

EDUCATIONAL INTERVENTION PROPOSAL FOR TEACHING AND LEARNING VOCABULARY IN SPANISH AS A SECOND LANGUAGE IN PRIMARY EDUCATION

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Abstract

The starting point of this paper is the design and implementation of a quasi-experimental case study on the lexicon available of a group of students who do not have Spanish as their mother tongue, in spite of being residents in Melilla and that they attend the last academic year of primary education (6.º). The language level that is required at the end of this stage is A2, according to the Common European Framework of Reference for Languages (CEFR). Our methodological approach is, above all, the design and development of a systematic planning of teaching and learning vocabulary in the study of Spanish as a second language in the context of the compulsory education, but this research is also useful for our university teaching, because we are trainers of future teachers and also teach them how to develop vocabulary and teaching applications.

Key words: multicultural contexts, second language, Spanish, teaching and learning, vocabulary

Introduction

The starting point of this paper is the design and implementation of quasi-experimental research on the lexicon available of a group of students who do not have Spanish as their mother tongue, in spite of being residents of Melilla (Spain) and attending the last academic year of Primary Education (sixth scholar year). This research is also useful for our university teaching, because we are trainers of future teachers and teach them how to develop this competence and their didactic applications. Our educational landscape has the peculiarity of being specially adapted to a very particular context, as it is the case of public schools in Melilla (Spain), where a large

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number of students from Maghreb are enrolled. They do not have Spanish as their mother tongue, but they can speak Spanish at very different levels, depending on the level of influence of the many social, economic, political and cultural factors that shape the complex reality of this city, located in the north of Africa.

Our research is oriented towards the achievement of a key objective as it is the degree of impact on the lexical competence in Spanish as 2L (S2L) of these students. Thus, we propose an educational innovation in the field of Primary Education, in multicultural contexts in which traditional apprenticeships, based mainly on the memorization of lexical items, have been revealed, both in terms of practice and educational consequences, by contributions to the new sciences of language (Oster, 2009, San Mateo, 2005, Vivanco, 2001) as inadequate, if not downright ineffective. In order to break the inertia of the usual patterns, we believe we should provide teachers with experiences and materials to guide empirically tested and their work toward a change that takes them to introduce into their schedules, in a systematic and integrated with the other contents and objectives of the area, relative to the lexicon competence.

Our proposal is an "adaptation" of *Collage Method* (Möller, J. and Burbat, R., 2007), originally developed for the teaching of German as Second Foreign Language at the Faculty of Translation and Interpretation of the University of Granada (Spain), subsequently adjusted to the teaching of Spanish², with special attention to wording in the study of second languages and finally contextualized in the particular environment of the coexistence of four communities (Arabic, Spanish, Hebrew and Hindu Community), in the autonomous city of Melilla (Spain).

The investigated students had language comprehension difficulties. Because they were not native speakers, they were not placed in a school setting with native speakers and, therefore, could be included in the Draft Center – a programme designed especially for them, as students attending a school on the outskirts of the city, with a hundred percent of students whose mother tongue is “Chelja language” (Arabic dialect that is spoken in the Rif zone, Morocco), and not the programme for other native speakers of the city, as noted later, when we shall talk about the materials used. The central hypothesis of our research is related to the comparison of two groups of students (experimental and control) before and after being subjected to a specific program for learning vocabulary, and is formulated as follows:

² Innovation Teaching Project (2004-08) “*Collage Method: Teaching a Second Language for the teaching of German as Second Foreign Language at the Faculty of Translation and Interpretation of the University of Granada (Spain)*”, coordinated by Julia Möller Runge (Full Professor at the University of Granada). In this Project we studied the peculiarities of teaching Spanish as a Second Language and we also analyzed the adaptability of determining *Collage*, where appropriate, changes and adaptations for Spanish compared with German.

Sixth-grade students of the third cycle of Primary Education, with a Mother Tongue other than Spanish and following the Didactic Programme for the Development of Lexical Competition, called “Pedelex”, shall improve their vocabulary at higher rates than students who do not follow this method.

