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Development of the Writing Skills of Students in Compulsory Education in Spain

DOI: 10.15804/tner.2015.42.4.04

Abstract

Acquiring writing skills requires an entire academic lifetime but acceptable levels of proficiency should be covered in compulsory education. This research verifies the beginner, intermediate and advanced levels of writing skills in the Spanish education system. It compares both the development of knowledge and the associated difficulties in interviews with 40 students from the even years of primary and secondary education. Descriptive and correlational analyses were made, after coding their statements according to the theoretical model used. They revealed an unexpected stagnation, depending on the levels, with important educational implications.

Keywords: *writing, basic education, progress, difficulties*

Introduction

The studying of writing constitutes a challenge for professionals and researchers, given that learning to write – the primary aim of Basic Education– is fundamental to success in school. Writing sets the cognitive processes in motion that enable students to develop their knowledge, thus playing an essential role as a tool for further learning.

However, problems in learning to write are not uncommon. Research has revealed writing difficulties in several groups of subjects. In Primary Education (EP) and Compulsory Secondary Education (ESO, by their Spanish acronyms), e.g., drawbacks have been observed in thematic progression and in semantic, morphosyntactic and metacognitive knowledge (González & Martín, 2006), as well

as the production of ideas, adaptation to the audience, the use of drafts (Gallego, 2008b), self-regulation (Lecuona, Rodríguez & Sánchez, 2003), and textual review (Salvador & García, 2009).

Other studies, however, attribute the drawbacks to learning difficulties in general (Salvador, 2004); inadequate use of textual structures and style (Ramos, Cuadrado & Iglesias, 2005); social disadvantages (García & Salvador, 2010); hearing (Gutiérrez & Salvador, 2006), visual (Rodríguez, 2007), and cognitive (Gallego, 2008a) impairments; and even intellectual giftedness (Gallego & González, 2008).

There are few studies analysing the development of the writing skills of students in compulsory education in Spain (García & Fidalgo, 2003; Álvarez & García, 2014). This justifies placing this research within the framework of current studies, in which, according to the initial hypothesis, the higher the educational level, the higher the management of cognitive activity in general planning processes (mental draft of a composition), transcription (writing a text), textual review (formal and functional analysis of what has been written) and self-regulation (control over the writing process).

Consequently, the main objective of the research was to understand students' skills/difficulties in handling the operations involved in writing and detect potential differences between levels and academic years.

Theoretical framework

In the sphere of teaching and research, the model of writing proposed by Hayes and Flower (1980), subsequently reformulated by Hayes (1996), stands out. The model, which provides a guideline for this study, shows writing as a problem-solving process in which the writer implements planning, analysis and inference strategies that are conditioned by the individual's external and internal variables. In fact, various cognitive processes, of a recursive and interactive nature which writers must go through efficiently, appear to be decisive for the quality of a text (Beauvais, Olive & Passerault, 2011).

In the Hayes model, two basic components can be observed: the individual and the context of the task. The first component includes motivation, affectivity, cognitive processes, long-term memory and working memory. The second component comprises two main aspects that delimit the writing activity: the social context and the material context.

Methodology

An *ex-post-facto* methodology was used, in which a specific situation was described (the writing skills/difficulties of Basic Education students) and values were selected to estimate the relationships between the variables and draw inferences, based on descriptive and correlational methods.

The data was analysed using the SPSS 22.0 software. A 5% confidence interval was established for the tests and the estimated correlation was 70% (0.7 for the direct correlation and 0.7 for the reverse correlation).

Research Sample

The research was conducted on a sample of 40 students in Basic Education (50% male and 50% female) between 8 and 18 years of age, who were in the 2nd, 4th and 6th grades of EP and the 2nd and 4th grades of ESO. The sample included eight individuals (4 male students and 4 female students) from each of the grades (clustered) indicated. Five schools were obtained (2 students per grade and school) in the city of Granada, from among the students who showed normal school performance, based on non-probability and intentional sampling.

Instrument and Procedures

Semi-structured interviews were used to obtain the data, following a questionnaire guideline (Salvador, 2008) that gave clues to the students on the operations and processes that are supposedly activated when composing a text. The aim was to help them think about and verbalise what they were doing, so inferences could be drawn from the execution and regulation processes in writing and the potential relationships between the two. The questionnaire was validated using the procedure of “experts’ judgements” and triangulation (Fox, 1981).

