



DEPARTMENT OF EDUCATION, UNIVERSITIES AND RESEARCH

SECRETARIAT FOR LANGUAGE POLICY

€.I.F.€.

(Euskararen Irakaskuntza: Faktoreen Eragina)

**Influence of Factors
on the Learning of Basque**



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Vitoria-Gasteiz, 1986

EUSKO JAURLARITZAREN ARGITALPEN-ZERBITZU NAGUSIA

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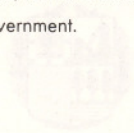
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EUSKO LAURAKHARTZAREN ARGITZARREN

CONTENTS

1. INTRODUCTION.....	7
2. OVERALL VIEW OF BASQUE MEDIUM AND SUBJECT EDUCATION.....	9
3. DESCRIPTION OF THE STUDY.....	11
4. RESULTS OF THE TESTS.....	16
5. MODEL D.....	20
6. MODEL A.....	24
7. MODEL B.....	27
8. SUMMARY.....	31

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1.- INTRODUCTION

1.1. This study is the first exposition of results obtained from the plan to Basquise (1) the education system of the Basque Country.

The results may seem limited to those who placed all their hopes on the recuperation of the Basque language through the school system. For those familiar with bilingual teaching models, this study reveals nothing new. Hypotheses are simply confirmed. We think however that this is sufficiently important for the information offered to act as a compulsory point of reference for all sectors involved in teaching Basque.

EIFE is not the ratification of one method of bilingual education or another. EIFE is merely a sample of the Basquising effort within the educational system over the four or five years since the plan was started. It is the result obtained at a certain period in time in a given context with certain resources. It should not be taken for granted that the results revealed by EIFE can be generalised to the entire process, but they must necessarily be taken into account.

1.2. What have we achieved by introducing the process of Basquisition into all non-university education?

In the 1978-79 school year, with the exception of ikastolas (2), Basque was not a school language. Schools in the Basque Country were entirely monolingual, Spanish speaking. In public primary schools, only 5% of the teaching staff knew Basque. The majority of teachers were from outside the Basque Country.

Today, every child knows that Basque is the native language of Euskal Herria (The Basque Country). Basque, like other languages, is a school language. And the majority of Basque children show a favourable attitude towards Basque. The whole teaching staff is aware of the fact that the basic specific feature of Basque schools is the Basque language. The teachers have also felt the need for in-service training as a consequence and a broad sector is involved in literacy training (3), Basquisition (4) and preparation for language teaching.

Parents, on the other hand, are demanding more and more competent responses from schools, taking on an increasingly active and responsible role.

School activities are being substantially reformed under the impulse of Basque teaching. A school with a good bilingual model is much more enriching than a monolingual one and this has a beneficial effect not only on the learning of Basque but also on the entire educational process.

However, we have not yet achieved the objectives of competence in Basque outlined in each model of bilingual education. This study shows how those children taught under model A achieved low levels in Basque; neither have those in model B achieved all that was aimed at in this bilingual educational model;

1. ie. introduction of Basque language subject and medium teaching.

2. Private Basque-medium schools created by popular enterprise often with the hope of becoming part of the public network.

3. Basque adults are frequently literate in Spanish or French only.

4. For non-native speakers.

and finally, not much has been proved by revealing that the children in model D -Basque speaking by origin- know Basque.

In any case, we have observed that the knowledge of Basque attained through the school is greater in those cases where the children come from Basque speaking families.

All of this will not have much meaning for many people. However, those who are involved in the world of teaching will hold a different opinion. Social change always precedes educational change. We wanted Education to be a pioneer in the Basquisition process, but that is impossible. Society and the school system will have to learn Basque simultaneously or not at all.

1.3. In our opinion, the basic result of this study is the following: to open channels in order to achieve better results from schools and all the resources put into the Basquisition process. Generally speaking, research will have to be promoted in this sphere. It is therefore essential to study the analysis of objectives in depth. The central objective is to expand the use of Basque rather than knowledge of the language. And on the basis of this objective, the programming of each model, educational context, school and classroom should be analysed.

A deeper knowledge of the concept of language, and more specifically, a greater knowledge of Basque language behaviour would generate methodologies that would be more appropriate for teaching Basque. There is a great shortage in this field.

On the other hand, we think it is essential to publish these results when there is such a strong social effort behind the Basque learning process. Even if they are not very promising, the figures have to be compared with our hopes and fears and the rumours that circulate. EIFE is a major effort in that direction.

Moreover we believe that knowledge of the results and the reasons why they occur is a necessary first step towards improving them, especially if the information reaches those directly involved.

As a result, it is essential to ensure that the results of each model reach each and every school and classroom so that those most intimately involved with Basquisition can appreciate the fruits of their labour and can find there the incentive and the guide necessary to continue their task.

We sincerely hope that the EIFE study will be of use in the improvement of the process of Basquisition of the Basque educational system.

Itziar Idiazabal
HEAD OF PRIMARY EDUCATION

2.- A COMPREHENSIVE VIEW OF BASQUE EDUCATION

In accordance with the Autonomy Statute of the Basque Country (1979), Basque, the native language of the Basque country, shall, like Spanish, be an official language in the Autonomous Community of the Basque Country.

The Basque Parliament defined this coofficiality in the Basic Law of Standardisation of the Use of Basque (1982).

By virtue of this, the Department of Education, Universities and Research published the Decree of Bilingualism (1983), the Bilingualism Order (1983) and many other orders and resolutions, with the aim of giving the Basque language its due place in the educational system.

