

DETECTION AND CORRECTION OF LINGUISTIC ERRORS: RESULTS ACCORDING TO LINGUISTIC PREFERENCES AND USES

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Abstract: *This paper examines the ability of 256 university students to detect and correct errors related to different linguistic aspects of Catalan, by means of a test including correct and incorrect sentences. The sentences included aspects of Catalan prescriptive grammar, errors caused by interference from Spanish, and discursive aspects (adequacy, coherence and cohesion). In addition to that, the ability of the students has also been linked to data from their language use and linguistic experience in the following areas: language spoken in the family, language spoken with friends, and formal and informal languages of preference. The results show that students whose preferred language is Spanish or either Spanish or Catalan are less competent than those using Catalan on a regular basis. Taking into account the type of error, students who use preferably Spanish or both languages show significantly worse results in the error detection task (in sentences containing grammar and interference errors) than those who prefer Catalan. In contrast, no significant differences are shown regarding discourse errors when the students' linguistic use is considered.*

Keywords: *error detection, error correction, Catalan norm, linguistic interference, linguistic use.*

1. INTRODUCTION

The difference between novice and expert writers is a topic that has been studied since the 1970s (Emig, 1977; Flower and Hayes, 1980; Bereiter and Scardamalia, 1987; among others). It is held that expert writers use a series of complex cognitive strategies that, apart from grammar skills, also includes aspects related to Psycholinguistics, Sociology, Pragmatics or Sociolinguistics.

The writing process of expert writers is complex, and it consists of three basic stages: planning, translating (textualization) and reviewing. Each one of these stages involves the knowledge of multiple skills. Text reviewing with regard to both the form (superficial revision) and the content (accurate revision) plays a central role in the writing process (Ferris, 2006; Goldstein, 2006; Sachs and Polio, 2007). In fact, there are many studies that have focused on various aspects linked to text reviewing: from the process of reviewing in general (García and Arias-Gundín, 2004; Pérez, 2001; Conrad and Goldstein, 1999; Chanquoy, 1997; Cameron et al., 1997; Camps, 1992) to specific grammatical features (Largy, Chanquoy and Dédéyan, 2004; Largy, Dédéyan and Hupert, 2004).

But it is obvious that, in order to be expert writers, it is essential for students to be able to review their own texts critically with regard to the content and the text structure as well as the use of language. This means that the reviewing process will involve the knowledge of a series of skills. On the one hand, an accurate reviewing will imply the control of the objectives set, the development of the ideas, and text adequacy, coherence and cohesion, among others. So the correct use of cohesive elements (of text grammar) will play a significant role. On the other hand, one of the main problems with respect to the superficial reviewing has to do with the ability to detect grammatical errors (relative to the prescriptive grammar of the language examined or loan translations borrowed from other languages) and orthographic errors.

From a university perspective, precisely one of the problems observed in Catalan students, and one that causes more concern, is the lack of knowledge of the language rules. In particular, rules related to aspects of Catalan itself and aspects derived from the influence of Spanish, or the weak knowledge of textual elements. Despite all these shortages, Catalan students get results similar to the rest of Spanish students with regard to their linguistic skills, according to the results from the comparative studies on linguistic skills. Those results are obtained when the Catalan in Catalonia is compared to the Spanish in the rest of Spain or when what is exclusively analyzed is the competence in Spanish in both places. Arnau (2004) reviews different studies along these lines (even though he does not specifically measure the detection and correction of errors).

Firstly, the reading comprehension tests from the PISA report (OCDE, 2001) focus on the access and recovery of the information, the integration and interpretation of the information, and the reflection and assessment. The results in Catalonia are always slightly better than the Spanish average, and they are close to the average of the group of countries studied. Those results are maintained in the reports published on the PISA tests in posterior tests (MEC, 2007; MEC, 2010).

