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Lexical availability in Argentinian students who attend bilingual institutions

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Introduction and Antecedents

As a member of Área de Lingüística Aplicada of Centro de Investigaciones of Facultad de Lenguas (CIFAL) in Universidad Nacional de Córdoba, I took part in a project, carried out in Spanish, about lexical availability in institutions in Buenos Aires and Córdoba; such research project inspired me to explore this topic. The project presented to Secyt and developed between 2010-2011 is entitled "La enseñanza del español en el mundo hispánico". Un estudio de replicación en la ciudad de Córdoba. Part of this title is written between quotation marks because it belongs to a larger project. This larger project stems from a study proposal presented by the Association of Spanish Language Academies (a group of Academies from all the Spanish-speaking countries) to Comillas Foundation in 2006 about the situation of the countries "in relation to linguistic education." The project was accepted with the above mentioned name and was done between 2006-2011 under the direction of Humberto López Morales and with the collaboration of a representative per participant country.

The study consisted of two parts: On the one hand, an analysis of the educational and institutional situation of each country in relation to the teaching of the mother tongue was carried out; on the other hand, some data about the linguistic competence of students who attended institutions in the capital city of each country was collected. To do so, "Some diagnostic tests were administered to study lexis (lexical richness indexes, lexical availability), morphosyntax (syntactic

¹ Since most of the bibliography was found in Spanish, the translation of the quotes belongs to the author of this paper.

complexity indexes), discourse (cohesive patterns in the discourse and textual coherence) in the written production." One of the research teams from Área de Lingüística Aplicada (Centro de Investigaciones Lingüísticas, Facultad de Lenguas, Universidad Nacional de Córdoba), under the direction of M. Viramonte de Ávalos, Argentinian representative in the project carried out at the international level, suggested that a replication study be done in Córdoba. This new study proposed for the years 2012-2013 was entitled "Re-producción escrita del texto expositivo en la escuela media y en los primeros años de la universidad. Análisis de aspectos léxicos, sintácticos y discursivos." The replication study was carried out in secondary and higher levels of education, and it consisted of "an incursion into the field of the written reproduction of the expository text, explored in those same aspects, which will be taken as parameters so as to voice an agreed opinion (lexical richness/shortage, syntactic complexity/simplicity, cohesion and coherence/textual dislocation)."

The fact that the National Ministry of Education in Argentina decided to incorporate Bilingual Intercultural Education (BIE) to the educational system encouraged me to choose a bilingual school in Córdoba to carry out this replication study. Córdoba city has a quite extensive variety of private schools that offer bilingual education (Spanish-English). Colegio Bilingüe Mark Twain, founded in 1995, is considered one of the most prestigious in the city. The students in this institution are in contact with both languages during the school day due to the double-shift system. In general, they show a good command of the foreign language due to the practice time required and because they must avoid using their mother tongue during the shift corresponding to the foreign language.

This paper intends to assess the number of items of vocabulary available to the learners in both their L1 and L2, and determine which of the languages shows evidence of a higher development of mastery.

The present replication study aims at analyzing the same phenomenon, that is, the lexical availability, in another sample. The methodology used will be the same, but the subjects will be different. The sample of this project will include a total of 30 subjects, (two groups of students aged 11-12/17-18) who have received bilingual education (Spanish-English) for at least 6 years.

The aim of this research project is then to compare the lexicon available in each language of those students who attend a bilingual institution, so as to find similarities and differences as regards their ability to provide an array of terms both in Spanish and in English. Bilingualism should be reflected both in the quantity and

in the variety of terms available in each language and updated by the students as required. Such update will be influenced by the context or extralinguistic reality referred to by Jakobson (1971) in his theory, since the students tend to select, among the terms available to them, those tailored to the features of each communicative situation context. It is assumed that those learners with more terminological availability will be able to cope more easily and effectively with any situation, whether to act as addressers or to decode the message in the role of addressees.