The technique used is not significantly different from another informal technique (“thinking aloud”), which has been found to be a useful tool for capturing what is going on in the mind of an individual writer (Hayes & Flower, 1980). It enables researchers to analyse the cognitive and metacognitive functions operating in the mind of the writer.

To facilitate the students’ verbalisation during the interviews, these were carried out in a relaxed atmosphere, individually and in a separate room. They were asked to write a narrative text and, immediately afterwards, to recall the operations used during the writing process. The choice of the narrative text was justified by the

fact that it is the style most frequently used by students when they write freely (Salvador, 2008).

All the interviews were recorded and transcribed verbatim. Thus, the oral discourse was converted into a written text and used to conduct a content analysis, following a system of categories (Bardin, 1986; Krippendorff, 2002), validated by expert judges and triangulation of independent encoders. The categories correspond to the operations that the students carried out when writing the texts, according to the theoretical model on which this research was based (Hayes, 1996). The categories, extracted aprioristically (Bardin, 1986), were assigned codes and represented by capital letters and numbers (Table 1). The positive codes corresponded to the appropriate execution of the operation referred to in each category (by adding the number of times the students said they had used the strategy appropriately). The negative codes indicated that the operation requested had not been used or was used inappropriately (by adding the number of times that the strategy was ignored, not used or handled inappropriately).

Table 1. Variables in writing

PLANNING (P)		REVIEW (R)	
Genesis of ideas	+/-P1	+/-R1	Review of the plan
Consideration of the audience	+/-P2	+/-R2	Review of structure and vocabulary
Setting objectives	+/-P3	+/-R3	Review of the spelling
Selection of ideas	+/-P4	+/-R4	Review of the handwriting
Organisation of ideas	+/-P5	+/-R5	Review by others
Source of ideas	+/-P6	+/-R6	Self-revision
Capturing of ideas	+/-P7	+/-S1	Knowledge and control of planning
Textual organisation	+/-P8	+/-S2	Knowledge and control of transcription
		+/-S3	Knowledge and control of revision
Order of words	+/-T1	+/-S4	Knowledge and control of the structure
Richness of vocabulary	+/-T2	+/-S5	Attitude to writing
Word choice	+/-T3	+/-S6	Knowledge of good writing
Appropriateness of words	+/-T4	+/-S7	General knowledge and control of writing
TRANSCRIPTION (T)		SELF-REGULATION (S)	

Data Analysis

Firstly, a content analysis was carried out to determine the frequency with which each writing operation occurred, as well as its suitability. Next, the data was analysed quantitatively, in a descriptive (averages and standard deviation) and

correlational manner (Spearman ρ - and Kruskal-Wallis -KW- tests). It was not possible to use parametric tests to measure the contrast between variables, since the Kolomogorov-Smirnov (KS) test was carried out. The Mann-Whitney (U) test was used to analyse the differences between groups.

Results

Planning

As the measures obtained indicate (Table 2), a certain amount of progress can be observed as the school year advanced, although the frequencies (positives versus negatives) were not very dispersed, as the standard deviation indicates. Moreover, there was also a significant correlation between the two frequencies, although a reverse correlation to what could be expected was observed in categories P5 and P8 of the 4th grade of EP.