As a result of this, Basque has become a compulsory subject in school and the different bilingual teaching models have been given their appropriate legal framework.

Below is a brief description of these bilingual teaching models which are applied from kindergarten on:

MODEL A: All subjects -except Basque- are taught mainly in Spanish. Basque is taught like any other ordinary subject.

MODEL B: Both Spanish and Basque are used to teach other subjects, as well as being subject matter themselves.

MODEL D: All subjects, except Spanish, are taught mainly in Basque.

Models A and B are designed for Spanish speaking children and were only introduced a few years ago into the Basque educational system. Model A was first applied around 1979 and Model B a little later.

These two bilingual teaching models have substituted the previous teaching model in which Basque was completely excluded.

Model D was initially conceived for Basque speaking children, but it later included Spanish speaking pupils. This model is much older, as it was linked to the ikastolas; this movement began to gather strength and spread from 1960 onwards. At present, model D is also being gradually introduced in public and private schools.

As determined by the above mentioned Bilingualism Decree, the Department of Education and Culture, in collaboration with the Secretariat for Language Policy, must establish the research tools necessary for checking the results obtained from the application of different bilingual teaching models.

This EIFE study (EUSKARAREN IRAKASKUNTZA: FAKTOREEN ERAGINA) (Influence of factors on the learning of Basque) is one of the tasks carried out in order to fulfil this mandate.

As the research data were collected in 1983/84, it is clear that models A and B were still undergoing a process of consolidation. Nevertheless, it was important to know the data from this period; on one hand

because they dealt with the first results and on the other because they would serve as a reference point for further studies.

In the aforementioned school year, in the fifth grade of OHO (BGE - Basic General Education) (10 year olds), the majority of children were in Model A, to be exact 67%; 4% were in Model B; 15% in model D and 14% were not taught Basque.

In the second grade of BGE (7 year olds), 64% were in Model A, 13% in Model B, 18% in Model D and 5% were not taught Basque.

3.- DESCRIPTION OF THE STUDY

3.1. AUTHORS AND PROMOTERS OF THE STUDY

This study has been promoted by the Secretariat for Language Policy and the Department of Education, Universities and Research, with the aim of analysing some of the factors that influence the learning of Basque in schools.

The EIFE project has been carried out by experts from the Sociedad de Estudios Socio-Económicos SIADECO and the Basque sub-department of Education together with the collaboration of members of the University of the Basque Country and other centres.

SIADECO was in charge of designing the socio-linguistic survey and the sample and of carrying out diverse data analyses. The language tests and other types of data analysis were carried out by experts from the sub-department of Education. The Statistics Centre of the University of the Basque Country was in charge of data processing, and the Statistics Dept. of the Faculty of Business and Economic Sciences carried out the statistical consultancy work.

3.2. OBJECTIVES

- a) To measure the level of Basque and Spanish in 2nd and 5th grade BGE students belonging to the 3 models of bilingual education (A,B,D).
- b) To analyse some of the psycholinguistic, sociolinguistic and other factors related with the teaching of Basque.
- c) As a result of research on the above points, to obtain specific quantitative and qualitative data on the language situation within the educational system during the 1983-84 school year.
- d) To develop the methodology and instruments necessary for this type of research.
- e) To create and develop instruments for measuring and evaluating language competence.

3.3. DESCRIPTION OF THE RESEARCH

a) *Sample*

The stratification of the sample was carried out on 3 parameters:

SCHOOL YEAR:

- 2nd year of BGE (7-8 year old children)
- 5th year of BGE (10-11 year old children)

MODEL OF BILINGUAL EDUCATION:

- Model A: basically in Spanish
- Model B: basically in both languages
- Model D: basically in Basque

SOCIOLINGUISTIC AREA:

The municipalities were classified into 5 zones, according to the percentage of Basque speakers:

ZONE 1.....	1- 10%
ZONE 2.....	11- 30%
ZONE 3.....	31- 50%
ZONE 4.....	51- 70%
ZONE 5.....	71-100%

Frequently, several sociolinguistic zones coexist within each council area and it has obviously been impossible to take these into account.

Below are the groups of pupils studied:

	MODEL		
	A	B	D
2nd year BGE	2A	2B	2D
5th year BGE	5A	—	5D

Model B was not studied in the 5th form, as it was still only taught in very few classrooms.

The sample was chosen at random: with 95% confidence there is an approximately 6% margin of relative error.

It is composed of two subsamples: a general one to obtain main conclusions; and another specific one for a qualitative analysis of the sociolinguistic zones.

In short, 1986 pupils were studied, split into 336 classrooms, belonging to public and private schools and ikastolas in the Basque Autonomous Community, during the 1983-84 school year.

b) Language tests

One of the most important objectives of the EIFE study was to measure the LEVELS OF BASQUE AND SPANISH.

A clear forerunner and reference point of this project has been the «Quatre anys de catalá a l'escola» (Four years of Catalan at school) carried out by the Departament d'Ensenyament de Catalunya (1).

Some of EIFE's language tests were inspired by the tests of the abovementioned Catalan study, although they have later been revised.

The function of these tests was to distinguish mainly between the Basque levels of children belonging to very different school grades and models, and at the same time to discriminate within each group to be studied.

In order to do this, the four basic language skills had to be examined; oral comprehension, oral expression, reading and writing, always within the school environment.

Due to the fact that very different Basque levels were measured, the language subtests have different degrees of difficulty in order to adapt themselves to the groups of pupils to be analysed.

