

**BEGOÑA PLANELLS HERNANI<sup>1</sup>****Bilingualism and expressive vocabulary in infants**

*Our research was focused on how the acquisition of a second language in pre-school students does not harm but benefits, and specifically how it helps to expand students' vocabulary based on the fact that the more vocabulary in Spanish, the more they learn or have in English. In addition, we focused on the oral part in which we did evaluate how students know and produce correctly the vocabulary presented through flashcards. The sample consisted of a group of 40 (n = 40) 4 year - old children of a bilingual school in northern Madrid. The methodology followed showed a certain amount of flashcards based on the vocabulary they were learning in the classroom so that students could produce orally what they saw in the different images. Regarding the acquisition of vocabulary in other language than their mother tongue, there are several aspects to consider; first, we had to make reference to age. The smaller a child is exposed to a language, the faster and better he or she will learn, and second it must be said that following the results of our study, in our case, the more Spanish vocabulary our students have, the more English vocabulary they learn. Moreover, in our sample, those whose chronological age was younger had lower vocabulary both in Spanish and in English.*

**Bilingualism definition and evolution**

Following Baetens Beardsmore (Baetens Beardsmore, 1989), it would be difficult to establish a definition about bilingualism, because there are plenty of them and we keep creating and innovating when talking about the coexistence of two languages.

But, we will start saying what Weinreich and Mackey said (Huguet Canalís & Madariaga Orbea, 2005): bilingualism is the use of two languages, and bilingual is the person who speaks two languages.

That definition is a little bit short or lazy because not all bilingual people have the same skills. Due to that, there are different basic skills and dimensions in each person, that's why there are different types of bilingualism which we are going to explain in the chart. Before that, it is important to mention that those skills are related to production and reception (understanding, speaking, reading, and writing).

Here we have the different types of bilingualisms (Butler & Hakuta, 2004):

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<i>Typology</i>	<i>Dimension</i>	<i>Definition</i>
Balanced (Peal & Lambert, 1962)	Relationship between proficiencies in two languages.	Acquisition of similar degrees of proficiency in two languages.
Dominant (Peal & Lambert, 1962)	Relationship between proficiencies in two languages.	Higher proficiency in one of the language(s).
Compound (Weinreich, 1953)	Organization of linguistic codes and meaning unit(s).	Two sets of linguistic codes are stored in one meaning unit.
Coordinate (Weinreich, 1953)	Organization of linguistic codes and meaning unit(s).	One linguistic code is organized in two sets of meaning units.
Subtractive (Lambert, Culture and Language as Factors in Learning and Education, 1974)	Effect of L2 learning on the retention of L1.	L2 has been acquired by losing L1.
Additive (Lambert, Culture and Language as Factors in Learning and Education, 1974)	Effect of L2 learning on the retention of L1.	L2 has been learning without losing L1.

**Table 1. Types of Bilingualism**

Bilingualism provokes word exchanges among languages. For example, in Spanish we have German, Arabic and roman words, but at the same time we also have words from France and Portugal.

Another example it could be that vask people whenever they speak Spanish, they use vask words. Catalanian people do the same; when they speak Spanish they use certain words that make sentences incorrect because they are used to use or apply those rules to Catalan.

An extreme case would be what we call: “spanglish”. That is the result of the interaction between Spanish and English in the US. Millions of Latin- Americans, Spaniards, and Americans call mouse to the hand-held device we use to control the cursor of the computer; *printear*: to produce in print; *resetear*: to reset again.

In Spain, historically, bilingualism has been characterized by producing diglossia which means two languages are used under different conditions in the same territory. This instability

was seen in different areas: education and Government used Spanish as the official language, meanwhile vask, catalan, etc, were spoken just at home, and sometimes were even prohibited. However, in the last decades, this situation has changed, and bilingualism is helping to have equilibrium between languages (Lorenzo, Trujillo, & Vez, 2011).