The ability to communicate accurately in different situations is one of the essential skills that every student should have after having finished high school. Without such knowledge, the individual is likely to fail in certain instances because they lack the necessary tools to address other people appropriately according to the characteristics of the communicative situation. Language and its availability, mainly as regards lexis, are the building blocks in the acquisition of such ability. Compulsory education² becomes the main agent in charge of providing the students with the tools to develop this ability.

In the case of bilingual institutions, the education provided tends to be more comprehensive because it is imparted in two languages in a parallel way. Specifically, this project intends to analyze the levels of lexical availability in

² Compulsory education in Argentina is supported by the Cumpulsory Education National Plan, approved by the Federal Board of Education by means of Resolution no. 79 in May 2009, which provides the possibility to establish a "joint construction that integrates the national, provincial, and local policies, the strategies to face the compulsory education challenges in its different environments, levels, and modalities, and the coordination with the intersectorial interventions from other ministries and social organizations." This Plan includes the compulsory education defined in Act 26.206: "kindergarten at five years old, elementary school and high school with their modalities of rural education, special education, artistic education, education for young and adult people, and bilingual intercultural education, education in imprisonment contexts, home education, and education in hospitals."

students who attend this kind of schools so as to analyze the amount of specific vocabulary available related to a topic when triggered by a task.

The research questions that will guide this paper are the following:

-Have students who receive a bilingual education built a similar mental lexicon in both languages?

-ls there any difference as regards the level of development of each language?

State of the Art

There is some bibliography related to this topic, although most of it belongs to authors from other countries who analyzed the situation in different places in the world. There are also several research papers done in many foreign universities in which this topic was selected as a central axis. Most of this information was found in Spanish due to the importance given by the Association of Spanish Language Academies to this issue.

One of the researches was carried out by Antonio María López González, who took as a baseline the fields of interests used in the project "Proyecto panhispánico de disponibilidad léxica" directed by Humberto López Morales, Secretary General of the Association of Spanish Language Academies (ASALE); the author analyzed this phenomenon in Polish bilingual institutions, and compared the results obtained in two different educational levels. As an overall result, he affirmed that "the enrichment of the lexical competence of students who attend

Bilingual Sections, as they make progress in the study level, is evident, both with respect to words –quantitative– and to terms –qualitative– (...) There is a lexical development that is very unequal in the different thematic areas used as incentive" (López González, 2010, p.10).

Roberto Ferreira and Max Echeverría did a similar research, but they used different subjects: On the one hand, they worked with Spanish-speaking students of English (Chilean students) and, on the other hand, they studied English-speaking students (England residents). These researchers concluded that "the students of English as a foreign language only distinguish large semantic categories, while the native speakers are able to organize the words in subcategories with a high degree of specificity" (Ferreira y Echeverría, 2010, p.1).

Some years before, in 2008, Francisco J. Rodríguez Muñoz and Isabel O. Muñoz Hernández studied the lexical availability in students of middle school so as to apply these results to Didactics: "the proposals for the teaching of languages, and specifically of the lexicon, must be tailored to the students educational needs; (...) only in this way a language didactics (...) will be able to contribute to the development of their communicative skills" (Rodríguez Muñoz y Muñoz Hernández, 2008, p.8).

Regarding the research papers in which lexical availability is the central topic, one carried out in 2008 by Eva López Rivero in Universidad Antonio de Nebrija, in Madrid (Spain) was found. In this paper, the author makes reference to the overall lexical availability, to its development over time, and to the Pan-Hispanic project directed by López Morales. Then, she presents her own research that, according to what was done related to the topic before, is centered on students of Spanish as a

foreign language. Another research paper was done in Rice University of Houston, Texas (United States) and its author is John Bailey Victery, Jr. In this case, the same test was administered to three kinds of subjects: To subjects who only spoke Spanish and that lived in Monterrey, Mexico; to subjects who only spoke English, and to bilingual subjects; the subjects included in the two last groups lived in Houston, Texas. After that, the results were analyzed taking into account certain factors such as age, gender, and socioeconomic level.