Each test is made up of the following tests or subtests:

TESTS	2nd YEAR BASQUE	5th YEAR BASQUE
S U B T E S T S	Oral Comprehension I Oral Comprehension II Oral Comprehension III Oral Expression I Oral Expression II	Oral Comprehension I Oral Comprehension II Oral Comprehension III Reading I Reading II Writing Oral Expression I Oral Expression II
TESTS	2nd YEAR SPANISH	5th YEAR SPANISH
S U B T E S T S	Oral Comprehension I Oral Comprehension II Oral Comprehension III Oral Expression I Oral Expression II	Oral Comprehension I Oral Comprehension II Oral Comprehension III Reading I Reading II Writing Oral Expression I Oral Expression II

Second year pupils were not given reading and writing tests, as they have not yet mastered these skills.

(1) «Quatre anys de catalá a l'escola» Generalitat de Catalunya, Departament d'Ensenyament. Barcelona 1983.

The Basque and Spanish tests were constructed together. The majority of the tests are for group use, except those for oral expression, which are given individually. Before fixing the final form of the test, various pretests were done, followed by the analysis of items and marks as well as the necessary changes and corrections.

c) *Psycholinguistic, sociolinguistic and pedagogic variables*

A series of psycho-sociolinguistic and pedagogic variables were compiled -the majority by means of a sociolinguistic survey- in order to relate them with the results of the language tests.

They have been classified into the following groups:

1. SCHOOL CHARACTERISTICS:

Type of centre, size of school, number of pupils per classroom, teacher's years of experience ...

2. SCHOOL LANGUAGE ENVIRONMENT:

School language make-up, percentage of Basque speaking children in the classroom, language used in certain subjects, language of school material, teachers' language training, language spoken to the teacher, language spoken to schoolmates...

3. FAMILY LANGUAGE ENVIRONMENT:

Origin of parents, parents' knowledge of Basque, language used during the child's early years, language relation between members of the family, media...

4. NEIGHBOURHOOD LANGUAGE ENVIRONMENT:

Sociolinguistic zone, language used with friends, with adults.

5. OPINIONS AND ATTITUDES WITH RESPECT TO LANGUAGES:

Attitude regarding Basque, Spanish, the nicest language, the favourite language...

6. PERSONAL APTITUDES OF THE CHILD:

School performance (in teacher's opinion), I.Q. (Catell's «G» factor test), knowledge of the languages (in teacher's opinion)...

There are, nevertheless, important psycho-sociolinguistic variables which have not been collected (methodology, socioeconomic level...), and which, on this occasion, have been rejected due to the difficulties they would have created for a survey of this scope.

d) *Statistical analyses*

Very varied statistical analyses have been carried out by computer, as this is practically the only way to work with such an accumulation of data.

Apart from frequencies, means and deviations, item analyses have been made with the «Anitem» programme. This means that the distribution of children's marks has been analysed as well as the test's «behaviour».

With this as a starting point, the other analyses were made with the aid of large data packages, in the Statistics Centre of the University of the Basque Country at Leioa:

Reliability and contingency tables (with the S.P.S.S. data package), Analysis of Main Components and Analysis of Multiple Correspondences (with the S.P.A.D. data package).

Finally, in order to obtain reliability by the «two halves» method, it was necessary to write a data processing program to that effect.

e) *Limitations on interpretation*

In this kind of work, there is a temptation to derive solutions and cause-effect relations with excessive haste from the results and correlations obtained.

Statistics does not prove a cause-effect relation. And, as a result, all data indicated in this study should be used with the necessary precaution.

3.4. ADAPTATION OF LANGUAGE TESTS

It seems that on the whole, the language tests used have been appropriate. They have been able to distinguish well between the different models of bilingual education and also between the subjects within each group.

As the same tests were applied to the three models, it is obvious that some subtests were quite easy or rather difficult for certain groups. This was unavoidable. But there are appropriate subtests for all groups which have helped to discriminate between the subjects of the same.

In order to calculate the reliability, the «two halves» method was used. This means that a measure of internal coherence of the tests was found (a single index would not have much meaning as different tests were applied to 5 different population groups, and therefore several sub-indexes of reliability had to be calculated.

Reliability in subgroups varies between 0.77 and 0.97.

We can say therefore that the tests have sufficient internal coherence.

Furthermore, in order to confirm the validity of the tests, the correlation between the grade obtained by the pupils and the mark given by the teacher has been calculated.

All the correlations are positive. They vary, with one exception, between 0.33 and 0.54. This means that the grading of the test and the teacher's mark are, in general, convergent to a normal degree.

However, in the 2nd year of model A, the teacher's opinion and the test's grading have a correlation of almost zero. This could be due to two reasons:

a) that on the one hand, neither the test nor the scale prepared to ascertain the teacher's opinion were appropriate for this model and level; b) that the teachers find it difficult to discriminate between pupils at this level of Basque.

It is in any case advisable to regard the validity level of the test with respect to the language as a whole as relative. The test is only a measure. It is obvious that it does not include all aspects of the language. Even those which are measured could be improved.

With regard to the Basque and Spanish tests, we can affirm that they have reached a high degree of parallelism owing to the fact that their construction, contents and method of correction are similar.

It has been possible to prove statistically that there is a similar degree of difficulty in the test for native Basque speakers and in the other for native Spanish speakers.

