dimensions for the students

both of Spanish Primary Education Year 4 and Year 6, respectively. And while reflexion and evaluation is the least developed by Year 4 students in the Diagnostic Assessment, for Primary Year 6 students, 'reorganization of information' is the worst.

6.3. *'Textual types' and their relation with 'reading comprehension'*

As mentioned in the theoretical framework, 'comprehension' of an 'informational (expository) text' presents more difficulties than, for example, a 'narrative text' (Roehling, Hebert, Ron Nelson & Bohaty, 2017). Corroborating this with this study's results, the lowest percentage of correct answers corresponds to 'informational texts'. Texts containing charts or data ('discontinuous texts') are very similar in difficulty, while 'literary texts' prove to be the easiest. These results, on the one hand, agree with the study by Rico-Martín and Mohamedi-Amaruch (2014), in which the correct answers for 'literary texts' were 40.70%, 39% for 'informational texts', and 29.66% for the 'discontinuous texts'—the most different to the results of the current study. In the same line we find the works of Stein and Trabasso (1981), Saenz and Fuchs (2002), and Montanero Fernández (2004).

On the other hand, they disagree with the results from IE (2009a) and Pérez Zorrilla (1998) with students of the same year group: 60% correct answers for 'literary texts', 66% for 'informational texts', and 68% for 'verbal and non-verbal texts'. In other words, in this case the lowest percentage of correct answers was for 'literary texts', followed by 'informational texts', and the easiest being the 'verbal and non-verbal discontinuous texts'.

6.4 *Relation between the 'gender variable' and 'reading comprehension'*

One of the factors that have been the object of many investigations is the relationship between 'gender' and 'reading performance'. Based on the results of this study, there are significant differences in the ACL-6 test according to the 'gender' of the students ($t = -2.07$; $p = .039$). Girls obtain a better global score in the ACL-6 test than the boys, as they did in the study by Rico-Martín and Mohamedi-Amaruch (2014). Likewise, in many other studies and for different levels, it has been concluded that women obtain higher levels of 'comprehension' in their reading than men (Carvallo, Caso, & Contreras, 2007; Consejo Económico y Social [Spanish Economic and Social Council], CES, 2009; Fernández-Enguita, Mena, & Riviere, 2010; IE, 2007a, 2007b, 2011; INEE, 2012a; Mullis, Martin, Kennedy, & Foy, 2007; OECD, 2015; Rodríguez, 2009; Sánchez, 2010; Yubero & Larrañaga, 2010). However, this result is normally inverted when the competence being evaluated is mathematics or science (García Montalvo, 2012; OECD, 2015).

7. CONCLUSIONS

This study has provided empirical data on the 'reading comprehension' of Spanish Year 6 students in the Autonomous City of Melilla (Spain).

The fact that the ACL-6 test employed associates each text dealt with and, within each one, associated items, with a specific ‘dimension of reading comprehension’, provides the researcher or teacher using this tool with sufficient information to be able to analyse and compare ‘reading ability’ with the development of thinking skills, and to carry out a better assessment of the group with which they work in order to plan their teaching activities.

From the data obtained and in relation to the ACL-6 test results and the aims set out at the beginning, the following has been determined:

1. With regard to the first objective, the ‘*reading comprehension performance*’ of Spanish Year 6 students is found to be below that expected for their level. Only 30% of the students manage to surpass the ‘comprehension level’ projected for a year group finishing Primary Education.
2. As regards the ‘*processes of reading comprehension*’, linked with the second objective of this study, the level of ‘literal comprehension’, the most basic, poses problems for more than half the students (56.26%), while in ‘inferential comprehension’ even more lack strategies for establishing logical connections between the data given by the text for its interpretation (62,47%). The level of ‘critical comprehension’ is similar (62.1%), but as many as 69% of the students have been shown to have difficulty in reorganizing the information read, making the ‘interpretative dimension’ the least developed among Spanish Year 6 students. In other words, the students’ level in the different ‘reading dimensions’ is comparable in the texts worked with, ‘literal comprehension’ being only slightly better.
3. As for the third objective –to estimate the ‘comprehension level’ of the students in the various ‘*text types*’– we have been able to confirm that there are no significant differences according to the typology worked with. The degree of ‘comprehension’ was very low in the three ‘textual types’, although it was worst in the ‘informative and interpretative texts’.

Complementary to these objectives, what stands out from the results is, looking at the ‘gender’ of the students, how the girls obtain better scores in ‘reading comprehension’ than the boys.

Beyond the Year 6 participating sample, the results and conclusions from this study can be generalized to a larger school population that encompasses all of the schools of the city, and even to other Spanish cities where students with similar characteristics are undergoing Primary Education.

This study demonstrates the need for a fundamental strengthening of those studies and programmes that deal with the development of the ‘processes of reading comprehension’. A reasoned and scientifically proven case is presented of a situation that, unfortunately, is not exclusive to the social and geographical context that is the subject of this work. Hence the intention reflected in these pages is that of evaluating the development of the skills and abilities of thinking, specifically of Year 6 students of the schools of the Autonomous City of Melilla, above all, based on the results

obtained. These results confirm the need to broaden the corresponding studies into 'reading comprehension' to other educational levels, for this problem is widespread in the school population of Melilla.

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