Material and procedures

Once we have established the objectives and hypotheses, we shall further determine the participants involved, the materials used and the procedures. We believe that the kind of research that best fits the character of this work is descriptive and inferential analysis of the results. Moreover, the different existing research designs-cross-sequential longitudinal and the cross, were chosen for performing the data collection over a period of time, as well as to process and subsequently analyze the data obtained. In the field of Second Language Acquisition (ASL) there are other references to the implementation of longitudinal studies in order to test the effects of various factors on the acquisition (Ortega and Iberri-Shea, 2005; Singleton and Ryan, 2004). Finally, the empirical study of our investigation is from a design that Dendaluce called quasi-experimental, because the sample is selected only relatively by chance, as long as one works with groups and levels previously established by the centre where the empirical study is conducted.

Participants

We used representative samples of the population towards which the research is directed, as stated above, students of compulsory primary education who have Spanish as a Second Language (SL). The sample consists of students attending a public school on the outskirts of Melilla, where the population's mother tongue is “Chelja”. The total sample consists of fifty five students, of whom twenty five are boys and thirty, girls. The participants provided two groups corresponding to the sixth grade of a Primary Education Centre in the autonomous city of Melilla (Spain), with a command of Spanish to varying degrees, depending on the level of influence of the many social, economic, political and cultural factors which make up the complex reality of this city and particularly that of these students. We shall here summarize their cultural characteristics: almost all children, 90% of the participants were born in Melilla and 85.5% have been living there. Regarding their relationship with Morocco, the study has revealed the fact that 83.6% of all the subjects visited Morocco quite often (on weekends, holidays, etc.)

As expected, about 50% of parents of the participants were born in Morocco and in Melilla. Regarding data on the studies of the father and the mother, a relevant segment of the participants

(34.5%) did not know how to answer or provided no answer whatsoever. We believe that this is due to the fact that many of them filled in only the item of the studies of the father, because in the Arab culture it is common for mothers to have no education and work inside the home. Thus, in more than half of the cases (52.7%) the mother has no education and only 12.7% of them have primary education. Almost the entire group of students (96.4%) are not repeaters. However, it is noteworthy that 36.4% of the participants had received an E (inadequate) for the Spanish Language the previous year. It is curious also that half of the participants (60%) are recognized as Spanish speakers and also as Chelja speakers. Almost 70% admit using the two languages at home and outside school.

Other questions related to the socio-cultural context of the students were concerned with whether or not the children watched television and the number of hours they spent in front of the screen. 70% of the participants watched Spanish television between one and three hours daily. Regarding the experience of reading, including its possible impact upon the level of proficiency, it is noteworthy that the subjects did not deny their lack of interest in this activity, although we suspect that children usually know what they should say in these cases and, although not true, mark the option as expected. The vast majority (70%) say they read books. Only 10.9% specify exactly what kind of books (comics and/or stories), but in general we cannot rely entirely on these data, because of the reasons mentioned above.

The research sample consisted of two groups of subjects: a quasi-experimental group consisting of twenty seven students of the sixth grade, third cycle of primary education, and which has developed throughout the programme developed by us, called *Pedelex*; a control group made up of twenty eight students in the same grade, involved in no activity from our programme and limited to following the guidelines set by the textbook on Spanish Language and Literature used in the centre, published by Anaya (2006). Establishing certain extra linguistic variables and new criteria specific to the lexical statistical studies and corpus linguistics (Perez, 2002, Sinclair, 2004) allows us to define the relevance of the words that are part of the corpus studied.

In this study, we consider lexical performance indicators, among others, the “breadth and mastery of vocabulary” and the “lexical richness” manifested in the use of general and specific strategies detailed in the instruments used in research. The first indicator is a manifestation of the speaker’s knowledge of the surrounding reality, in terms of the quantity and quality of the vocabulary used. The second indicator is defined as the number of new words appearing in a given text (Müller, 1977: 116). That is, an increasing number of words, corresponding to the increased length of a text, will increase the rate of lexical richness, although not at the same pace. Therefore, lexical

competence shall be looked at in terms of the quantitative value, lexical richness, as well as knowledge of strategies of using words effectively and appropriately in any context of communication (Cottez, 1987:276 and cited by Prado, 2004: 309).