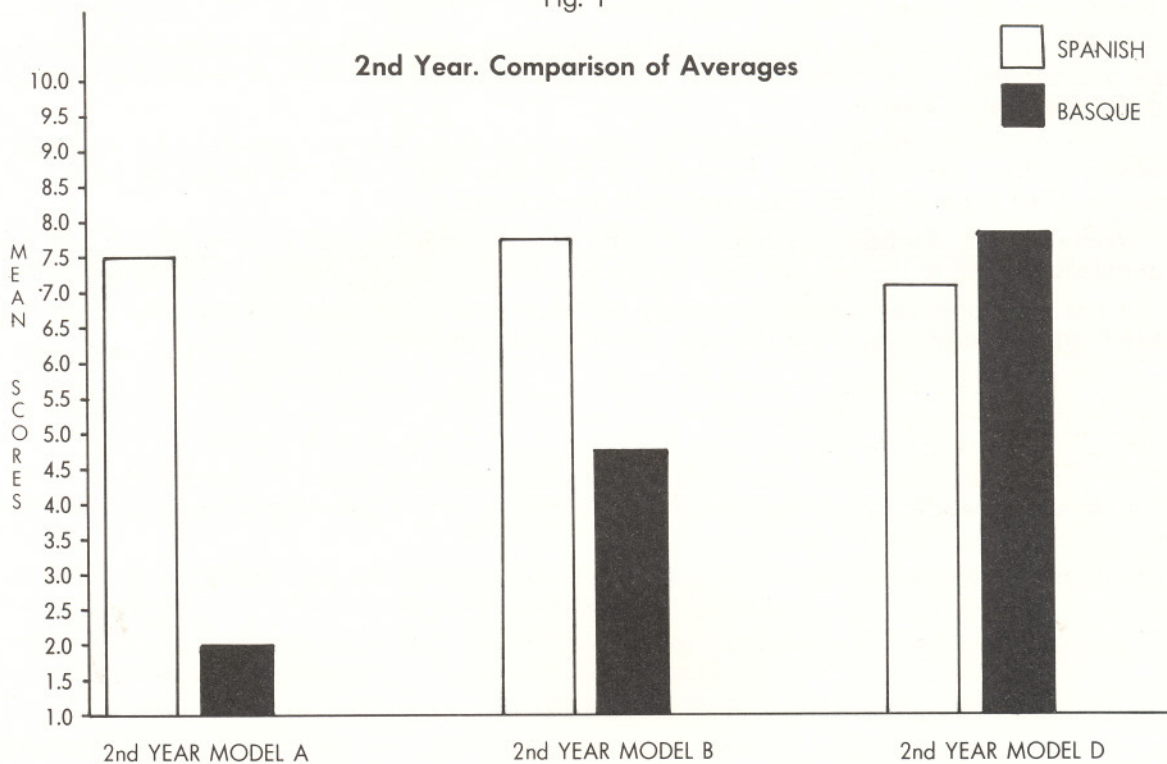
4.- RESULTS OF THE TESTS

The language tests, as indicated previously, are composed of sub-tests. The sub-test scores were integrated by means of two formulas, one for the 2nd year course and the other for the 5th year course, thereby obtaining an overall mark.

Below are the averages for the 2nd year:

	2 A	2 B	2 D
Basque	2	4.6	7.6
Spanish	7.4	7.6	7.1

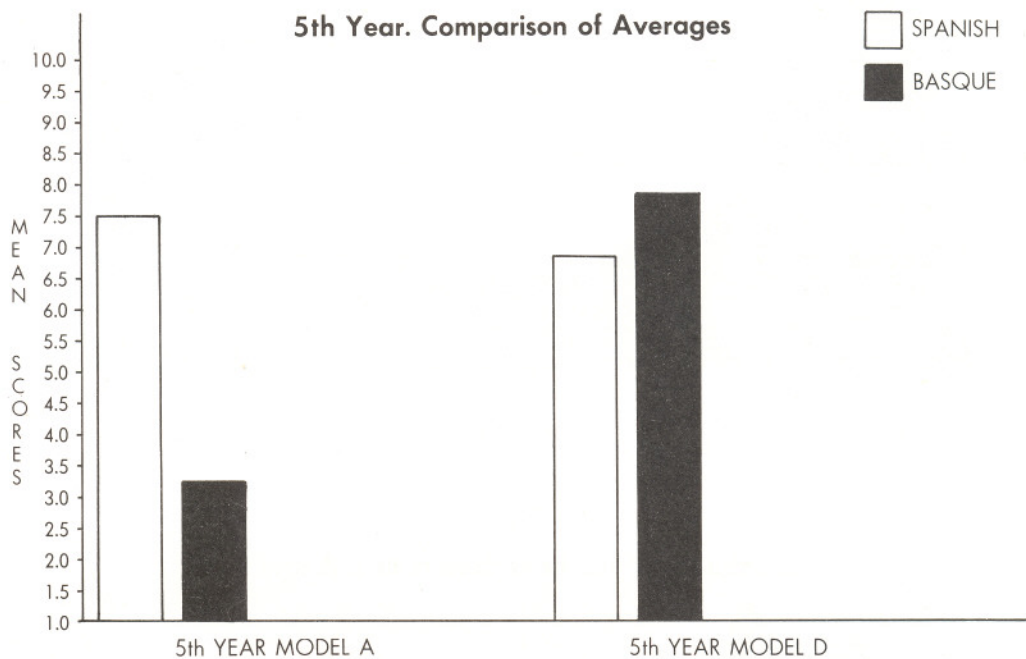
Fig. 1



5th year marks cannot be compared with 2nd year ones, as we were dealing with two different populations and because reading and writing tests were included in 5th year.