Table 2. Descriptive data and correlations on planning

	2° EP			4° EP			6° EP			2° ESO			2° ESO		
	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ
P1 +	1.63	0.52	-0.07	2.13	0.64	0.00	2.13	0.35	-0.38	3.13	0.35	0.14	4.38	0.52	0.49
-	1.63	0.52		1.00	0.00		0.50	0.54		0.88	0.35		0.13	0.34	
P2 +	1.50	0.54	-0.26	2.50	0.93	0.57	3.75	1.28	0.00	5.5	0.76	-0.32	6.38	0.52	0.49
-	2.38	0.52		1.00	0.54		0.75	0.46		0.5	0.54		0.13	0.35	
P3 +	0.25	0.46	-0.41	2.50	0.76	0.37	3.13	0.35	-0.13	5	0.93	0.41	5.75	0.46	0.15
-	2.38	0.74		1.50	0.76		1.13	0.35		0.75	0.71		0.63	0.52	
P4 +	1.63	0.52	0.23	2.25	0.71	0.26	3.00	0.76	0.37	4.88	0.64	0.28	5.88	0.64	0.07
-	2.25	0.89		1.50	0.76		0.38	0.52		0.5	0.76		0.25	0.46	
P5 +	0.75	0.71	-0.62	2.88	1.25	-0.84	3.88	1.13	-0.34	4.88	0.64	0.56	4.88	0.84	-0.09
-	4.75	1.04		2.13	0.64		1.13	0.35		0.63	0.74		0.88	0.35	
P6 +	1.75	0.46	0.00	2.00	0.54	0.00	2.38	0.74	-0.54	4	0.76	0.00	6.13	0.99	0.62
-	3.63	1.77		1.38	0.52		0.88	0.35		0.5	0.54		0.13	0.35	
P7 +	1.25	0.89	-0.34	2.50	0.54	-0.25	3.75	0.71	0.25	4.13	0.35	0.38	4.25	0.46	0.45
-	4.50	0.93		1.75	1.17		0.88	0.64		0.5	0.54		0.63	0.52	
P8 +	2.75	1.04	-0.54	4.38	0.74	-0.71	5.88	1.13	0.00	6	0.54	0.50	6.5	0.54	0.58
-	5.25	1.75		3.13	0.64		2.00	0.54		0.5	0.54		0.25	0.46	

Transcription

The data (Table 4) indicates some progress in this writing skill and some difficulties were overcome, though it was not possible to establish a significant correlation between them.

Table 4. Descriptive data and correlations on transcription

	2º EP			4º EP			6º EP			2º ESO			2º ESO		
	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ
T1 +	0	0	-	1.88	0.35	-0.29	1.75	0.46	-0.45	2.38	0.52	0.26	2.63	0.52	0.07
-	1.13	0.35		0.63	0.52		0.38	0.52		0.5	0.54		0.38	0.52	
T2 +	0	0	-	0.63	0.52	-0.29	1.38	0.92	0.41	2.25	0.46	0.33	2.75	0.46	0.46
-	1.63	0.52		0.88	0.35		0.5	0.54		0.5	0.46		0.38	0.52	
T3 +	1.38	0.52	-0.26	1.88	0.35	0.66	1.88	0.64	0.19	2.38	0.52	0.26	2.5	0.54	0
-	1.5	0.54		0.75	0.46		0.5	0.54		0.5	0.54		0.25	0.46	
T4 +	2.14	0.84	0	3	0.93	-0.58	3.3	0.99	-0.06	2.63	0.52	0.15	2.63	0.52	-0.26
-	2.14	0.64		0.25	0.46		0.5	0.54		0.75	0.46		0.5	0.54	

According to the KW test, the differences are significant in all the cases. The largest differences by grade are observed between the 2nd grade of EP and the remaining years, both in progress in skills and reduction of difficulties. In the remaining grades there are only occasional differences, which may emphasise the development of the skills corresponding to the T2 and T4 aspects (Table 5).

Table 5. Statistics of contrast between averages and groups on transcription

	Contrast Data		Contrast Cases U de Mann-Whitney									
	K-S	K-W	2º-4º	2º-6º	2º-8º	2º-10º	4º-6º	4º-8º	4º-10º	6º-8º	6º-10º	8º-10º
T1 +	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.13	0.02	0.08	0.02	0.44
-	0.00	0.04	0.13	0.02	0.07	0.02	0.44	0.72	0.44	0.72	1.00	0.72
T2 +	0.00	0.00	0.04	0.00	0.00	0.00	0.11	0.00	0.00	0.05	0.01	0.11
-	0.00	0.00	0.02	0.00	0.00	0.00	0.23	0.04	0.11	0.44	0.72	0.72
T3 +	0.00	0.00	0.11	0.16	0.01	0.01	0.96	0.13	0.07	0.19	0.11	0.72
-	0.00	0.00	0.04	0.01	0.01	0.00	0.44	0.44	0.11	1.00	0.44	0.44
T4 +	0.00	0.08	0.05	0.04	0.13	0.13	0.96	0.23	0.23	0.38	0.38	1.00
-	0.00	0.00	0.02	0.00	0.00	0.00	0.04	0.16	0.04	0.44	1.00	0.44

Reviewing

Here, also, an increase can be observed in the averages of the positive frequencies to the detriment of the negative ones, with the dispersion being negligible. However, it is only in the case of the students in the 4th grade of ESO that there is a correlation between progress and difficulties in two of their improvements: R1 and R6 (Table 6). Curiously, one of them is direct (R1), expressing the opposite of what was expected: the greater the skill, the greater the difficulties. The other aspect did obtain the reverse correlation, as would be expected.