Secondly, the reports from the Instituto Nacional de Calidad y Evaluación (INCE, 1999; INCE, 2000) analyze the knowledge of Spanish in Catalonia and in the rest of Spain. They take four dimensions into account: oral and reading comprehension, writing, knowledge of the use of language and Spanish literature. The general results indicate that the knowledge of Spanish in Catalonia is comparable to the average in Spain. Finally, the comparative study on the linguistic skills of students in Catalonia (SEDEC, 1998) compares the results obtained on the knowledge of Catalan and Spanish. It also provides information on the native language of the students (Catalan or Spanish). This study focuses on 14 different dimensions: oral comprehension, morphosyntax, spelling, reading comprehension, writing (adequacy, coherence, cohesion and linguistic correction), oral text (linguistic correction and organization), phonetics and reading (mechanics, intonation and speed). In the assessment of Catalan, the results are always higher for Catalan-speaking students (with statistical significance) or similar to Spanish-speaking students. In the assessment of Spanish, on the other hand, the results are much more homogeneous in both groups. From the 14 dimensions analyzed, there are four with significant differences (in three of which Catalan-speaking students get a higher score and only in one, oral expression, Spanish-speaking students obtain better results).

These results can be explained in the framework of the **Interdependence Hypothesis** (Cummins, 1979). According to this hypothesis, students are capable of transferring some linguistic knowledge learned in one language to another language. For example, the ability to create coherent, cohesive and adequate texts, or the ability to make metalinguistic judgements, to explain, narrate, etc.

In order to tackle this issue, this article focuses only on the following aspects of reviewing: the ability to successfully detect and correct errors. We present empirical results on this skill from 256 Primary Education undergraduate students (future primary school teachers) in their first year at the University of Girona (during the 2009-2010 academic year). The goal is to analyze this ability and connect it to various data indicating the students' preferences and linguistic uses.

The test provided consisted of one error detection and correction exercise. Following van der Pool's (1996) criteria, who classifies the assessment tools of the reviewing process into *online* tools (direct observation, interview while the reviewing is being carried out, thinking out loud or specific detection and correction tests) and *offline* tools (questionnaires, interview after the reviewing task or a posteriori evaluations by the teachers of texts produced by the learners), we can say that our test belongs to the *online* category, similarly to studies like Cameron et al. (1997), Hacker et al. (1994), McCutchen et al. (1997) and Wallace et al. (1996), where students have to detect, mark and correct textual errors.

More specifically, the task designed for this research was based on James (1998) analysis, who divides the learner's linguistic errors into three categories: intralinguistic errors (caused by difficulties of the language itself), interlinguistic errors (due to the influence of other languages) and errors related to discourse properties (including both discourse errors and pragmatic ones). Thus, our test takes these three categories into account and deals with the following types of error: a) errors relative to the prescriptive grammar and orthography specific to Catalan (intralinguistic errors); b) errors related to the linguistic interference of Spanish (interlinguistic errors); and c) errors connected to discourse adequacy, coherence and cohesion (discourse errors).

The results obtained from the participants are connected to their linguistic uses in the following environments: language spoken in the family, language spoken with their friends, preferred formal language and preferred informal language. Hence these data will allow us to know which groups of students have more difficulties detecting and correcting each type of error.

2. GOALS AND HYPOTHESES

The present study focuses on the empirical analysis of the ability to detect and correct errors related to the prescriptive grammar, to the linguistic interference of Spanish and to discourse elements (of coherence, cohesion and adequacy) and it has the following goals:

- a. The analysis of how the students' ability to detect and correct errors is connected with their everyday use of Catalan or Spanish. This is done in the following contexts: language normally used in the family; language normally used with friends; preferred language in formal situations; and preferred language in informal situations;
- b. The finding and analysis of the types of error that offer more difficulties to each group of students.

In order to formulate the hypotheses, we have considered the results from different evaluation studies (such as SEDEC, 1998; INCE, 1999; INCE, 2000; OCDE, 2001; MEC, 2007; MEC, 2010). So the hypotheses that are assessed here are the following:

- a. Overall, students who prefer and use Catalan more often will obtain better results in detecting and correcting errors (presented in the Catalan language).
- b. Students who have Spanish as their preferred language will show a lower ability to detect errors than students who prefer Catalan due to linguistic interference.
- c. There will be no statistically significant differences in the effectiveness to detect and correct errors related to Catalan prescriptive grammar, since all the students have had the same formal education in prescriptive grammar during their obligatory education.
- d. There will be no statistically significant differences in the detection and correction of errors related to text coherence, cohesion and adequacy, since these are more transferable aspects from one language to another than orthographic or grammatical features.