	5 A	5 D
Basque	3'2	7'7
Spanish	7'5	6'9

Fig. 2



As can be seen, the level of knowledge of Spanish is similar in all models; and although model D is at a somewhat slightly lower level, the difference is very small, and pupils in this model too have good marks.

On the contrary, the situation of the level of Basque is quite different. It is only at the same level as Spanish in model D; model A is at a very low level and model B is in an intermediate position but still a long way from the competence shown in Spanish.

If we look at the distribution of these scores, while always bearing in mind the structure of each model and composition of the tests, the following remarks can be made:

With regard to Basque (figures 3 and 4):

- The population in model D is logically distributed.
- Model A is very homogeneous: the majority of subjects are grouped around the same low marks.

- Model B is very heterogeneous. The children's levels of Basque are very different and therefore we cannot speak of a compact group. Many of them have marks characteristic of model A or D.

With regard to Spanish:

- All groups have a rather logical distribution, although, as we have said before, model D seems slightly lower.

- Subjects of model B reach the same level as those of model A (higher in some cases).

Fig. 3

Distribution of marks in Basque in 2 A, B and D.

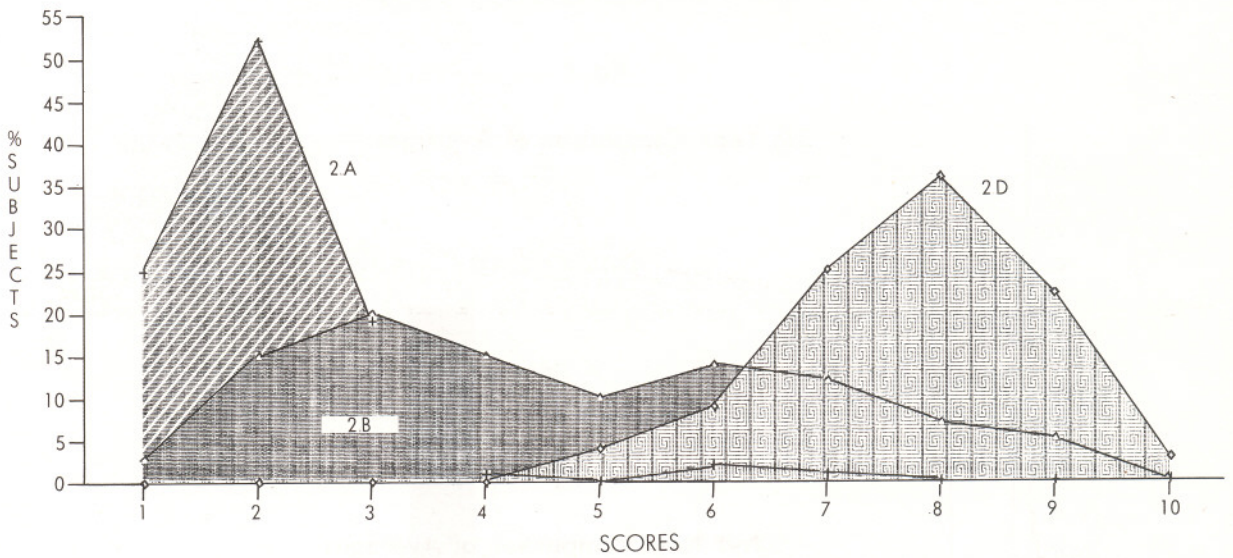


Fig. 4

Distribution of marks in Basque in 5 A and D.

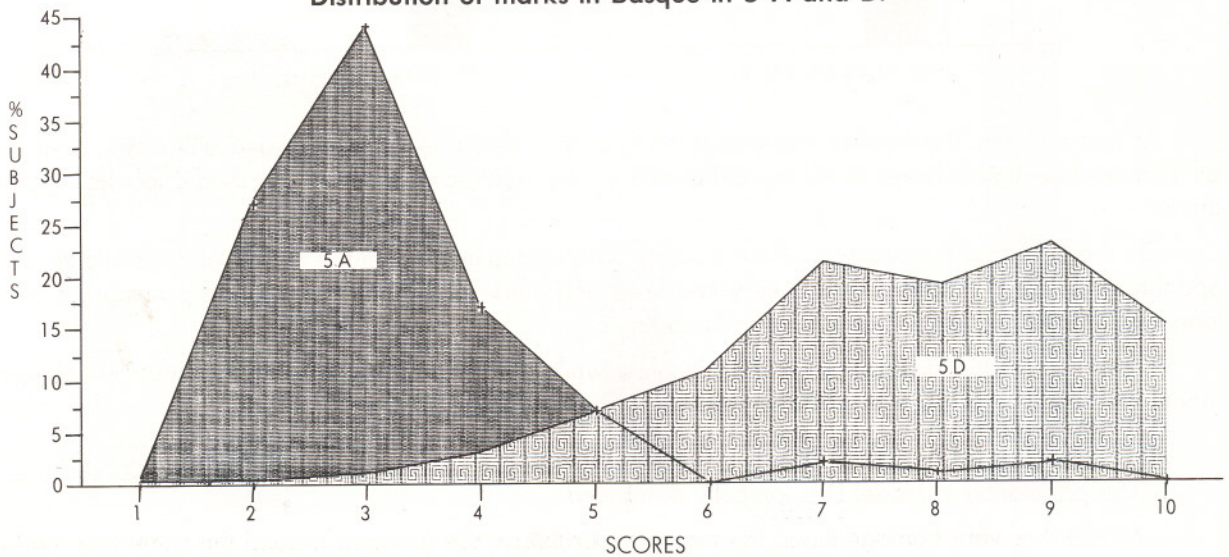


Fig. 5
 Distribution of marks in Spanish in 2 A, B and D.