On the other hand, when we talk about the history of bilingualism, we can find authors saying “perfect-foreign language learning is not accompanied by loss of the native language, it results in bilingualism, native-like control of two languages” (Bloomfield, 1933); and others say that a person is bilingual if he has some of the four skills in the foreign language (speaking, reading, writing, and understanding) (Macnamara, 1969). However, it should be taken into account those skills:

	<i>Oral ability</i>	<i>Written ability</i>
<i>Receptive Skills</i>	Understanding	Reading
<i>Productive Skills</i>	Speaking	Writing

**Table 2. Basic Skills and Dimensions in the Bilingual Individual (Baker, 1997)**

In spite of looking at this chart, we must bear in mind that bilingualism is a very ambiguous term and there is not just one definition; we really do not know when we can talk about bilingual people or not. To establish a final definition, we could say that someone is bilingual when his skills are well developed.

### **Bilingual education definition and evolution**

#### *What it is*

The relationships between language and education are very varied and complex. It does not matter if language is written or spoken, English teachers are going to be crucial in relation to students' success or failure. But, it is also important how motivation and programs are designed because bilingual education is in charge of teaching languages to those who cannot learn due to social and familiar problems. That is, school organization tries to make up for the lack of exposition to one or more languages. For all that, bilingual education uses different resources, but the most important is: to use language or languages as an instrument to teach contents.

### *Definition*

There are loads of definitions when talking about bilingual education and it is hard to choose just one because it is a very ambiguous term and it depends on where and how it develops; but we are going to follow the next: “Bilingual education is the use of two languages as media of instruction for a child or a group of children in part or all of the school curriculum” (Cohen, 1975). This definition excludes all those educational programs that include only one language as a subject and not as a mean of introduction of certain subjects or school contents. Bilingual education would be “in” two languages and it would not be teaching “from” one language to another. In other words, if bilingual education is a way to organize the educational system in order to teach students a language which cannot learn due to social or familiar problems, it should not be a way to teach languages as subjects, but teaching through knowledge.

### *Characteristics*

When we talk about bilingual education, the characteristic is the use of two languages as means or instruments of teaching. Teaching in two languages. Therefore the definition above excludes programs dedicated to teaching a second or foreign language. In this case the language would be the content of education.

At the same time, in literature there are two different definitions:

- Teaching L2 when that language is in most parts of an area but it is different from the L1 people speaks. For example: In the USA, English would be L2 for Hispanic people, and Spanish L1.
- Teaching a foreign language when that language is not spoken by the community. A good example would be: teaching French in Spanish schools.

Nevertheless, we can find a lot of bilingual situations because not all schools, cities, or countries have the same needs. We are going to present Fishman’s classification. (Fishman, 1976)

Fishman (Sánchez & R. de Tembleque, 1986) proposes a typology of bilingual education programs depending on: school and community’s objectives, intensity, and languages status.

- Based on the objectives we want to obtain with a bilingual education, there are three types of education:
  - Compensatory; for those students who are going to study in a different language they use at home, and it is also a minor language. This will allow children to progress in a faster way when learning L2.
  - Enrichment; it is intended for those who want to have an additional educational experience related to a foreign language.
  - Maintenance; students who want to preserve and develop L2 and at the same time they want to participate in its culture but they also want to accept activities and festivities in their own culture.
- Based on the intensity, there are four types:
  - Transitional bilingualism; it uses L1 to help teaching L2 and it allows students to adjust to school until their skills are developed to the point that it alone can be used as the medium of instruction.
  - Monoliterate bilingualism; it uses both languages but children just learn how to read and write in L1.
  - Partial bilingualism; this kind of program seeks fluency and literacy in both languages. Students learn how to read and write in both languages, but “cultural subjects” are taught in their mother tongue, and on the other hand, “scientific subjects” are learnt in L2.
  - Full bilingualism; students are to develop four skills (speaking, understanding, writing, and reading) in both languages, L1 and L2.
- Based on the status; this classification has a sociological point of view, and the author tries to make it successful when predicting the program’s success. We can find four dichotomies: “L1 vs L2” in bilingual education; “home language” vs “school language”; “major language1” vs “minor language2” depending on their importance in the world; and “institutionalized language” vs “non-institutionalized language” outside school.