3. METHODOLOGY

3.1. Participants

The participants in this study were 256 Primary Education first year undergraduate students. The test was answered at the end of the academic year. With regard to their gender, 64% were female and 36% male. The access to university was mainly through a high school diploma and a university entrance examination (70.5%), followed by a vocational qualification (23.4%), examinations for students over 25 years of age (2.8%), and others (from other university degrees or other types of access, 3.3%). The native language of the participants was Catalan (65%), Spanish (25.7%) or both languages indistinctively (9.3%). However, since all participants lived and attended Primary and Secondary schools in Catalonia in their childhood and adolescence, they were supposedly proficient in both Catalan and Spanish.

3.2. Test design

The test designed consists of 60 sentences. The first 20 sentences are related to the interference of Spanish grammar (interlinguistic errors). The topics selected correspond to those aspects that are more problematic, as identified by Amadeo and Solé (1996) and Mestres et al. (2007), and frequent in the writings of university students, according to the researchers' preliminary observations. Sentences 21-40, on the other hand, deal with grammatical and orthographic issues specific to Catalan (intralinguistic errors). The choice of topics was based on the test of *Nivell de suficiència* of the Direcció General de Política Lingüística of the Generalitat de Catalunya, which is equivalent to the C1 level of the Common European Framework of Reference for Languages (CEFR). Finally, the last sentences (41-60) have to do with discourse matters (adequacy, coherence and cohesion).

The test started with this statement: "In the following sentences, there can be various problems of language (adequacy, coherence, cohesion, grammar, prescriptive grammar...). Say if the sentence is correct or has problems. If you think that a sentence has problems, write below the version that you consider better or correct." In the appendix we provide the 60 sentences with the particular aspect that is being assessed. The sentences marked with an asterisk are incorrect or have problems. In four questions, more than 50% of the students gave new correct versions of already correct sentences (on average, 64% of the students with Catalan L1 and 61% of the students with Spanish L1). In these cases, we decided to cancel the sentence and not to take them into account

in the statistical analysis, since the formal context in which the test was handed out could have caused the false impression that some of the sentences contained hidden difficulties.

The reliability of the test has been statistically validated through the split-half method (Spearman-Brown coefficient = 0.791; Guttman Split-Half coefficient = 0.787).

In order to obtain the variables referring to the linguistic preferences, the participants were asked to provide information (through a written form with closed questions) about the language normally used in the family and with friends, and the preferred language in formal and informal situations. Table 1 shows a summary of the participants' characteristics according to their linguistic preferences. As can be observed, there is a clear preference for Catalan in all the environments. The percentage of students who claimed to use other languages (2.5% of the total) was discarded from the statistical analysis since the sample was not representative.

Table 1. *Percentage of participants according to their preferences and linguistic uses.*

	Catalan (%)	Spanish (%)	Catalan and Spanish interchangeably (%)
Language normally used in the family	65	25.7	9.3
Language normally used with friends	67.1	12.2	20.7
Preferred language in formal situations	86.1	5.5	7.6
Preferred language in informal situations	70.5	16	13.5

3.3. Statistical analysis

For the statistical treatment of the data, we used contingency tables (with the specification of the corrected typified residues) and Pearson's chi-square statistic. Once we analyzed whether or not there was a significant relationship between the ability to detect and correct the errors and the factors studied, the next important step was to measure what the direction of that relationship was by comparing the observed cases and the expected cases. The expected cases are the result that would be obtained in the sample analyzed if the two variables (acceptable detection and correction of errors, on the one hand, and language use and preferred language in the various environments studied, on the other) were independent of each other, that is, if there was no relationship between the presence of errors and the factor analyzed. The fact that there is a significant relationship between the two variables causes the observed cases of detection of errors registered not to coincide with the expected ones, precisely because the factor determines that ability. In order to be able to carry out the comparison between cases expected and cases observed, the adjusted residual values (ARV) were utilized. This statistical value follows a normal distribution with zero average and standard deviation 1. Therefore, assuming a confidence interval of 95%, we can say that residual values higher than 1.96 or lower than -1.96 show the situations with the crossing of two variables containing more or fewer cases, respectively, than the ones expected if the variables were independent.