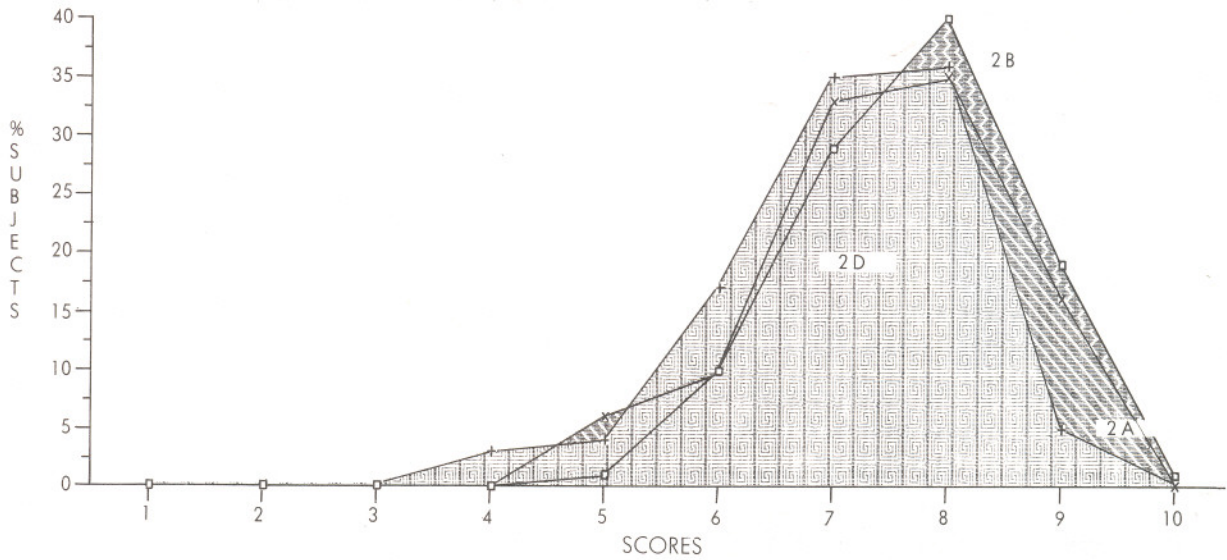
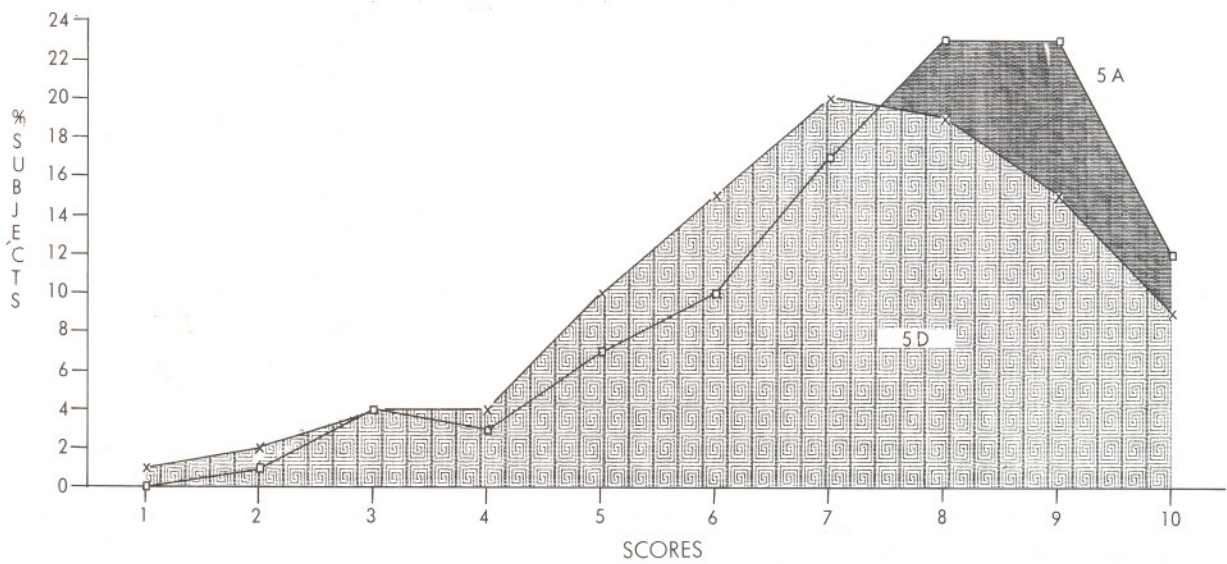


Fig. 6
 Distribution of marks in Spanish in 5 A and D.