Other case studies on vocabulary acquisition were conducted by Pigada & Schmitt (2006), Fitzpatrick, Al-Qarni & Meara (2008) and Strong & Boutorwick (2011). The first case study is about a learner of French who explores whether an extensive reading programme can enhance lexical knowledge. The study assessed a relatively large number of words (133), and examined whether one month of extensive reading enhanced knowledge of these target words spelling, meaning, and grammatical characteristics. Overall, the study indicates that more vocabulary acquisition is possible from extensive reading than previous studies have suggested.

The second paper by Fitzpatrick *et alii* (2008) describes a single-subject study of vocabulary acquisition. The subject, an L1 English speaker, was required to learn 300 vocabulary items in Arabic at a rate of 15 new words a day over a period of 20 days. The paper considers factors which might affect the uptake and retention of items, and uses a matrix analysis to make long-term projections for vocabulary acquisition.

The third paper is about how important extensive reading is for incidental vocabulary acquisition and the authors enhance three types of word knowledge to uphold it.

Procedure

We used a combination of quantitative and qualitative methodology. The qualitative data was provided by the teachers' experience in sharing sessions. Quantitatively speaking, the test results were analyzed statistically and then interpreted, in order to generate as comprehensive a view as possible of the phenomenon studied and to see the extent to which our objectives and hypotheses were met. This paper is part of a wider research which had three distinct complementary phases and which we cannot mention here because of the nature of this paper.

Results

The two figures below summarize the positive trend that supports the experimental group on the average of sixteen of their lexical semantic fields. This indicates that this group has shown a constant evolution while the control group stagnated, as shown in Figures 1 and 2. These figures also noted the average of the sixteen fields of semantic lexicon available to both groups in the pre-test and post-test.

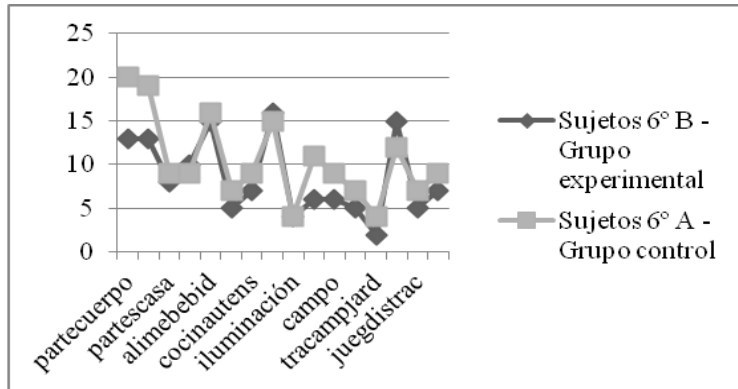


Figure 1. Average lexical semantic fields available to the experimental and control groups in the *pre-test*

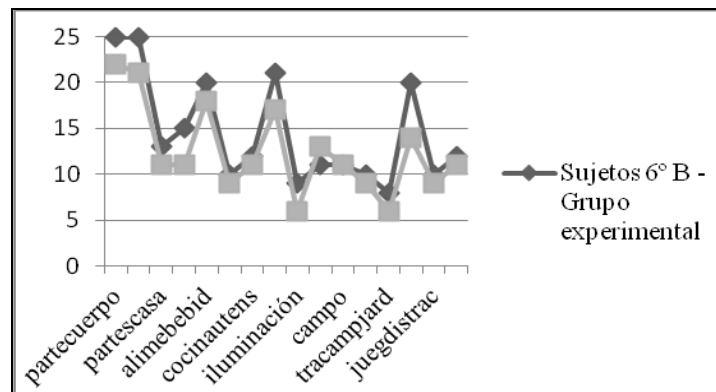


Figure 2. Average lexical semantic fields available to the experimental and control groups in the *post-test*

On the overall, the average range of the experimental group shows that their vocabulary has grown significantly compared to the control group, which reaches even lower, as shown in Table 1.