### **Pros and cons about bilingual education**

In the last twenty years there have been numerous evaluations about immersion programs. Most have shown that students who follow such program do not suffer any damage in relation

to language development in their first language or their academic performance. However, most of these assessments have been conducted on students belonging to medium / high socio cultural level and highly motivated by their families. Hence the importance of evaluating the results obtained by students with special characteristics in immersion programs (socio cultural level or low IQ, language problems, etc.); assessment, and provided data helps to improve the effectiveness and relations between linguistic competences.

Cummins' predictions (Cummins, 1979) according to which students with low socio-cultural level would not benefit from the transfer of powers from the L2 to the L1 since, for that to be possible, a threshold level of competence is required in your language, have not been confirmed. Therefore we can say that there are no significant differences in academic and linguistic performance of these students compared to others who do not follow an immersion program. But this is not conclusive, since one of the problems is that the sample size of studies is small, and the teachers who have conducted these studies are highly motivated.

Yet we could summarize the advantages of bilingual education in the following (Cloud, Genesee, & Hamayan, 2000) (Torres, 2011) (García, 2009):

1. Academic benefits. Bilingual programs provide opportunities for students to develop their first language, second and sometimes third.
2. Personal benefits. It is not detrimental to the acquisition of the first language, because learning two languages simultaneously at an early age helps to reach high levels of cognitive and language skills.
3. Socio-cultural benefits. Expands student's environment, it helps to know other cultures, countries, in other words, other ways of seeing the world.
4. Professional benefits. Provides access to better jobs both locally, regionally or nationally and internationally.

Despite the benefits of bilingual education, some people are against it and say it does not work. Baker (Baker, 1997) maintains that for a bilingual education program to be effective, it must be from four different perspectives. At the student level, class level, at school and material and physical level.

Moreover, Cummins (Cummins, 1979) is committed to bilingual education involving emphasis on social justice which promotes equality between the two languages, and also it does not underestimate social and cultural identities of languages in specific communities.

**Vocabulary acquisition (Previous studies)**

The first words the child learns to say have properties in common. They tend to be words for names of people or objects and activities that children have contact with and are often used in their interactive social routines (e.g., goodbye).

Children use words wrongly when doing over extensions, that is using a word to mean more than what it really means (e.g. "dog" to name animals), and sub-extensions, using a word that means only part of its real meaning (eg "car" to name a car that is moving).

These first sentences which consist on a single word, are called holophrases because they function like phrases and can express meanings that are more complex than simple tags (e.g., a child says "mum" but he is trying to express a more complex message "mum come here").

The first sentences of children tend to express the same declarative intentions expressed than they did in their first year with gestures and vocalizations.

Although there are many individual variations in the recent development of expressive language, studies suggest that children aged 24 months who produce less than 50 words can be considered representative below normal expressive language and are at risk for chronic linguistic disadvantages (Tough, 2012).

The acquisition of expressive and receptive vocabulary continues to grow during the third year of life.

As the child increases his vocabulary, he develops expertise on a semantic categories, spatial terms, adjectives, colors and also learn to produce and understand interrogative words (what, where) and personal pronouns.

During preschool years, children learn to use and understand a large number of words; they dominate the use of many pronouns, except the pronouns (me, you...) which are not learned until school age.

Many of the terms used to describe the extent of family members (e.g. brother) are finally understood at the age of 5 years. Time terms (before, after, since, until) are introduced into the vocabulary at this age, although at the beginning they are used as prepositions and later on as subordinate conjunctions. At 5 years, they learn to use adjectives, adding more precise terms in their vocabulary.

Leopold (Leopold, 1939–1949) conducted a study in which their daughters studied their linguistic progress since they were raised in a bilingual environment, so that the father always spoke to them in German and their mom in English.

Hildegard's development of the first vocabulary (one of Leopold's daughter) was observed, and he saw that English words predominated before the German (Hildegard lived in USA with his family), and how a very low percentage of neutral words, children's words (e.g. woof-woof) were said in both languages. The girl always tended toward one of the languages.