Table 6. Descriptive data and correlations on review

	2º EP			4º EP			6º EP			2º ESO			2º ESO		
	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ
R1	+ 1.88	0.64	-0.58	4	0.76	-0.62	4.63	0.74	0.27	5.38	0.52	0.49	6	0.54	0.76
	- 3	0.76		1.88	0.64		1.13	0.35		1.13	0.35		0.88	0.35	
R2	+ 0.5	0.25	-0.5	1.25	0.71	0.42	1.25	0.46	-0.55	1.75	0.46	0.15	2.13	0.35	0.29
	- 1.5	0.54		1	0.54		0.63	0.74		0.63	0.52		0.63	0.52	
R3	+ 0	0	-	2	0.93	0	2.13	0.99	0.53	3.13	.35	-0.22	3.25	0.46	-0.22
	- 3.13	0.35		1.5	0.54		0.88	0.35		0.25	0.46		0.13	0.35	
R4	+ 0.25	0.46	-0.07	1	0	-	1	0	-	1.5	0.54	-0.58	1.75	0.71	-0.21
	- 2.13	0.84		1.13	1.35		0.25	0.46		0.25	0.46		0.25	0.46	
R5	+ .13	0.35	-0.38	1.63	0.52	-0.13	2	0.54	0	1.25	0.46	0	1.88	0.84	0.64
	- 2.5	0.54		1.5	0.76		0.88	0.35		1	0.54		1	0.54	
R6	+ 0.25	0.46	.033	2.88	0.84	0.42	3.75	1.28	-0.01	3.5	0.93	-0.19	4.13	0.64	-0.73
	- 2.25	0.46		1.38	0.74		0.75	0.71		1.38	0.74		1.13	0.64	

The above difficulties are significant (Table 7). The differences between the 2nd grade of EP and the remaining grades stand out. Behaviour is more erratic after the 2nd grade, although the differences between the 4th grade of EP and the 4th grade of ESO also stand out. The differences occur more frequently in the progress in the skill than in overcoming difficulties.

Table 7. Statistics of contrast between averages and groups on review

	Contrast Data			Contrast Cases U de Mann-Whitney								
	K-S	K-W	2°-4°	2°-6°	2°-8°	2°-10°	4°-6°	4°-8°	4°-10°	6°-8°	6°-10°	8°-10°
R1 +	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.07	0.00	0.07
R1 -	0.00	0.00	0.02	0.00	0.00	0.00	0.03	0.03	0.01	1.00	0.44	0.44
R2 +	0.00	0.00	0.07	0.04	0.00	0.00	0.96	0.19	0.02	0.11	0.01	0.28
R2 -	0.00	0.03	0.16	0.00	0.02	0.02	0.28	0.28	0.00	0.88	0.88	1.00
R3 +	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.02	0.02	0.03	0.02	0.72
R3 -	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.04	0.01	0.72
R4 +	0.00	0.00	0.01	0.00	0.00	0.00	1.00	0.11	0.04	0.11	0.04	0.57
R4 -	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.01	0.01	1.00	1.00	1.00
R5 +	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.23	0.65	0.03	0.02	0.16
R5 -	0.00	0.00	0.02	0.00	0.00	0.00	0.07	0.16	0.16	0.72	0.72	1.00
R6 +	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.23	0.05	0.65	0.72	0.19
R6 -	0.00	0.01	0.04	0.00	0.04	0.01	0.13	1.00	0.51	0.13	0.33	0.51

Self-regulation

As in the preceding cases, progress increased and difficulties diminished, although no correlation was established between the two in each of the suboperations. This occurred infrequently in the A2 aspects of the 6th grade of EP (reverse correlation), and A3 and A1 of the ESO grades (direct correlation) (Table 8).