All these researches are useful as a foundation for this paper. Whereas in some of them there are two languages implied (Spanish and English), only one of them studies bilingual subjects and none of them administers the test simultaneously in both languages, so this paper may be considered an extension of the researches carried out until now.

Objectives

The objectives of this paper are:

Primary objective:

•To compare the lexical availability both in Spanish and in English of students in two different cycles of their bilingual education.

Secondary objectives:

- •To register, in both languages, the semantic relationships that stem from the supply of a specific term.
- To analyze and assess the lexical availability level in each of the languages at the same time.

Hypothesis

It is expected that if the students at a bilingual institution have developed both languages with the same degree of depth, they will have a comparable or similar available lexicon in their L1 and in their L2.

Variables

The independent variable in this hypothesis is the degree of development of each language in students of a bilingual institution. The dependent variables are the number of terms related to each field of interest, the total number of terms known by the group, and the number of repetitions of the same term.

Theoretical Framework

Formal instruction in a language entails, among other things, providing the students with the necessary skills to communicate effectively in different situations. If the learning process is successful and the students are able to develop such skills, they will acquire a variety of vocabulary, which will facilitate communication. The student that has received a bilingual education constitutes a special case because they often get instruction not only to learn the foreign language but also to study content subjects in the foreign language, and this, of course exposes them to a greater variety of topics, which enlarges their vocabulary significantly.

Any human being has a mental lexicon that varies according to different factors such as age, gender, social class, education. To put it simple, it may be compared with a catalogue that includes all the terms that each speaker has available at the moment of communicating both orally or in writing. H. López Morales (1999) states that "in the mental lexicon, there is a series of terms that are not updated unless they are necessary to communicate very specific information. It has to do with an available lexicon…" (p.11) The lexicon is made up of smaller units called terms³.

Antonio López González (2010) refers to the distinction of two subsets within the functional lexicon established by R. Michéa (1950, 1953):

- a) the **basic lexicon** includes the most frequently used terms and it is non-thematic.
- b) the **available lexicon** is based on a thematic order, and it includes terms with a very concrete semantic content.

Every lexicon is dynamic and changeable; that is, that the human being updates it as they relate with different people, in different environments, and they are able to recognize that certain terms are obsolete, or that there are neologisms. Moreover, the terms are related to each other by topic or as a consequence of certain emotive content given by each individual after having specific experiences involving such words; this last criterion sometimes brings the learner face to face with unexpected relationships.

³ Although they are generally used alike, word and term have different meanings. While word makes reference to any unit used to create a text, term has to do with each of the entries that appear in the dictionary.

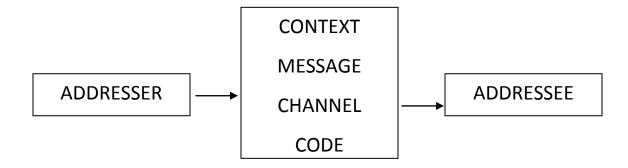
The update of a specific term generally depends on the context the speaker is in. Based on the communicative situation, its nature, the participants' features, the time-space coordinates, and the formality degree, each individual selects, among the options available in their lexicon, the term they consider the most appropriate. In connection with this, Ferreira y Echeverría (2010; 2011) state that:

Evidently, knowing the nature of the mental lexicon is very important for the lexical availability, since each time a subject recalls a word they necessarily have to go over a path that takes them to this mental structure to activate, select and, ultimately, produce the lexical item. (p.136)

There is not a regularity in this selection, and this implies a process which the human being learns over time by means of different experiences and, sometimes, by trial and error.