Table 1. The comparison of results on the available lexicon variable: total vocabulary available between the pre-test and post-test experimental and control groups

	GROUP	N		AVERAGE RANGE	SUM OF RANGES
TOTLEXDIS	PRE-TEST	EXPERIMENTAL	26	24,50	637
		CONTROL	26	28,50	741
	POS-TEST	EXPERIMENTAL	25	27,26	696,50
		CONTROL	27	25,80	681,50

Figure 3 shows this evolution for the experimental group and we see the rank sum of the two groups come to equal and overlap in the post-test, shortening the large differences observed at the beginning of this research.

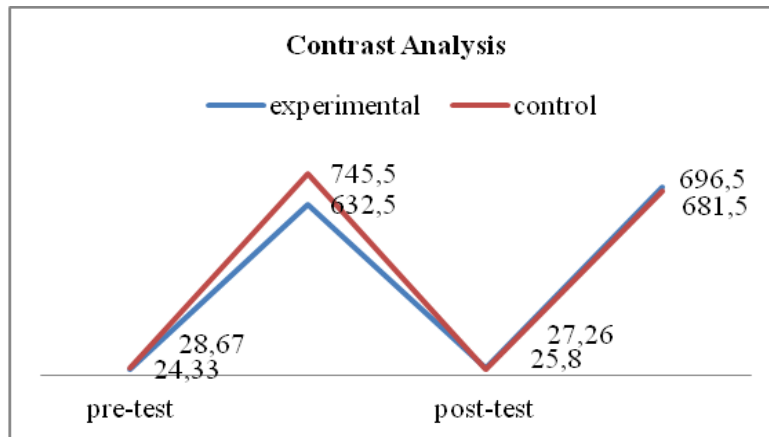


Figure 3. Contrast analysis on lexical variable available and total vocabulary available: total vocabulary available between the pre-test and post-test experimental and control groups

The Z-contrast was used to test whether the U statistic is significant, because there have been some equal scores (ties). For example, in “body parts” $Z = -3,12$ $p \leq 0.00$. Here, the Z-contrast checks if there are significant differences between the two groups of subjects. The Wilcoxon W contrast was used to see whether there are any differences in the pre-test and post-test experimental group, $W = 518.50$ ($19.94 * 26$).

The statistical Mann-Whitney U equals 167.50 in this example. The results in Table I show how failing to 0.005 significant differences in the various fields on the lexical variable available in the pre-test, post-test are equal even in terms of these small differences, which are still not significant. This means that if there had been any differences between the two groups at first, they would have been attenuated and both groups would have tended to equalize after the intervention programme is the central part of this research.

Table 2. *Test statistics available on the lexical variable between the pre-test and post-test*

VARIABLE		U DE MANN-WHITNEY	W DE WILCOXON	Z	SIG. ASINTÓT. (BILATERAL)
PARTECUERPO	PRE-TEST	167,50	518,50	-3,12	,00
	POS-TEST	424	1909	-2,65	,00
ROPA	PRE-TEST	281	632	-1,04	,29
	POS-TEST	666	2151	-,09	,92
PARTESCASA	PRE-TEST	263	614	-1,37	,16
	POS-TEST	595	920	-,84	,39
MUEBCASA	PRE-TEST	247	598	-1,67	,09
	POS-TEST	593	918	-,86	,38
ALIMEBEBID	PRE-TEST	288	639	-,91	,36
	POS-TEST	535	2020	-1,47	,13
OBJMESACOM	PRE-TEST	262	613	-1,39	,16
	POS-TEST	569	2054	-1,12	,26
COCINAUTEN	PRE-TEST	318,50	669,50	-,35	,72
	POS-TEST	620	945	-,58	,56
ESCUELA	PRE-TEST	302,50	653	-,65	,51
	POS-TEST	557	2042	-1,24	,21
ILUMINACIÓN	PRE-TEST	327	678	-,20	,84
	POS-TEST	653	978	-,23	,81
CIUDAD	PRE-TEST	269,50	620,50	-1,25	,20
	POS-TEST	644	2129	-,32	,74
CAMPO	PRE-TEST	323	674	-,27	,78
	POS-TEST	619	944	-,59	,55
MEDIOTRANS	PRE-TEST	267,50	618,50	-1,29	,19
	POS-TEST	553	878	-1,29	,19
TRACAMPJARD	PRE-TEST	256	607	-1,52	,12
	POS-TEST	487	812	-2,01	,04
ANIMALES	PRE-TEST	321	672	-,31	,75
	POS-TEST	645	2130	-,31	,75
JUEGDISTRAC	PRE-TEST	317	668	-,38	,69
	POS-TEST	601	926	-,78	,43
PROFEOFICIOS	PRE-TEST	326,50	677,50	-,21	,83
	POS-TEST	656	2141	-,20	,84
TOTAL LÉXICO DISPONIBLE	PRE-TEST	286	637	-,95	,34
	POS-TEST	637	2122	-,40	,68