5.- MODEL D

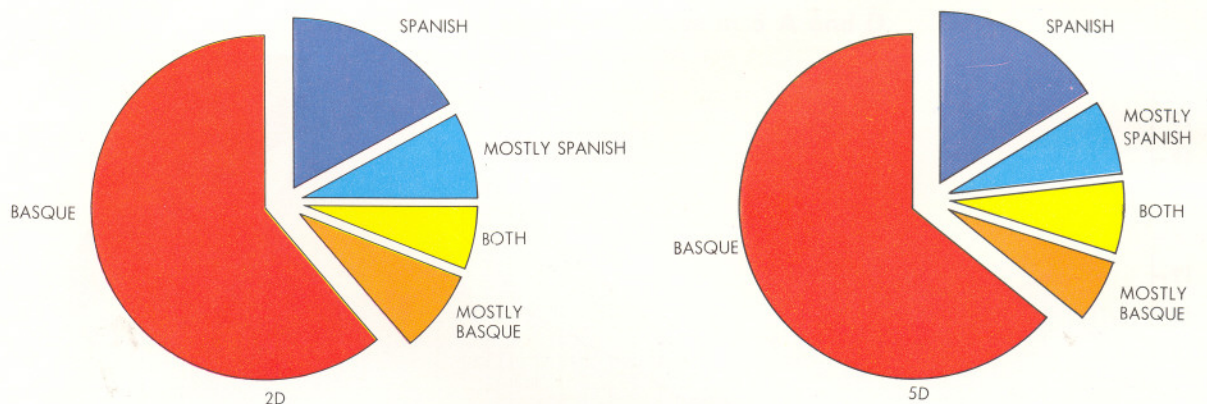
5.1. DESCRIPTIVE DATA

In model D, teaching is carried out in Basque while Spanish is taught as just one more subject. Other data have been collected from the socio-linguistic survey which can help to complete the idea of this model. For example:

- Model D does not only cover the Basque-speaking zones but can be found well-established in the five socio-linguistic zones differentiated in the study.
- The majority of the pupils' parents in Model D are Basque-speaking: approximately 70% of the mothers can speak Basque; and 60% of the fathers.
- With regard to the type of centre the majority of them are ikastolas. However, this model is expanding to some private and especially public schools, as the percentage of this type of school with model D is greater in 2nd than in 5th year of BGE.
- Roughly 60% of the parents always speak Basque to their children.

Fig. 7

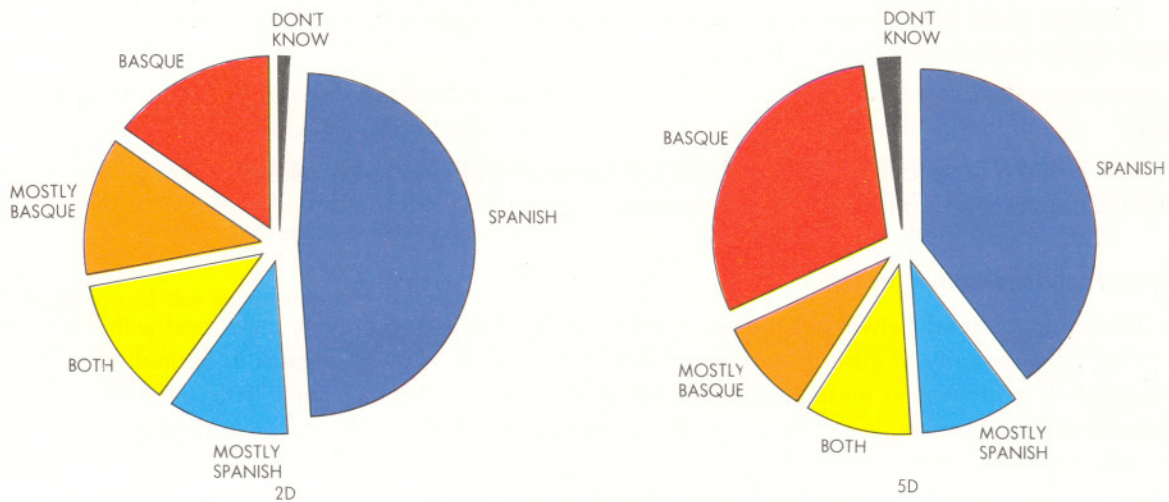
Language used by mother with child



- In contrast to this, when the parents speak among themselves, the percentage does not reach 40% in 5th year (even if we add together the percentages of those who always or nearly always speak in Basque) and is even less in 2nd year -30%-. The parents who always or nearly always speak in Spanish are 50% in 5th year and 60% in 2nd year.

Fig. 8

Language used between parents



– More than one variable seems to confirm that 5th form pupils are somewhat more Basque speaking than the 2nd form ones.

– On average, Basque speaking pupils are relatively numerous in the classrooms. In the majority of cases more than half the children in the classroom learnt how to speak Basque as babies. And so the majority of parents who send their children to Basque schools are Basque-speaking, except for those belonging to the most Spanish speaking socio-linguistic zone (zone 1). The children from the other zones come from fairly Basque family environments. In any case it is impossible to establish a clear order: for example, pupils from zones 3 and 4 are very Basque, in spite of the fact that these are zones with not such a high Basque speaking percentage.

– Roughly 60% of the children always or almost always speak in Basque, both during playtime as well as with friends.

– By contrast, approximately 20-25% always or almost always speak in Spanish. When relating with neighbourhood friends, the use of Basque drops to 40% and Spanish rises to 45%.

– Only a few watch Basque Television exclusively. But 71% of 2nd year pupils and 85% of 5th year pupils watch it regularly.

– The children's attitudes towards Basque are enormously positive. They are in favour of it.

– However, there is no unanimity with regard to Spanish. A considerable number of pupils show a positive attitude, another large group a negative attitude and a third group uncertainty. 2nd form pupils have a more negative attitude than those of 5th form, perhaps because they haven't yet completely mastered this language.