The Communication Process

Communication entails, according to R. Jakobson (1971), a series of essential elements that are related in a specific way so as to produce a correct process:



While the addresser is the person who codifies the message, the addressee is the individual who decodes it. The term message makes reference to what the addresser transmits to the addressee in this process. To perform this procedure, it is necessary to have a physical medium through which the message is sent; that is, a channel. The term code has to do with the system of signs used in the message transmission; in this case, the language. A critical condition for the communication to be effective is that both participants share the same system of signs, so as to avoid misunderstandings. Finally, the channel or extralinguistic reality is a primary element in the communication act. According to the features of this reality, the learners will take different positions, they will use the system of signs in a specific way, and they will adapt themselves to the conditions that will be present. All the aforementioned elements make up an essential part of the process; the absence of one of them could make the communication ineffective.

Seen from a constructivist view, the process of teaching and learning languages as a communicative type process is considered an interactive act. In other words, the learning of languages, especially foreign languages, is more effective when students make a real use of the language and they apply it into communication acts with peers with a higher knowledge of such language. Thus, the student's language improves during the interactive process, whether by imitating a role model or by the correction of mistakes. The constructivist approach of Williams and Burden (1999) highlights the importance of a reciprocal exchange in the classroom as the main way of acquiring a language: "Social interactionism emphasizes the dynamic nature of the interplay among teachers, learners and

tasks and provides a view of learning as arising from interactions with others" (p.43).

Methodology and Instruments

The methodology used in this research is quantitative.

The tests were administered in both languages at the beginning of the school year, when students are generally more motivated and willing to work, and are likely to have a better performance. The subjects of this research project were students in the last year of elementary and high school at Mark Twain school in Córdoba city. The tests were only administered to 15 students in the last year of each level (students who are 11 to 12 years old and attend elementary school, and students who are 17 to 18 years old and attend high school) because it is expected that they will have a better lexical development compared to younger students in both primary and secondary level.

The instrument⁴ used for the data collection was the following:

 A table with five columns, one for each field of interest (partes del cuerpo humano/parts of the body; animales/animals; alimentos/food; medios de transporte/means of transport; profesiones y oficios/jobs and occupations).
 The Spanish option is mentioned first because that was the first test taken, since it is their mother tongue.

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⁴ In the Appendix, there is a sample of the instrument prepared for the data collection and there are the copies of the tests completed by the learners.

To administer the test, the learners were asked to complete it attentively and not to share their answers with their classmates. They were given two minutes to complete each of the columns, and they had to stop writing after the indication that the time allotted had elapsed. They were only given an example with the instructions, and it is important to mention that these were free-association tests. "In the free-association test, the subject is told to state the first word that comes to mind in response to a stated word, concept, or other stimulus" (Encyclopædia Britannica [online], 2014).

Data Analysis and Results

After collecting the data, the analysis was carried out as follows:

A responses average was obtained. This percentage is equivalent to the average number of terms available to the students for their communication in the area related to each field of interest. The other figures obtained were the total number of different terms (the total number of terms known by the sample), and the cohesion index (an indicator of the degree of matching of the responses). These two indexes are closely related: the degree of homogeneity in the use of certain terms is directly proportional to the degree of availability of such term for the whole sample. It is important to mention that all the indexes were obtained individually, and then the general average was estimated in each case. Finally, the results of each student in both languages were compared.

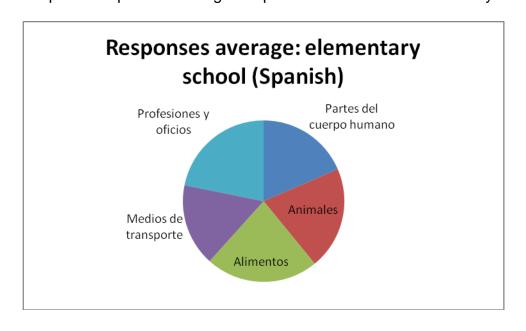
Responses average

Regarding the responses average, in the case of students in the last year of elementary school, they apparently know more terms in Spanish than in English, but the percentage difference is not too high, except for the terms related to food where the difference is quite higher (almost twice as much).