4. RESULTS

Firstly, table 2 shows the ARV results, which indicate the ability to detect and correct the errors successfully according to the language used in the various situations examined and the participants' preferred language in the study. The p-value of the chi-square is highly significant in all cases. The results demonstrate that students who claim to use Spanish more than Catalan (or, to a lesser degree, both languages together) have a lower ability to detect and correct errors than students who only use Catalan (since they show significant negative ARV values, while students who claim to use Catalan more often show significant positive values). This aspect needs to be considered since it shows a different profile in those participants who use Spanish on a regular basis. We can see neither a positive transfer in terms of Odlin (1989) nor facilitation in terms of Ellis (1994) and Ellis and Barkhuizen (2005), which would involve an improvement in the learning of the two languages due to their structural similarities, but the performance of Catalan in the students who use Catalan and Spanish or Spanish as their preferred language is less satisfactory than in those students who mainly use Catalan.

Table 2. Ability to detect and correct the error successfully according to the preferred language and use. Adjusted residual values and Pearson's chi-square. Asterisks show significant ARV values.

	Adjusted residual values (ARV)			sign. Pearson's chi-square
	Catalan	Spanish	Catalan and Spanish interchangeably	
language in the family	5.6*	-6.6*	0.7	p<0.001
language with acquaintances	7.2*	-6.8*	-2.9*	p<0.001
preferred formal language	6.4*	-6.9*	-2.2*	p<0.001
preferred informal language	7.9*	-5.7*	-4.5*	p<0.001

Secondly, the analysis of the ability to detect errors according to their typology shows that students who claim to use Spanish more often than Catalan (or the two languages interchangeably) are less able to identify linguistic interference errors and errors specific to Catalan grammar than students who prefer the use of only Catalan. With regard to the detection of errors related to discourse aspects, the groups do not show any differences according to their preferred language.

Table 3. Ability to detect and correct errors successfully according to the type of error and the preferred language of use in several situations. CTR and indication of the degree of significance of p.

	Linguistic interference	Specific aspects of the Catalan grammar	Discourse aspects
language in the family	Catalan: 6.5 Spanish: -7.8 Both: no sign. Pearson's chi-square***	Catalan: 2.7 Spanish: -3.1 Both: no sign. Pearson's chi-square**	Pearson's chi-square no sign.
language with friends	Catalan: 7.8 Spanish: -6.7 Both: -3.7 Pearson's chi-square***	Catalan: 4.8*** Spanish: -4.2*** Both: -2.2*** Pearson's chi-square***	Pearson's chi-square no sign.
preferred formal language	Catalan: 6.7 Spanish: -6.6 Both: -2.8 Pearson's chi-square***	Catalan: 4,6 Spanish: -3,7 Both: -2,7 Pearson's chi-square***	Catalan: no sign. Spanish: -2 Both: no sign. Pearson's chi-square*
preferred informal language	Catalan: 8.7 Spanish: -6.4 Both: -4.7 Pearson's chi-square***	Catalan: 4.6 Spanish: -2.6 Both: -3.4 Pearson's chi-square***	Pearson's chi-square no sign.

***p<0.001;**p<0.01;*p<0.05

5. DISCUSSION AND CONCLUSIONS

The first goal set in this study was to analyze the ability of different groups of students to detect and correct linguistic errors successfully according to their preferences in the use of Catalan or Spanish and the language normally used in different environments. The observation of the data presented here allows us to state that, in absolute terms, CTR values higher than 1.96 or lower than -1.96 show significant differences. These data agree with the findings provided in the comparative study of the knowledge of Catalan and Spanish sponsored by the Servei d'Ensenyament del Català - SEDEC (1998) (cited in Arnau, 2004), where the knowledge of Catalan and Spanish among 6th-grade schoolchildren in Catalonia is evaluated (this study has the following variables into account: language in the family, socio-professional position of the family and the type of school, i.e., state, private or state-subsidised school). The SEDEC study shows that competence in Catalan (which tests oral comprehension, morphosyntax, orthography, phonetics, reading mechanics, intonation and reading rate) is significantly better in Catalan-speaking students than in Spanish speakers in 9 out of 14 tests. In addition to this, it also clearly demonstrates that the pupils' family language does not cause any setback in the knowledge of Spanish. We can see this in the fact that there are no significant differences in most of the tests, and that only in one of the 14 tests Spanish-speaking students obtain better results than Catalan-speaking students (against three in which Catalan-speaking students get a better score). Hence, the results obtained in our study are in the same line as the results shown by the SEDEC study. Therefore, hypothesis a) is confirmed.