Furthermore, Taehsner (Taehsner, 1983) studied the acquisition of Italian and German by his daughters. In her work she confirms that from birth to two years of age the child behaves as if there was just one lexical system, in other words, using both lexical words as if they were one. In addition, after two years she begins to differentiate lexical but she follows a unique system of morphosyntactic rules. This means that she incorporates few equivalents because she is not able to memorize so many terms. Finally, the bilingual is already capable of separating both lexical and morphosyntactic forms in each language. The bilingual discovers that both codes have different rules and apply them severely assigning each person a language.

## **Development**

Oral language is a skill that comes along with social, emotional, environmental, neurophysiologic and cognitive skills that enables the communication of the individual. Learning to speak involves integrating a certain system of sounds, words and phrases in the set of behaviors that characterize the overall development of the child.

If there is an interaction between the processes that integrate language acquisition and the factors that characterize the overall development of the child, it must take into account the problems of oral language so that language development is not separate from the motor, cognitive, emotional or social development.

The stages of child development can be slow or fast, uniform or unequal, progressive or stoppages. It is therefore necessary to perform a correct diagnosis throughout their growth. We can not only make an observation and examination because disorders evolve, change and vary over time.

Diagnose oral language means assessing levels of expression and comprehension factors which are established with its corresponding variables. The evaluation of the observations must lead us to determine whether the alteration in oral language is typical of the disorder or there are other factors associated with alteration.

To discern between the two observations, we must know the factors involved in the evolutionary development of spoken language, as well as presenting the elements that we



must observe and study from the perspective of the general development of the child. Therefore, we need to know certain information to help us determine the various issues rose.

#### *Instruments to collect data*

An identification sheet aims to record the main variables of personal and school identification, and the development of speech and language of each child. The card was completed by classroom teachers who knew the students very well.

In the identification sheets four sections were rated: the school, the student, personal data of each child, schooling, and speech and language development.

In relation to personal data of the child, it was important to consider their chronological age in relation to the school year. Children in kindergarten and first cycle of primary education are at a very important time of growth, and maturational difference of 6 or 9 months of age among them can provide a slow but good or bad evolution depending on each student's progress.

From the point of emotional and relational view, it was important to assess the number of siblings and position between them, and the family's attitude towards him to see if there is acceptance, rejection or indifference on the part of parents.

In relation to school data and schooling, we had to take into account the class and the number of children per class in order to facilitate a better methodology. Of course we also had to take into account the home language and school language when doing the observations.

From the point of school relational view, it was noted child's attitude regarding to the teacher and classmates in order to assess their level of communication, mood and level of integration. Every child should feel welcomed by the school and the teacher should be able to give each child what they need.

Regarding the development of speech and language, it was important to explain to the teacher that the difficulties in oral language are not homogeneous, but there could be children with obvious alterations in oral expression, however, they had a good level of language understanding.

In sum, we thought about an identification sheet which globalized those data of interest and served as a starting point to determine whether the child required a more complete evaluation or not. (See Annex I).

Moreover, taking into account the theoretical knowledge, it was created a sheet for vocabulary data collection when showing the flashcards.

The only thing we wrote down was the number of hits and the number of errors or words he did not know during the test.

The main objective of creating the evaluation sheet was to see if there was any truth in the idea that the more Spanish vocabulary they had the more English vocabulary they knew (See Annex II).

The content validity of the test, resulted from the monitoring of the trial of an expert who analyzed the items in relation to the data studied.

### *Description of data collection*

Before proceeding to explain which rules' test were, we did discuss why we decided to choose that school.

The selected geographic context was Villanueva del Pardillo, in the north of the community of Madrid. It is a bilingual school and it has a high socioeconomic level. In our case the percentage of students with language disorders was very low, so our results were not affected.

In the sample of chosen students, none had special educational needs or language disorders because what we wanted to evaluate was orality or speech. On one hand, we wanted to know if they knew the vocabulary, and secondly if they knew how to say it correctly, so we could not include in this group students with speech disorders that prevented us from seeing how the general and normal class was. Those children with possible language disorders could be assessed some other time, because they may know the vocabulary, they may know what the images were and they may know how to say them but they did not know how to express them correctly in an oral way. Therefore, the right thing was to evaluate them using other methods and other values. For that we had to do a completely different study.