Table 1: Responses average in English and Spanish of students in elementary school.

	Partes del cuerpo humano / Parts of the body	Animales / Animals	Alimentos / Food	Medios de transporte / Means of transport	Profesiones y oficios / Jobs and occupation s
Spanish	20.8	17.8	21.6	14.2	12.6
English	21.2	14.8	12.8	12.6	10.8

Graph 1: Responses average in Spanish of students in elementary school.



Responses average: elementary school (English)

Parts of the body occupations

Means of transport

Food

Graph 2: Responses average in English of students in elementary school.

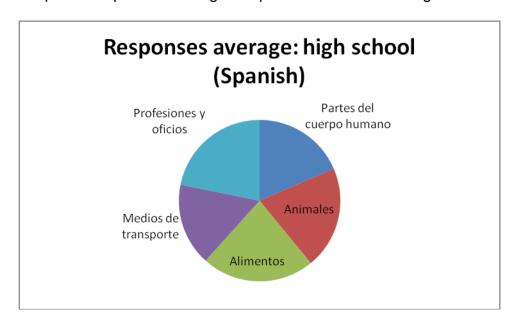
Conversely, in the case of high school students, the overall percentages are higher since most of them exceed 20%; this may indicate that the vocabulary of the learners has expanded with the transition from one level to the other one. Both in Spanish and in English, the lowest results are present in the column related to means of transport. Moreover, the difference between both languages is quite important; the higher indexes are in Spanish.

Table 2: Responses average in English and Spanish of students in high school.

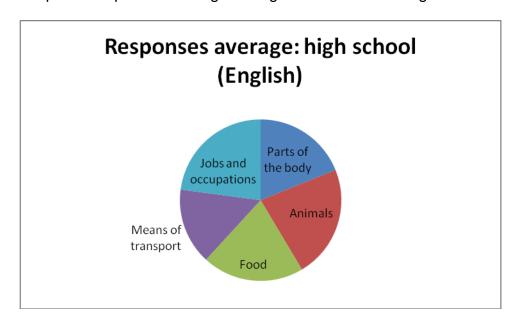
	Partes del cuerpo humano / Parts of the body	Animales / Animals	Alimentos / Food	Medios de transporte / Means of transport	Profesiones y oficios / Jobs and occupation s
Spanish	29.2	28	29	20.6	22.8

English	22.2	23.4	20.6	15.6	17.6

Graph 3: Responses average in Spanish of students in high school.



Graph 4: Responses average in English of students in high school.



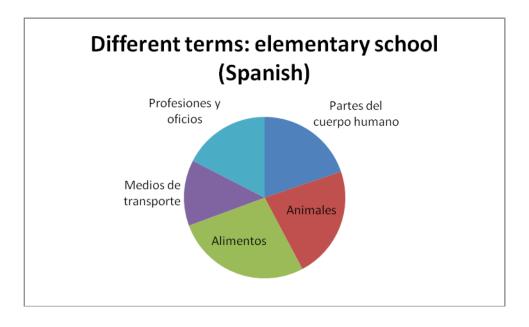
Different terms index

Regarding the different terms index in Spanish, that is, the amount of terms known by the sample in the case of elementary school students, the highest result is in the field of food, whereas the lowest one is in means of transport. It is important to mention that there is a substantial difference between these two figures because the final percentage for the field of food is much higher than the percentage for the field of means of transport (almost twice as much).

Table 3: Different terms in Spanish of students in elementary school.

Partes del cuerpo humano	Animales	Alimentos	Medios de transporte	Profesiones y oficios
51	58	70	34	45

Graph 5: Different terms in Spanish of students in elementary school.