As far as the second goal is concerned (i.e., the analysis of which typology of errors shows more difficulties for each group of students according to their linguistic uses), it can be observed that students that prefer Spanish get worse results with regard to the detection of errors caused by interference processes (in a high degree) and errors related to Catalan prescriptive grammar (to a lesser degree, although it is also statistically significant). These data allow us to validate hypothesis b), but not hypothesis c), since the worst results are maintained in the group preferring Spanish in the various situations examined.

Related to the latter hypothesis, the results obtained are not those expected as the aspects on normative grammar that are assessed are specific to the written language and to a formal register (therefore, quite far from colloquial oral uses). Thus, the use of Catalan in the family should not be an advantage. On the other hand, no significant differences are seen on the detection of problems relating to the discourse, so the results validate hypothesis d).

It is interesting to emphasize that the results show a lack of ability to detect orthographic and grammatical errors, interference errors and discourse errors in all groups, although mainly in the group where Spanish is highly preferred. This inability prevents the students from getting the skills in writing that are characteristic of expert writers, among other things because they neglect one of the three fundamental stages in the writing process, i.e., correction. Students who prefer Spanish get results that are overall worse than students who prefer Catalan, so they will need strategies that allow them to improve their communicative competence.

Finally, it has to be stressed that, according to the SEDEC (1998) study, Catalan students (both Catalan speakers and Spanish speakers) obtain general results on linguistic competence in Spanish similar to those observed in Spanish monolingual autonomous communities, but, in the former case, students also gain linguistic competence in Catalan (clearly higher in Catalan speakers). The SEDEC data also indicate that in practically all the tests, both in Catalan and in Spanish, Catalan speakers get better results than Spanish speakers.

The analysis of the students' linguistic skills is a topic that needs to be investigated in more detail. This study contributes in this direction by showing that the ability to detect errors in the Catalan language is higher in Catalan speaking students even when all the students received the same education. Now a matter for further research would be to carry out the test the other way around so we could observe the ability of Catalan speakers and Spanish speakers to detect errors in Spanish.

If the results followed the same direction as our study has pointed out, it would seem that, despite having a good bilingual or multilingual education, the proficiency of the preferred language in the family and with friends would be higher than in other languages. In this case, it would be necessary to find strategies to correct these inequalities in the knowledge of one language so the speakers who do not have it as their preferred one could overcome this disadvantage (which, as we have seen, it is maintained at university) without affecting the knowledge of other languages. This would help us to get an overall view of the situation, and it would also mean a step closer towards understanding how the different skills are transferred from one language to another and how one language interferes with another.

REFERENCES

- Amadeo, I. and Solé, J. (1996). *Curs pràctic de redacció*. Barcelona: Ed. Columna.
- Arnau, J. (2004). "Sobre les competències en català i castellà dels escolars de Catalunya: una resposta a la polèmica sobre el decret d'hores de castellà", *Llengua, Societat i Comunicació*, 1: 1-7.
- Bereiter, C. and Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale (N.J.): Erlbaum.
- Cameron, C., Edmunds, G., Wigmore, B. Hunt, A. and Linton, M. (1997). "Children's revision of textual flaws", *International Journal of Behavioral Development*, 20/4: 667-680. doi:10.1080/016502597385117
- Camps, A. (1992). "Algunas observaciones sobre la capacidad de revisión de los adolescentes", *Infancia y Aprendizaje*, 58: 65-81. doi:10.1080/02103702.1992.10822333
- Chanquoy, L. (1997). "Thinking skills and composing: Examples of text revision", in J. H. M. Hamers and M. Oortoom (ed.) *Inventory of European Programmes for teaching thinking*, Utrecht: Sardes, pp. 179-185.
- Conrad, S. M. and Goldstein, L. M. (1999). "ESL student revision after teacher-written comments: text, contexts and individuals", *Journal of second language writing*, 8/2: 147-179. doi:10.1016/S1060-3743(99)80126-X
- Cummins, J. (1979). "Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters", *Working Papers on Bilingualism*, 19: 121-129.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford Applied Linguistics.
- Ellis, R. and Barkhuizen, G. (2005). *Analysing Learner Language*. Oxford: Oxford University Press.