This target population was in first year of Early Childhood Education, and they were all 3 years. The criteria used to choose the students was:

- Review of students' records, if they came from the nursery, and watching and observing them for several days in the classroom to see the type of vocabulary used by the students.
- Used vocabulary to express themselves. Always used the same words, varies, or did not talk.

The research was design in the 2013–2014 school year as a temporary space for the field in which five different periods could be distinguished:

- Period of contact and request the school.
- Observation period in order to decide which classroom research developed the research and which students were involved.
- Data collection period, which was establish the starting point for assessing the vocabulary that was going to be showed to students.
- Period of intervention, to develop proposals.
- Period of summing up, reflecting, evaluating and revising what we obtained.

### *Procedure*

After selecting the sample of 40 children, individually we seated with the child. We began by explaining what we were doing; we were playing a game where we had to say what we saw in the pictures. One by one these flashcards were passed first in English and then in Spanish, and then the other way around. The flashcards were showed randomly. We did not have them placed in any order, they did appear randomly.

Only students spoke. We could not say anything. We could not correct anything. We did not set a time, each one took what they needed, but the estimated time for each student was about 10–15 minutes.

As we mentioned before, in order to evaluate oral expression in English using vocabulary, we created a test which evaluated pronunciation.

First we did fill out the identification record, and afterwards the evaluation sheet. To carry out the test there was a set of rules and they are:

- Give to the students 42 images (see annex IV); the pictures were not in order, and children named them. First, they had to name them in Spanish and afterwards they did it in English. When they finished, we did it the other way around (Spanish- English).
- The test was conducted before Easter because the whole vocabulary was worked and it was supposed to be known. If it would have happened after the holidays they may had forgotten.
- It was hold before going to the playground in the morning, as they were less altered and more concentrated.
- We did not make any correction in any errors of speech or language used by the child.

As they spontaneously named the different images, we did mark if they did it correct, wrong or did not know what it was shown.

After finishing the test, we did count the total, and in the observations part, we referred to oral expression, that means, the rhythm and fluency of speech, the kind of voice, etc., but we did not need those data in our study. Also we took note of the attitude of the child before and during conducting the test.

### **Description and data analysis**

The identification record, evaluation sheet and the results on explored oral language skills and additional areas, provided us information to prepare a speech therapy report.

The speech therapy report contained the results of the information assessed and evaluated on observations and testing applied to the oral language and additional language areas. The report comprised the following sections:

- Useful information (individual, family and school situation): data obtained from the identification sheet completed by teachers.
- Valuation of intellectual ability, emotional and neurological maturity (additional information to oral language): obtained by standardized tests.
- Rating oral language skills (functions for expression, understanding and communicative situation): obtained through standardized and elaborated or created tests.
- Alterations: disorders in oral language.

The report was the basic tool therapists had to communicate the results of the overall evaluation of the child, to determine (in our case) the ability of oral language and to facilitate the listing of the skills that allowed us to prepare proposals for work. (See Annex V).

Regarding the results of our work we needed to start showing a table as summary of the data used in the study.

	<i>Cases</i>					
	<i>Valid</i>		<i>Missing</i>		<i>Total</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
<i>Test 1 Spanish</i>	40	100,0%	0	,0%	40	100,0%
<i>Test 2 English</i>	40	100,0%	0	,0%	40	100,0%
<i>Test 2 English</i>	40	100,0%	0	,0%	40	100,0%
<i>Test 2 English</i>	40	100,0%	0	,0%	40	100,0%