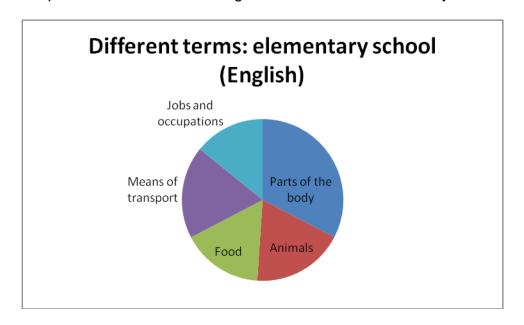


Regarding the different terms index in English, in the case of elementary school learners, the highest index is in the parts of the body column and the lowest one, in the column of jobs and occupations. It is important to mention that the average number of terms related to the parts of the body is twice as many as all the other averages.

Table 4: Different terms in English of students in elementary school.

Parts of the body	Animals	Food	Means of transport	Jobs and occupations
46	26	23	26	20

Graph 6: Different terms in English of students in elementary school.



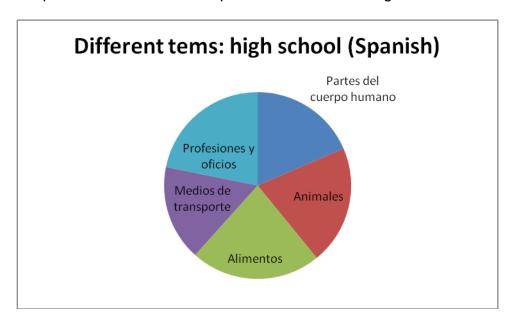
As to the analysis of the data and results of the students in high school, the highest and lowest different terms indexes are present in the same fields as in the elementary school students: The highest is in the field of food and the lowest in the

field of the means of transport. The other indexes are relatively within the same values.

Table 5: Different terms in Spanish of students in high school.

Partes del cuerpo humano	Animales	Alimentos	Medios de transporte	Profesiones y oficios
73	81	89	65	86

Graph 7: Different terms in Spanish of students in high school.

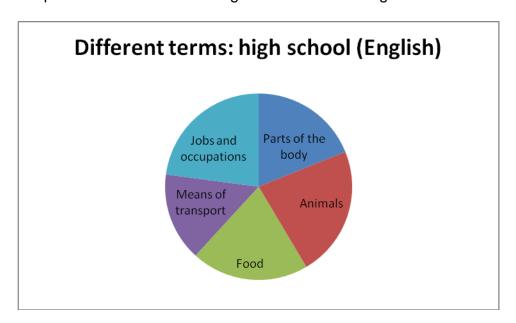


In general, the different terms index in English is significantly lower than the one in Spanish, which would indicate a difference in the vocabulary knowledge in each language. As it occurs in the case of Spanish in this same academic level, the lowest index in English is also present in the means of transport field.

Table 6: Different terms in English of students in high school.

Parts of the body	Animals	Food	Means of transport	Jobs and occupations
52	62	56	42	63

Graph 8: Different terms in English of students in high school.



Cohesive index⁵

With regards to the cohesive index, that is, to the number of recurring terms among the learners, it is possible to observe the following:

⁵ Terminology translated by the author based on the term used in the major research study carried out by Viramonte, M. y Muse, C. (2012). "La enseñanza del español en el mundo hispánico". Un estudio de replicación en la ciudad de Córdoba. Informe Académico. SECyT. Universidad Nacional de Córdoba. Córdoba.

In the case of elementary school in Spanish, there is not a large number of repeated terms. The reason of this phenomenon could be related to the context in which the learners grow up, so each of them presents the terms used more frequently. In all the cases, the limited repetitions are present in terms related to basic elements or phenomena that are generally common in any context, for example, basic parts of the body, domestic animals, fruits and vegetables, urban means of transport, and well-known jobs and occupations.