Table 8. Descriptive data and correlations on self-regulation

	2° EP			4° EP			6° EP			2° ESO			2° ESO		
	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ
S1 +	0.88	0.64	-0.33	1.63	0.52	0.15	1.88	0.35	-0.14	2	0.54	0	2	0.54	0.76
S1 -	2.13	0.64		0.75	0.46		0.88	0.35		1.13	0.35		1.13	0.35	
S2 +	0.5	0.54	0.19	1.5	0.53	-	1.88	0.35	-0.76	2.63	0.52	-0.45	2.75	0.71	0.19
S2 -	2.13	0.64		1	0		1	0.52		0.75	0.46		0.63	0.52	
S3 +	0.88	0.64	-0.58	3.25	0.71	0.28	3	0.76	0.35	3.38	0.52	0.75	3.88	0.64	0.26
S3 -	3	0.76		1.75	0.46		1.5	0.52		1.25	0.46		0.63	0.52	
S4 +	0.5	0.76	-0.57	3.25	1.04	-0.34	3.25	0.71	-0.01	3.5	0.52	0.58	3.75	0.46	0
S4 -	2.88	0.84		2.5	0.54		1.63	0.92		1.75	0.46		1	0.54	

	2º EP			4º EP			6º EP			2º ESO			2º ESO		
	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ	\bar{x}	σ	ρ
S5	+ 1.88	0.64	-0.45	4.13	0.84	-0.48	4.5	0.93	-0.38	4	0.54	0	4.63	0.52	0.07
	- 4.88	1.46		2.38	0.52		1.88	0.64		1.63	0.52		1.38	0.52	
S6	+ 1.25	0.46	-0.77	5.25	1.49	0.13	6.13	1.25	0.06	5.63	0.92	-0.62	6.75	0.71	-0.45
	- 4.75	1.49		2.5	0.93		2.5	0.54		2.13	0.35		2.13	0.35	
S7	+ 1	0.54	-0.64	1.13	0.35	-0.14	1.38	0.74	-0.28	1.88	0.35	-0.22	2.38	0.52	0.23
	- 2.88	0.84		1.13	0.35		1.13	0.84		0.75	0.46		0.5	0.54	

The differences are significant in all the cases, although not for every grade. They are undoubtedly significant between the first grade and all the others. After that, the most notable differences occur between the 4th grade of EP and the two grades of ESO, and also between the 6th grade of EP and the 4th grade of ESO. This fact suggests a certain amount of progress between EP and ESO (Table 9).

Table 9. Statistics of contrast between averages and groups on self-regulation

	Contrast Data		Contrast Cases U de Mann-Whitney									
	K-S	K-W	2º-4º	2º-6º	2º-8º	2º-10º	4º-6º	4º-8º	4º-10º	6º-8º	6º-10º	8º-10º
S1	+ 0.00	0.00	0.05	0.01	0.01	0.01	0.44	0.28	0.28	0.72	0.72	1.00
	- 0.00	0.00	0.00	0.00	0.01	0.01	0.72	0.28	0.28	0.44	0.44	1.00
S2	+ 0.00	0.00	0.01	0.00	0.00	0.00	0.23	0.01	0.01	0.02	0.02	0.79
	- 0.00	0.00	0.00	0.01	0.00	0.00	1.00	0.44	0.23	0.51	0.28	0.72
S3	+ 0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.79	0.13	0.38	0.05	0.16
	- 0.00	0.00	0.05	0.00	0.00	0.00	0.44	0.11	0.00	0.44	0.02	0.08
S4	+ 0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.57	0.28	0.57	0.19	0.44
	- 0.00	0.00	0.44	0.02	0.02	0.00	0.07	0.04	0.00	0.88	0.13	0.03
S5	+ 0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.72	0.28	0.28	0.79	0.07
	- 0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.04	0.01	0.51	0.16	0.44
S6	+ 0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.44	0.02	0.38	0.33	0.03
	- 0.00	0.00	0.01	0.00	0.00	0.00	1.00	0.38	0.38	0.23	0.23	1.00
S7	+ 0.00	0.00	0.72	0.28	0.01	0.00	0.38	0.01	0.00	0.19	0.02	0.13
	- 0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.28	0.07	0.38	0.16	0.44

Discussion and conclusions

The aim of this study was to investigate the writing skills/difficulties of students during compulsory schooling and detect possible differences between levels and school years. The shortage of similar studies in the Spanish context limits this discussion. However, the results obtained are consistent with the findings of García and Fidalgo (2003), who noticed some progress in the development of self-regulation in writing and a slight decrease in concentration on mechanical tasks. They also noticed an increase in the difficulties with handling some operations, which can be explained by the students' greater awareness of the complexity of the act of writing.