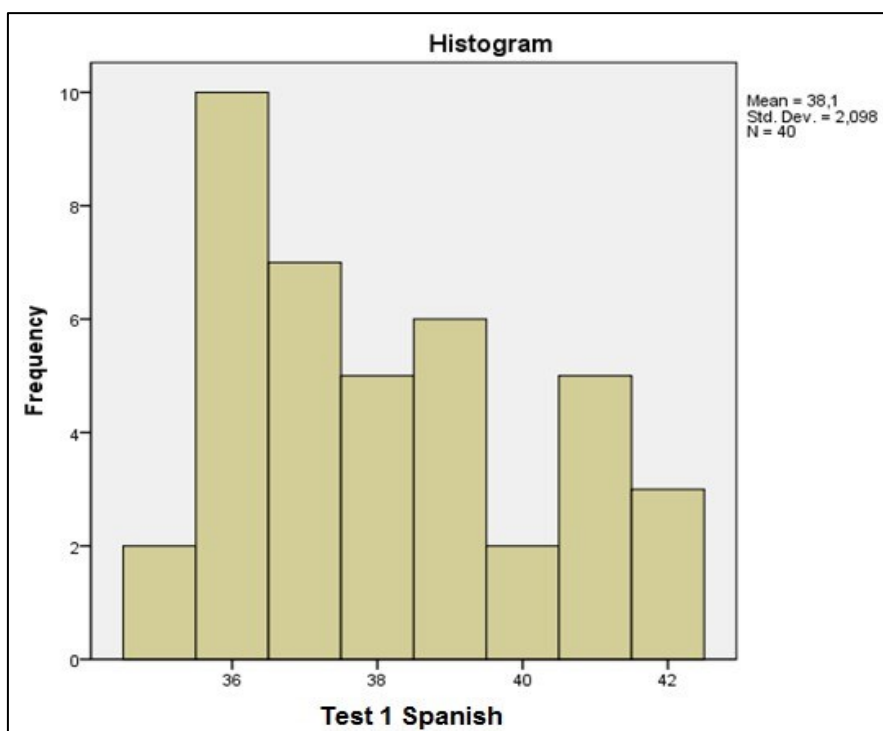
**Table 3. Case Processing Summary**

What it is shown is the number of people in the two tests, how many had been valid, how many did not show up, and which the total was.

Then we display the results of the test, first in Spanish and then in English.

In Spanish, the mean is 38.1, but in English, the average is 35.33. We can see that they had more hits in Spanish vocabulary than in English vocabulary.

Regarding the variance, we can say that in the test of English it is higher than in the Spanish test, which means that the data are more homogeneous in Spanish than in English. If there is more homogeneity in the data there were more kids who knew more Spanish vocabulary than children knowing English vocabulary.

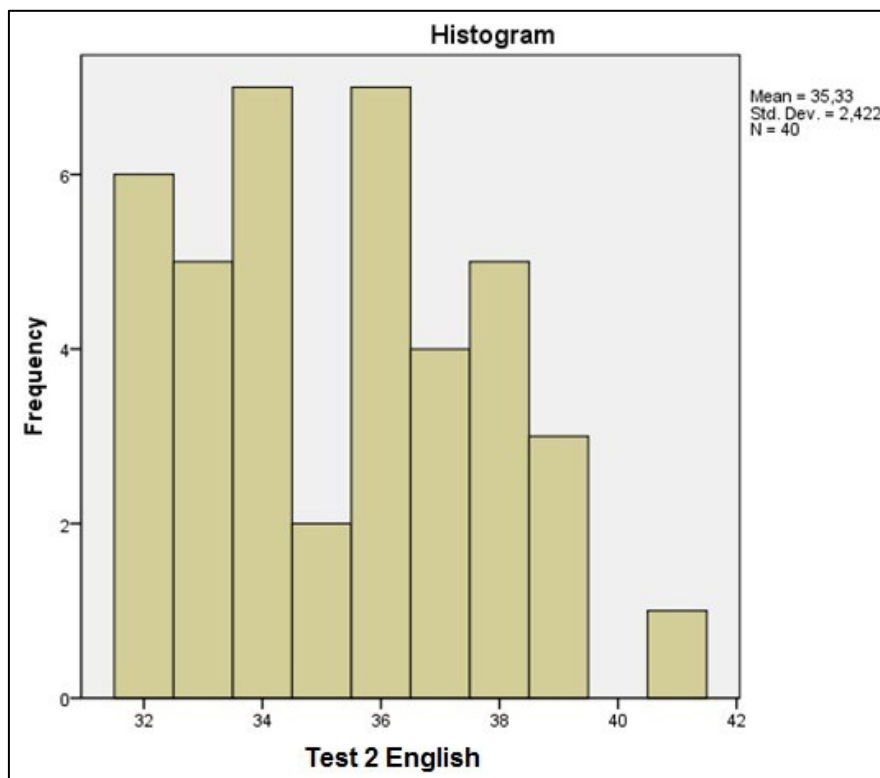


**Figure 1. The frequency of the data in the Spanish test**

This graph shows the **frequency of the data**, which means there were more students with number of hits next to 36.