Similarly, in the case of elementary school in English, most of the recurring terms are related to daily life. For example, in the case of the parts of the body, the repeated terms are those commonly used for a basic description of a human being (eyes, nose, mouth, hair, among others). What is more striking in this field is the repetition of technical terms related to parts of the body (intestine, lungs, esophagus, trachea) that have been probably acquired in a biology class. In the case of animals, most frequent ones are the domestic animals and those generally found in a zoo (dog, cat, butterfly, rabbit, bee, penguin, lion). As regards food, the recurring terms have to do mainly with the names of fruits and vegetables (tomato, potato, orange, lettuce), and with the typical junk food (hot dogs, hamburgers, French fries). The recurrent terms related to means of transport make reference to transport used every day (bus, car, bike, plane) or to those that are typical for the age of the participants (roller skate, skateboard). Lastly, regarding jobs and occupations, it seems that the most frequent terms are those the participants are exposed to more frequently (teacher, professor, policeman, firefighter, architect, dentist, lawyer, doctor).

In general, high school students were able to provide a higher number of recurring terms, which is the expected result, for they have received more years of bilingual instruction. As in the case of elementary school, high school students were able to provide technical terms related to the parts of the body both in Spanish and in English. Regarding animals, the fact that the students study content subjects in English, like science and biology seems to have expanded their lexical availability in this field so the recurring terms are not only limited to domestic animals, but they also include wild animals (orangutan, tiger, lion, bear), farm animals (hen, cock, duck), sea animals (whale, shark, swordfish, dolphin). As to lexical items related to food, it is noticeable the recurrence of names of vegetables and fruits which are not the most frequent ones in daily use, for example eggplant, celery, cucumber, artichoke, among others. It is noticeable the wide lexical availability in lexicon regarding jobs and occupations and means of transport. This last lexical field included a great variety of terms: truck, helicopter, submarine, vessel; lathe operator, blacksmith, goldsmith, announcer, air stewardess.

Conclusion

The study "La enseñanza del español en el mundo hispánico". Un estudio de replicación en la ciudad de Córdoba, on which this replication study was based and that was carried out in elementary and secondary students in the cities of Córdoba and Buenos Aires, led to the following conclusion taking into account the averages and the standard deviation percentages obtained: The lexical field in which the sample provided the highest number of terms was animals, followed by parts of the

body and food. The lowest number of supplied terms was found in the field of means of transport, while the field of jobs and occupations showed a significant enlargement in the percentage of terms provided by the learners who attended high school due to an expected academic progress in comparison with the students who attended elementary school. The researchers in this study considered that this improvement may have had to do with the participants' life experiences, reading and listening practices, and visualization processes.

Comparatively, the results of this study, in general and in both languages, show that the fields with the highest lexical availability in the learners are food, animals, and parts of the body, whereas the lowest lexical availability levels are in the fields of means of transport and jobs and occupations. The results of the different terms index indicate that both elementary and secondary students have a higher degree of knowledge about food items in Spanish. In the case of English, the highest lexical availability of the whole sample is seen in the field of parts of the body in elementary school students, and in jobs and occupations for high school learners. The lowest levels of lexical availability are observed in the field of means of transport in both languages for high school students and only in Spanish for elementary schools learners. The lowest degree of lexical availability in English in the case of the latter is in the field of jobs and occupations. In this replication study it is also possible to detect an acceptable degree of improvement due to the progress from elementary to high school.

The lexical availability of the learners in the sample of this replication study "Lexical availability in Argentinian students who attend bilingual institutions" varies mainly with age, since the older students had a much wider lexical availability. All the participants in this research project evidenced a significant difference in relation to the variety and the number of available terms in English and Spanish. The Spanish lexicon outnumbered the English one, which is logical because it is their mother tongue but at the same time it may suggest that the learning of English as a foreign language may influence the learning process and the acquisition of more vocabulary in Spanish. This indicates that the proposed hypothesis is rejected.

If we were to approach this research diachronically, it would also be very interesting to evaluate the lexical availability of the same student in the last year of elementary education, and then repeat the analysis in the last year of high school.