Discussions and conclusions

Given the results of the intergroup statistical analysis, i.e. comparing the lexical field available of the experimental and control groups in both the pre-test and in the post-test, we conclude that: statistically, students in the experimental group significantly improve their mastery of the following semantic fields: “body parts”, “clothing”, “parts of the house”, “household furniture”, “kitchen and utensils”, “school”, “country”, “work in the field and

garden”, “animals”, “games and entertainment” and “professions and trades” in their lexicon available.

Students from the sixth grade following the educational intervention program for the development of lexical competence (Pedelex) improve their vocabulary available in the case of semantic fields “lighting and heating” and “transportation”, although this optimization does not produce statistically significant results. Finally, the semantic fields that remained statistically unconfirmed are only three: “objects placed on the table for dinner”, “city” and “transportation”.

To summarize, we can say that with reference to the original purpose of the investigation, i.e. the evaluation of the main processes involved in lexical acquisition available, the usefulness of the procedure followed was to obtain a score to report on the amount of lexical availability of the experimental subjects. Since our study is located in the scientific field of language didactics, these data argue that rigorous and innovative approaches should be proposed and implemented in the classroom for compulsory education of the Spanish system, in order to adjust the educational intervention in multicultural contexts, and so that the result is not an isolated element in the teaching of languages, but a cognitive platform that contributes decisively to the development of the overall communicative competence of individuals whose native language is other than Spanish.

The change that we advocate through this experience should affect the overall design of the area of Spanish Language and Literature in Post-Compulsory Education and treatment of Spanish as a Second Language in a multicultural context. Therefore, we consider it necessary to incorporate the contributions of the new sciences of language and as governed by existing legal framework, which is offering the real possibility of this line of action.

From the point of view of communication, it seems appropriate to emphasize the difficulties in observing the evolution of lexical competence in relatively short periods of time as in this case, a school year. From the point of view of the methodology used in the empirical part, the lack of randomization in the selection of the sample, since the educational intervention was carried out with students in certain pre-established classrooms. Thus, taking into account the specific school context, students belonging to the sixth-year of primary school, the results must be understood as referring only to those circumstances and developmental

period of the participants, or similar backgrounds and ages, if equal intervening variables have been considered for the sample in question.

We presume that this work could facilitate further studies to complete the one presented here. Some parts of our investigation may be extended by applying it to other social or linguistic subjects, to other ages or educational levels, provided appropriate adjustments are made for each case. Or, there could also be the possibility of starting a job that would include lexical completion as part of the global discourse competence and focus on interactions between oral and written language in the process of language development and communication. In any case, the investigation here presented aims to be valued as a positive achievement, and dissemination of cultural and social wealth to advance in language education precisely in line with what the current and cross-cultural plural societies require.