Moreover, a recent study (Álvarez & García, 2014) confirms the development of writing in EP and ESO. However, as occurred in our case, they admit that "it is not as gradual as could be hoped" (p. 5). Their findings also coincide with this research, in indicating that, during planning, more proficient writers invest more time in planning and make more progress in organising their ideas. No discrepancies were found between the two studies concerning reviewing, a skill in which progress is made during the grade and students acquire some experience.

Given these findings, it seems correct to analyse the development of writing by levels and grades, comparing not only the skill but also the difficulties. The lack of correlation between the two points to dissimilar progress, for although both improve, they do so differently. Moreover, progress was not always significant. A certain amount of stagnation was detected, which makes us question and review curricula, given the indisputable need to optimise learning to write.

Also, although there are other instruments for evaluating writing skills, one more is presented, of proven effectiveness. Its novelty lies in being rooted in one of the world's most recognised theoretical models.

The study's teaching potential is obvious. Work must be done to develop writing skills and at the same time address any difficulties that may arise in the complex process of writing.

Future research could build on ours so parametric tests can be used to make results more generalised. This, in turn, would require other instruments for gathering data, such as tests and questionnaires, as well as other qualitative methods (ethnographic observation, discussion groups, etc.) that would promote a better understanding of the development of writing and its problems.

Acknowledgements

This research was financed by the Andalusian Regional Government (Spain) and the ERDF (European Regional Development Fund), Programme for STRENGTHENING R&D&I at the University of Granada.

References

- Álvarez, M.L., & García, J.N. (2014). Writer evolution process from primary to secondary education. *Journal of Psychodidactics*, 19 (1), 5–26.
- Bardin, L. (1986). *Content analysis*. Madrid: Akal.
- Beauvais, C., Olive, T., & Passerault, J.M. (2011). Why are some texts good and others not? Relationship between text quality and online management of the writing processes. *Journal of Educational Psychology*, 103, 415–428. doi: 10.1037/a0022545.
- Fox, D. (1981). *The research process in education*. Pamplona: Eunsa.
- Gallego, J.L. (2008a). Planning written expression of students with mental retardation. *Journal of Education*, 346, 267–290.
- Gallego, J.L. (2008b). Planning the expression written by primary school pupils. *Bordón*, 60 (2), 63–76.
- Gallego, J.L., & González, J. (2008). How to plan the written composition intellectually gifted students. *Journal of Educational Research*, 26 (2), 463–484.
- García, A., & Salvador, F. (2010). *How to write Roma students. Implications for educational practice*. Madrid: EOS.
- García, J.N., & Fidalgo, R. (2003). Changes in metacognition of the psychological processes of writing in students from 3rd to 3rd ESO EP. *Journal of General and Applied Psychology*, 56 (2), 239–251.
- González, M.^a J., & Martín, I. (2006). Performance analysis in written composition and its difficulties in secondary education. *Journal for the Study of Education and Development*, 29 (3), 315–326.
- Gutiérrez, R., & Salvador, F. (2006). The planning process in the written expression of deaf students : case studies in Secondary Education. *Journal of Education*, 339, 435–453.
- Hayes, J.R. (1996). A new framework for understanding cognition and affect in writing. In C.M. Levy y S.R. Ransdell (eds), *The Science of Writing* (pp. 1–27). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hayes, J.R., & Flower, L.S. (1980). Identifying the organization of writing process. In L.W. Gregg, y E.R. Steinberg (eds.), *Cognitive process in writing* (pp. 3–30). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Krippendorff, K. (2002). *Content analysis methodology. Theory and practice*. Barcelona: Paidós.
- Lecuona, M.^a P., Rodríguez, M.^a J., & Sánchez, M.^a C. (2003). Written evaluation models in primary education composition. *Journal of Education*, 332, 301–326.

- Ramos, J.L., Cuadrado, I., & Iglesias, B. (2005). Written in students of Elementary and Secondary Education composition. *Culture and Education*, 17 (3), 239–251.
- Rodríguez, A. (2007). Syntactic dysfunctions found in narrative texts produced by students with low vision and blindness. *Journal of Education*, 343, 531–451.
- Salvador, F. (2004). Structural features of narrative text written by students with learning difficulties. *Journal of Science Education*, 198–99, 285–305.
- Salvador, F. (2008). *Psychology and pedagogy of written language*. Madrid: EOS.
- Salvador, F., & García, A. (2009). The review process in written composition elementary school students. *Spanish Journal of Pedagogy*, 242, 61–76.