After having analyzed the tests in both languages, I daresay that the fact that these students are exposed to English, study it formally and even study content subjects in English may have enlarged the learners' vocabulary in Spanish. Perhaps, this is due to the fact that the learners are not always acquainted with the meaning of certain specific words when they learn a new term in English. This situation generates a learning environment in which the teacher has to teach not only the English term as it was planned, but also the meaning, use and grammatical features of its Spanish equivalent. This tends to occur in specific and specialized lessons, but the fact is that new terms arise very frequently when studying a second language, so it is possible that the learners acquire a wide range of vocabulary in their mother tongue, as well. This unexpected preliminary conclusion could be a starting point for a future research project whose hypothesis would be that lexical availability in Spanish is somehow boosted in students who have also received bilingual education.

References

- Encyclopædia Britannica [online] (2014). Chicago: Encyclopædia Britannica, Inc.

 Accessed on July 17th, 2014. http://www.britannica.com/
- Ferreira, R. y Echeverría, M. S. (2010/2011) Redes semánticas en el léxico disponible de inglés L1 e inglés LE. *Onomázein*, Nº 21, 133-153.
- Hisse, M. C. (2009). Educación intercultural bilingüe. Buenos Aires: Ministerio de Educación.
- Jakobson, R., Barthes, R. y otros. (1971). *El lenguaje y los problemas de conocimiento*. Madrid: Rodolfo Alonso.
- López González, A. M. (2010) La evaluación del desarrollo de la competencia léxica en L2 por medio de la disponibilidad léxica. *redELE: Revista Electrónica de Didáctica ELE*, ISSN 1571-4667, Nº 18. Accessed on May 20th,
 - http://www.educacion.gob.es/redele/RevistaFeb2010/AntonioLopez-lexico.pdf
- López Morales, Humberto. (1999). Léxico disponible de Puerto Rico. Madrid: Arco libros.
- López Rivero, E. (2008) Estudio de disponibilidad léxica en 43 estudiantes de ELE.

 Madrid: Universidad Antonio de Nebrija, Departamento de Lenguas

 Aplicadas.
- Michéa, R. (1953). Mots frequents el mots disponibles. Un aspecto nouveau de la statistique du langage. Les langues modernes, 47, 338-344.
- Piñel, R. (1994). "La lingüística contrastiva y el análisis de errores en la enseñanza del español a alumnos de lengua materna alemana". *Asele. Actas V.*

- España: Centro Virtual Cervantes. Accessed on August 8th 2014, http://cvc.cervantes.es/ensenanza/biblioteca_ele/asele/pdf/05/05_0117.pdf
- Rodríguez Muñoz, F. J. y Muñoz Hernández, I. O. (2009) De la disponibilidad a la didáctica léxica. *Tejuelo*, ISSN 1988-8430, Nº 4, 8-18.
- Subsecretaría de Equidad y Calidad de la Secretaría de Educación del Ministerio de Educación (2009). *Plan Nacional de Educación Obligatoria*.
- Victery, J. B. Jr. (1971) A Study of Lexical Availability among Monolingual-Bilingual

 Speakers of Spanish and English. Houston: Rice University
- Viramonte, M. y Muse, C. (2012). "La enseñanza del español en el mundo hispánico". Un estudio de replicación en la ciudad de Córdoba. Informe Académico. SECyT. Universidad Nacional de Córdoba. Córdoba.
- Viramonte, M. y Muse, C. (2012). "Re-producción escrita del texto expositivo en la escuela media y en los primeros años de la universidad. Análisis de aspectos léxicos, sintácticos y discursivos." Informe Académico. SECyT. Universidad Nacional de Córdoba. Córdoba.
- Williams, M. y Burden, R. L. (1999). *Psychology for Language Teachers: A Social Constructivist Approach*. Cambridge: Cambridge University Press.

Appendix