References

- Camacho, J. (2002). *Estadística con SPSS para Windows (Versión 11)* (pp.125-296). Madrid: Ra-Ma.
- Dendaluce, I. (1989). *Aspectos Metodológicos de la Investigación Educativa*. Madrid: Narcea.
- Fernández, G., Rico, A.-M.^a, Molina, M^a-J., y Jiménez, M^a-A. (2008). *Léxico disponible de Melilla. Estudio sociolingüístico y repertorios léxicos*. Madrid: Arco Libros.
- Fitzpatrick, T., Al-Qarni, I., Meara, P. (2008). Intensive Vocabulary Learning: A Case Study. In *Language Learning Journal*, 36 (2): 239-248.
- García, M., Ibáñez, J., y Alvira, F. (1994). *El análisis de la realidad social; métodos y técnicas de investigación*. Madrid: Alianza Universidad.
- Gougenheim, G. (1956). *Le français élémentaire*. Louvain: Centre International de Dialectologie Générale.
- Martín, M. (2004). *La enseñanza del léxico español a través de Internet*. Edinumen: Madrid.
- Martín, S. (2009). La revisión del concepto de vocabulario en la gramática de ELE. *Marcoele*, 9: 157-163. *Didáctica del español como lengua Extranjera*. Madrid: Expolingua. Retrieved at http://www.marcoele.com/descargas/expolingua_1999.martin.pdf [17-05-2012].
- Möller, J. (2001). *Siglo XXI: ¿Innovamos? La enseñanza de una segunda lengua extranjera*. Salobreña (Granada): Editorial Alhulia.

- Möller, J., Burbat, R. (2007). *Collage 1A: Manual de enseñanza del alemán: Lektion 1-5*. Granada: Universidad de Granada.
- Müller, C. (1977). *Principes et méthodes de statistique lexicale*. Paris: Hachette.
- Samper, M. (2002). *Disponibilidad léxica en alumnos de español como lengua extranjera*. Colección Monografías, núm. 4. Málaga: ASELE.
- San Mateo, A. (2005). *Aprendizaje del léxico español como lengua extranjera. Investigación sobre tres métodos*. Madrid: UNED.
- Ortega, L. y G. Iberri-Shea. (2005). Longitudinal research in second language acquisition: Recent trends and future directions. *Annual Review of Applied Linguistics*, Vol. 25: 26-45.
- Oster, U. (2009). La adquisición de vocabulario en una lengua extranjera: de la teoría a la aplicación didáctica. *Porta Linguarum*, 11: 33-50. Granada: Universidad de Granada.
- Pérez, C. (2002). Explotación de los *corpora* textuales informatizados para la creación de bases de datos terminológicas basadas en el conocimiento. *Estudios de Lingüística Española (ELiEs)*, Universidad de Málaga. Retrieved at <http://elies.rediris.es/elies18/> [17-05-2012].
- Pigada, M., Schmitt, N. (2006). *Vocabulary acquisition from extensive reading: A case study*. Retrieved at <http://nflrc.hawaii.edu/rfl/april2006/pigada/pigada.html>.
- Prado, J. (2004). *Didáctica de la Lengua y la Literatura para educar en el siglo XXI* (pp. 308-309). Madrid: La Muralla.
- Real Academia Española (2004). *Banco de datos (CREA). Corpus de referencia del español actual*. Retrieved at <http://www.rae.es/> [10-02-2012].
- Sierra Martínez, G. (2005). *Lingüística de corpus. Diseño y análisis de corpus textuales*. Retrieved at <http://iling.torreingenieria.unam.mx/CursoCorpus2005/default.html> [17-07-2011].
- Sinclair, J. McH (2004). *How to use corpora in Language Teaching*. Amsterdam: John Benjamins Publishing.
- Singleton, D. & Ryan, L. (2004). *Language Acquisition: The Age of Factor*. Clevedon: Multilingual Matters.
- Strong, B. Thomas Boutorwick (2011). Incidental Vocabulary Acquisition from Extensive Reading: Enhancing Three Types of Word Knowledge. *2011 International Conference and Workshop on TEFL Applied Linguistics* (pp. 408-415). Crane Publishing Co., LTD.

Vivanco, V. (2001). La adquisición del vocabulario en una segunda lengua: estrategias cognitivas y lazos afectivos. *Revista de investigación e innovación en la clase de idiomas*, 12: 177-188.

VV. AA. (2006). *Lengua. Deja huella. 6. º Primaria*. Tercer Ciclo. Madrid: Anaya.