- Emig, J. (1977). "Writing as a mode of learning", *College Composition and Communication*, 28: 122-128. doi:10.2307/356095
- Ferris, D. (2006). "Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction", in K. Hyland and F. Hyland (ed.) *Feedback in second language writing: Contexts and issues*, Cambridge: Cambridge University Press, pp. 81-104. doi:10.1017/CBO9781139524742.007
- Flower, L. and Hayes, J. R. (1980). "The dynamics of composing: Making plans and juggling constraints", in L. W. Gregg and E. R. Steinberg (ed.), *Cognitive processes in writing*, Hillsdale: N.J. Erlbaum, pp. 31-50.
- García, J. N. and O. Arias-Gundín (2004). "Intervención en estrategias de revisión del mensaje escrito", *Psicothema*, 16/2: 194-202.
- Goldstein, L. (2006). "Feedback and revision in second language writing: Contextual, teacher, and student variables", in K. Hyland and F. Hyland (ed.), *Feedback in second language writing: Contexts and issues*, Cambridge: Cambridge University Press, pp. 185-205. doi:10.1017/CBO9781139524742.012
- Hacker, D., Plumb, C., Butterfield, E., Quathamer, D. and Heineken, E. (1994). "Text revision: Detection and correction of errors", *Journal of Educational Psychology*, 86/1: 65-78. doi:10.1037/0022-0663.86.1.65
- Instituto Nacional de Calidad y Evaluación - INCE (1999). *Evaluación de la Educación Primaria*. Madrid: Ministerio de Educación, Cultura y Deporte.
- Instituto Nacional de Calidad y Evaluación - INCE (2000). *Evaluación de la Educación Secundaria*. Madrid: Ministerio de Educación, Cultura y Deporte
- Largy, P., Chanquoy, L. and Dédéyan, A. (2004). "Orthographic revision: the case of subject-verb agreement in french", in L. Allal, L. Chanquoy and P. Largy (ed.) *Revision cognitive and instructional processes*, New York: Kluwer Academic Publishers, pp. 39-62. doi:10.1007/978-94-007-1048-1_4
- Largy, P., Dédéyan, A. and Hupet, M. (2004). "Orthographic revision: a developmental study of how revisers check verbal agreements in written texts", *British Journal of Educational Psychology*, 74: 533-550. doi:10.1348/0007099042376382
- McCutchen, D., Francis, M. and Kerr, S. (1997). "Revising for meaning effects of knowledge and strategy", *Journal of educational psychology*, 89/4: 667-676. doi:10.1037/0022-0663.89.4.667
- MEC (2010). *PISA 2009. Programa para la evaluación internacional de los alumnos. OCDE. Informe español*. Madrid: Instituto de Evaluación. Ministerio de Educación. doi:10.1371/journal.pone.0011612
- MEC (2007). *PISA 2006. Programa para la evaluación internacional de los alumnos. OCDE. Informe español*. Madrid: Instituto de Evaluación. Ministerio de Educación.
- Mestres, J. M., Costa, J., Oliva, M. and Fité, R. (2007). *Manual d'estil. La redacció i l'edició de textos*. 3rd edition. Vic: Eumo.
- Organisation for Economic Cooperation and Development - OCDE (2001). "Regard sur l'éducation. Les indicateurs de l'OCDE", in Consell Superior d'Avaluació del Sistema Educatiu (2002), *Sistema d'indicadors d'Ensenyament a Catalunya*. Barcelona: Generalitat de Catalunya, Departament d'Ensenyament.
- Odlin, T. (1989). *Language transfer*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139524537
- Pérez, S. A. (2001). "Revising During Writing in a Second Grade Classroom", *Educational Research Quarterly*, 25/1: 27-32.
- Sachs, R. and Polio, C. (2007). "Learners' uses of two types of written feedback on a L2 writing revision task", *Studies in Second Language Acquisition*, 29: 67-100. doi:10.1017/S0272263107070039
- Servei d'Ensenyament del Català – SEDEC (1998). *Competència lingüística en català i castellà de l'alumnat de sisè de Primària, curs 1997-1998*. Barcelona: Generalitat de Catalunya, Departament d'Ensenyament. Unpublished.
- Van der Pool, E. (1996). "A text-analytical study of conceptual writing processes and their development", in G. Rijlaarsdam, H. van der Bergh and M. Couzijn (ed.) *Theories, Models and Methodology in Writing Research*, Amsterdam: Amsterdam University Press, pp. 456-472.
- Wallace, D., Hayes, J., Hatch, J., Miller, W., Moser, G. and Silk, C. (1996). "Better revision in eight minutes? Prompting first-year college writers to revise globally", *Journal of Educational Psychology*, 88: 682-688. doi:10.1037/0022-0663.88.4.682