<i>Right answer</i>	<i>Frequency</i>
35	2
36	10
37	7
38	5
39	6
40	2
41	5
42	3

**Table 4. The right answers and the frequency in the Spanish test**



**Figure 2.** The frequency of the data in the English test

In this case, **the frequency** it is the same on 33 and 38, that means there were several students who agreed on the number of hits in the English test.

<i>Right answer</i>	<i>Frequency</i>
32	6
33	5
34	7
35	2
36	7
37	4
38	5
39	3
40	0
41	1

**Table 5.** The right answers and the frequency of English test

Again a chart is shown with a **summary about data on the frequency**, but here we have the results of the test in English.

	M	SD	N
Test 1 Spanish	38,10	2,098	40
Test 2 English	35,33	2,422	40

**Table 6. The summary about data on the frequency**

Now we are going to focus on the **relationship between the two tests** to see what we proposed at the beginning of the project.

Pearson correlation showed that the data were scattered. If the coefficient is 1 or -1 data will not be scattered. In the case of the Spanish test, the result is 1 so the data were not too sparse; however the result in the English test was 0.922. All this means that those students who always performed better on the test of Spanish had always better results in English. And when we talk about best results we refer to the number of hits, which means they knew the vocabulary and pronounced it properly.

		Test 1 Spanish	Test 2 English
Test 1 Spanish	Pearson Correlation	1	,922**
	Sig. (2-tailed)		,000
	Sum of Squares and Cross-products	171,600	182,700
	Covariance	4,400	4,685
	N	40	40
Test 2 English	Pearson Correlation	,922**	1
	Sig. (2-tailed)	,000	
	Sum of Squares and Cross-products	182,700	228,775
	Covariance	4,685	5,866
	N	40	40

**Table 7. The relationship between the two tests**



Therefore we can conclude by stating the hypothesis we proposed at the beginning and what we wanted to study: it is true that the more Spanish vocabulary, the more they know in English.

## **Conclusions**

This project is the result of a process of learning, about contents related to the subject and linked concepts; that means it is a scientific study in the field of research.

The main goal was to experience and develop the stages of an investigation linked to education within the context of pre-primary; that approach would serve to learn through experience and learning by doing due to that is one of the aims of the Degree in Childhood Education. The main motivation in performing this task lies in the personal enrichment and learning by overcoming a challenge: make a Final Project Work based on research.

We have also become more aware of the importance about to be reviewed, recommendations, suggestions or referrals from people with research experience, when we start in a study of this nature. In particular, advice and peer support, specialized help or friends involved in research, have been essential to carry out this work.

We have searched through various bibliographies sources, to achieve all the objectives we set out from the beginning. Since the title is related to bilingualism and expressive vocabulary, our first step was to define what bilingualism means. As we have seen there is no one true definition, it varies depending on the characteristics and context that the author notes. So we have been collecting various influential, important, and special contributions that surround it.

Therefore, in the present study, we have tried to give some flavor of the complex nature of bilingualism, and a select group of issues that influence individual variations in acquiring bilingual vocabulary.

There is no agreed-upon definition of bilingualism among researchers and bilinguals are often broadly defined as individuals or groups of people who obtain the knowledge and use of more than one language. However, bilingualism is a complex psychological and socio-cultural linguistic behavior and has multi-dimensional aspects.

We understand bilingual education as the one which uses two languages as a way of instruction. We distinguish between teaching in a language and teaching through a language. In the first case, students can become bilingual, but it is not about bilingual education.

Regarding the acquisition of vocabulary in other language than your mother tongue, there are several things to say; first we have to make reference to age. The smaller a child is exposed to a language the faster and better he or she will learn, and secondly it must be said, following the results of our study, in our case, the more Spanish vocabulary our students have, the more English vocabulary they have.