APPENDIX

Sentences from the test used in this study and a brief explanation of the errors produced. The asterisks indicate the sentences that are incorrect and/or containing discourse problems. Sentences (1 to 20) in the test contain interlinguistic errors derived from Spanish interference; sentences (21 to 40) have errors related to intralinguistic aspects, that is, derived from difficulties inherent to the Catalan language; and finally, sentences (41 to 60) contain errors related to discourse aspects (coherence, cohesion, adequacy). Cancelled sentences are not included.

1. *Té tot el que vol.* Correct use of the neuter article.
2. *No tinc massa sort.** Use of *massa* ('too') in negative sentences.
3. *Han trobat un quadre excepcional, però desconeixen l'autor del mateix.** Incorrect use of *mateix* 'self'.
5. *L'he vist varies vegades.** Incorrect use of *varies* 'several'.
6. *No podien tenir fills, i van adoptar un.** Incorrect deletion of the partitive pronoun *en*.
7. *Ha marxat a casa, doncs tenia mal de panxa.** Incorrect use of *doncs* 'then,' which is assigned a causative value.
8. *No hi havia gaire gent al carrer.* Sentence with the correct conjugation of the verb *haver-hi* 'there is,' with no deletion of *hi* 'there.'
9. *Quan aniràs a Barcelona? Aniré demà.** Incorrect deletion of the pronoun *hi* 'there.'
10. *Van començar les obres al gener, acabant-les al juny.** Incorrect use of the gerund, which is assigned the value of a subsequent action.
11. *Es tracta que ho escriguis tu.* Correct use of the conjunction *que* 'that', i.e., it is not preceded by a preposition.
12. *El tenen que operar.** Incorrect use of the periphrasis of obligation.
13. *Hi ha que reconèixer que això està molt bé.** Incorrect use of the periphrasis of obligation.
14. *Vol algo més?** Incorrect use of the Spanish word *algo* 'something'.
15. *Vaig acompanyar l'Oriol a casa seva.* Correct sentence, i.e., the direct object is not preceded by the preposition *a* 'to'.
16. *Vull veure al meu fill.** Incorrect use of the direct object, since it is preceded by a preposition.
17. *Està segur de que el Barça guanyarà.** Incorrect use of a preposition preceding the conjunction *que* 'that'.
18. *Va comprar dues cases i va donar aquestes als seus dos fills.** Excessive use of the demonstrative.
19. *Al entrar ell, tothom va callar.** *Al* 'to the' is an incorrect form to introduce the infinitive with a time value.
20. *No hi havia gaire gent degut a la pluja.** Incorrect use of *degut a* 'due to'.
21. *Al final he entès que la intel·ligència és una capacitat molt complexa.* Correct sentence.
22. *Aquest és el llibre del que et vaig parlar.** Incorrect use of the relative pronoun.
24. *No em pensava que fossis tant tossut.** Incorrect use of *tant* 'so much' instead of the adverb *tan* 'so.'
25. *Després de l'escàndol, va ser inevitable que desapareixés del panorama musical.** Incorrect verbal form *desapareixés* 'disappeared' (subjunctive).
26. *No volem el pastís, mengeu's-el vosaltres.** Incorrect use of the combination of weak pronouns.
27. *Envia-lis una carta als socis.** Incorrect use of the weak pronoun.
28. *Però en aquí hi ha una part negativa que s'ha de comentar.** Insertion of preposition *de* to the influence of the spoken language.
29. *Cal apendre dels errors.** Incorrect form of the infinitive.
30. *Són el tipus de mestre que mostra més seguretat alhora de fer les classes.** Incorrect use of the adverb *alhora* 'at the same time', instead of *a l'hora* 'at the time of'.
31. *Per aquest motiu la tutora la castigat sense pati.** Incorrect contraction between a pronoun and the auxiliary verb.
32. *Si haguessis tornat, haguessis vist la posta de sol.** Incorrect combination of verbal forms.
33. *Prengueu el que vulgueu, que avui convido jo.** Incorrect imperative verbal form.
34. *No he vist enlloc un desordre com el que hi ha en aquesta casa.* Correct use of *enlloc* 'nowhere'.
35. *Va arribar tard a l'oficina per què va perdre l'autobús.** Incorrect use of the interrogative form *per què* 'why' in a sentence with a causative meaning.
36. *Quan va arribar la última cançó es van posar neguitosos.** Incorrect use of the apostrophe.
37. *Vam preguntar-los quins dibuixos hi havia en el conte.* Correct use of the weak pronoun.
38. *Quan acaben l'activitat, se'n porten una llibreta a casa.** Incorrect use of the verb and clitics due to a confusion with the verb *emportar-se* 'take away'.
39. *Els nous exercicis pot ser que ajudin a desenvolupar aquesta capacitat.* Correct use of *pot ser* 'maybe'.
40. *El treball consistia en decorar la cartolina amb ceres.** Incorrect use of the preposition preceding the infinitive.
41. *En primer lloc, us vull felicitar. D'altra banda, us vull dir que tenim molts projectes nous.** Problem of cohesion due to the inadequate use of the linking word *d'altra banda* 'on the other hand'.
42. *La Caputxeta va trobar l'àvia quelcom diferent.** Problem of register due to the use of the archaic form *quelcom* 'somewhat' in a children's tale.

43. *Durant la conversa et va anomenar tres vegades.* * Incorrect use of the verb *anomenar* 'to mention' due to a confusion with the verb *nomenar* 'to appoint'.
44. *Us envio el currículum amb l'esperança de guanyar-me les garrofes a la vostra empresa.* * Problem of register due to the use of a colloquial form in a formal text.
45. *El pàrquing estava complet i al final vaig deixar el cotxe en doble fila.* Adequate use of the participle *complet* 'completed'.
46. *He decidit que tanmateix també hi aniré.* * Inadequate use of the adverb *tanmateix* 'anyway.'
47. *Diu que em vol esperar, tot i que vindré aviat.* * Problem of coherence.
48. *No m'agrada gens que hi hagi pistatxo a l'amanida.* Correct use of *pistatxo* 'pistachio nut'.
49. *El senador va fer acte de presència al sopar acompanyat de la seva fulana.* * Problem of register due to the use of a colloquial form in a formal text.
50. *Ho ha provat d'arreglar per ser al sopar, però no podrà venir.* Correct sentence, with no problems of coherence or cohesion.
51. *Li han operat la seva mà dreta.* * Excessive use of the possessive determiner.
52. *En Joan és alt però simpàtic.* * Problem of cohesion due to the wrong use of the adversative conjunction.
53. *La pel·lícula ha estat molt interessant.* Use of the past participle of the verb *estar* 'to be' as recommended in the prescriptive grammar.
54. *Molts mestres es basen a realitzar la classe llegint i explicant simplement el que el llibre diu.* * Unnecessary and excessive periphrases.
56. *Aquest fet s'ha produït pot ser donat que no hi ha haver una explicació prou clara.* * Problem of cohesion due to the combination of the adverb *potser* 'maybe' (incorrectly written) and the linking word *donat que* 'given that'.
57. *El primer que haig de dir en aquest informe de pràcticum és que m'ha tocat una passada de classe.* * Problem of register due to the use of a colloquial form in a formal text.
59. *He fet una relació de les idees del propi tema amb les aportacions que han fet altres grups.* * Adequate use of the adjective *propi* 'same'.
60. *Era molt bona persona, és a dir, que havia treballat molt.* * Problem of coherence and cohesion: the relation between the two clauses can only be expressed by means of a positive copulative conjunction like *i* 'and'.