Finally, it could be added that it would be important to do a study on why usually the youngest have less vocabulary than the oldest in classrooms. In our case it has been like that. Those who their chronological age is younger had lower vocabulary both in Spanish and in English.

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## ANNEXES

Annex I

### **IDENTIFICATION RECORD**

#### **School:**

School language:

Class:

Number of students per class:

Language used in class: Teacher's

name:

Date:

#### **Personal information:**

Name & Last name:

Date of Birth:

Number of Siblings:                      Order:

Family language:

Family attitudes towards children:

Acceptance       Indifference       Rejection

Family situation:

Normal       Abnormal       Family problems       Divorced/separated parents

Socio cultural level:

High       Normal       Low

#### **Schooling:**

When he/she started:

Children's attitude towards teacher:       Normal       Problematic

Children's attitude towards mates:       Alone       Always with the same       Everybody

Efficiency at school:       Good       Normal       Bad

Repeated a school year:       yes       no

**Speech and language development:**

Normal tone of voice:     yes     no

Altered phonemes when speaking:     yes     no

Speaks too fast:     yes     no

Stutters:     yes     no

Structures sentences correctly:     yes     no

Understands what it says:     yes     no

Spells properly according to his/her age:     yes     no

Receives extra classes:     yes     no

Annex II

**EVALUATION SHEET**

Person:

Chronological Age:

Date:

IMAGE	Correct Answer	Error/ Doesn't know
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
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22		
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24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
TOTAL		

Annex III

**RESULTS**

Person	Age	Test 1 Spanish		Test 2 English	
		correct answer	errors/doesn't know	correct answer	errors/doesn't know
<b>1</b>	3 years 6 months	38	4	34	8
<b>2</b>	3 years 2 months	36	6	32	10
<b>3</b>	3 years 8 months	39	3	37	5
<b>4</b>	3 years 10 months	40	2	37	5
<b>5</b>	3 years 10 months	41	1	38	4
<b>6</b>	3 years 3 months	37	5	35	7
<b>7</b>	3 years 4 months	37	5	36	6
<b>8</b>	3 years 7 months	38	4	36	6
<b>9</b>	3 years 11 months	42	0	38	4
<b>10</b>	3 years 11 months	41	1	37	5
<b>11</b>	3 years 2 months	36	6	33	9
<b>12</b>	3 years 9 months	40	2	38	4
<b>13</b>	3 years 2 months	35	7	32	10



<b>14</b>	3 years 11 months	42	0	39	3
<b>15</b>	3 years 7 months	39	3	36	6
<b>16</b>	3 years 3 months	35	7	32	10
<b>17</b>	3 years 1 months	36	6	33	9
<b>18</b>	3 years 8 months	39	3	36	6
<b>19</b>	3 years 10 months	41	1	39	3
<b>20</b>	3 years 7 months	37	5	34	8
<b>21</b>	3 years 4 months	36	6	32	10
<b>22</b>	3 years 9 months	38	4	36	6
<b>23</b>	3 years 3 months	39	3	36	6
<b>24</b>	3 years 12 months	41	1	39	3
<b>25</b>	3 years 12 months	42	0	38	4
<b>26</b>	3 years 7 months	39	3	38	4
<b>27</b>	3 years 11 months	41	1	41	1
<b>28</b>	3 years 10 months	39	3	37	5

<b>29</b>	3 years 7 months	37	5	34	8
<b>30</b>	3 years 5 months	36	6	32	10
<b>31</b>	3 years 3 months	36	6	33	9
<b>32</b>	3 years 2 months	36	6	33	9
<b>33</b>	3 years 6 months	37	5	35	7
<b>34</b>	3 years 8 months	38	4	34	8
<b>35</b>	3 years 5 months	37	5	34	8
<b>36</b>	3 years 3 months	36	6	34	8
<b>37</b>	3 years 8 months	38	4	36	6
<b>38</b>	3 years 4 months	36	6	32	10
<b>39</b>	3 years 7 months	37	5	34	8
<b>40</b>	3 years 4 months	36	6	33	9

Annex IV

IMAGES