5.2. INFLUENCE OF FACTORS IN 2 D.

As can be seen from the total scores (in Figure 3) one could say that the 2nd form BGE population has attained a normal level of homogeneity. We can further affirm that on average they are very fluent

in Basque. Their total marks are between 5 and 10, the same as for the Spanish speaking pupils in their language.

By means of a factor analysis we have analysed what characteristics and variables are best related to the scores.

The data given below, therefore, will help to explain the slight differences that exist in this group with respect to the level of knowledge of Basque.

1. I.Q.

Few children have a low I.Q., but those are the ones that tend to be related to low scores. By way of contrast, normal or high I.Q.'s relate to relatively high scores.

2. Family language environment

The language used between members of the family and that used in early childhood with the parents coincides in the majority of cases. To always speak in Basque or to always speak in Spanish are the most representative modalities in these variables. Logically, those who speak mainly in Spanish and more so those who always speak it, were those with the worst scores in Basque; the opposite naturally occurs with those who speak Basque.

3. School performance

The fact is that those who have a better level of Basque are those who show a good performance. In contrast, those with only a mediocre or low performance generally obtain low scores.

4. Language used with schoolmates

Those who always speak in Spanish have a low level of Basque, and those who almost always speak in Basque have better scores.

5. Attitude towards the languages

All the children in this model and year have a positive attitude towards Basque. In any case, those with the most positive attitude generally obtain better marks. As far as attitudes to Spanish are concerned, there is a considerable dispersion. We can comment that those who get the best scores in Basque are those with the worst attitude towards Spanish, and viceversa.

5.3. INFLUENCE OF FACTORS IN 5 D

It can be seen that the scores of 5th form BGE pupils, model D, have a normal distribution; more or less from 4 to 10 points (see table 4) similar to the distribution of Spanish-speaking pupils in their own language. On an average, we can maintain that they know Basque well.

1. Personal aptitudes

School performance clearly influences the level of Basque measured. Good performers obtain high marks, while weaker performers tend to lower scores.

Another variable which seems to be closely linked to the above is I.Q. Its influence also seems to be quite marked and to have a similar effect to the school performance variable.

2. Family language environment

The language spoken with parents during the early years of life and the language used daily in the family are two highly influential factors; especially if that language used is always Basque or always Spanish. High scores are obtained in the first case while the opposite occurs with the latter.

3. Classroom language environment

The percentage of Basque-speaking pupils in the classroom is important. In «very Basque-speaking» classrooms (over 60% Basque-speaking pupils), as could be expected, better results are obtained. The same occurs with those pupils who have a literate Basque-speaking teacher or one who has a qualification in Basque. The language used with schoolmates can also be included in this section. Those who always use Spanish have a much lower level. The highest level corresponds to those who use mostly Basque.

4. Language of the environment

Those who live in an almost completely Spanish-speaking socio-linguistic zone (less than 10% of Basque-speakers), are undoubtedly in a worse position with respect to the level of Basque. In the Basque-speaking zones however, no logical order can be discerned (the best position corresponds to zone 4), as there are sufficient Basque origin pupils in all of them. (See page 21: «On average»)

6.- MODEL A

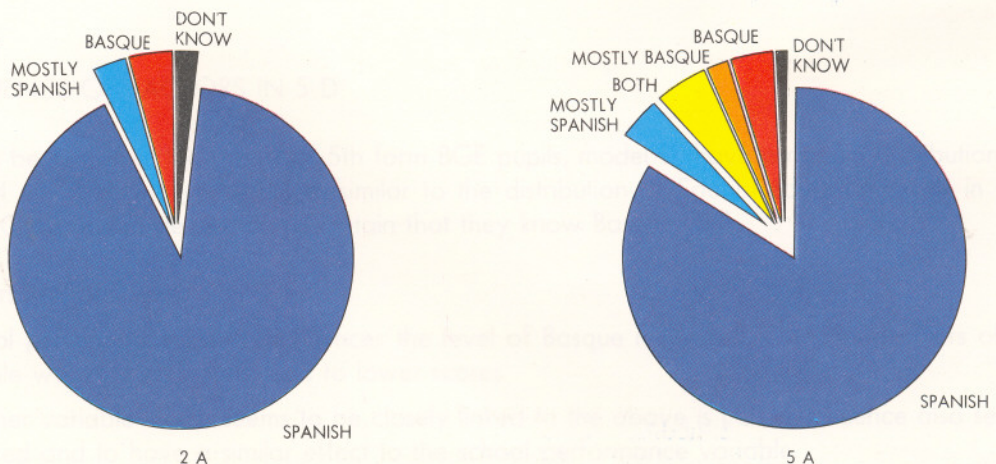
6.1. DESCRIPTIVE DATA

As is well known, teaching is carried out in Spanish in Model A. Basque is just another subject.

- Model A is concentrated in the Spanish-speaking zones (especially zones 1 and 2).
- It is frequently situated in large towns of over 50.000 inhabitants.
- The majority of schools are very Spanish-speaking and model A is predominant in them.
- With regard to the type of centre, all are public or private; there are no ikastolas.
- Despite the fact that there are some Basque teachers in those schools, the rest of the staff are completely Spanish-speaking or are in the process of learning Basque. More than half have been teaching for over 10 years.
- Roughly half of the parents were born outside the Basque Country. The majority of parents (80-90%) do not even understand Basque. 85-95% speak only Spanish to their children.

Fig. 9

Language used by the mother with her children



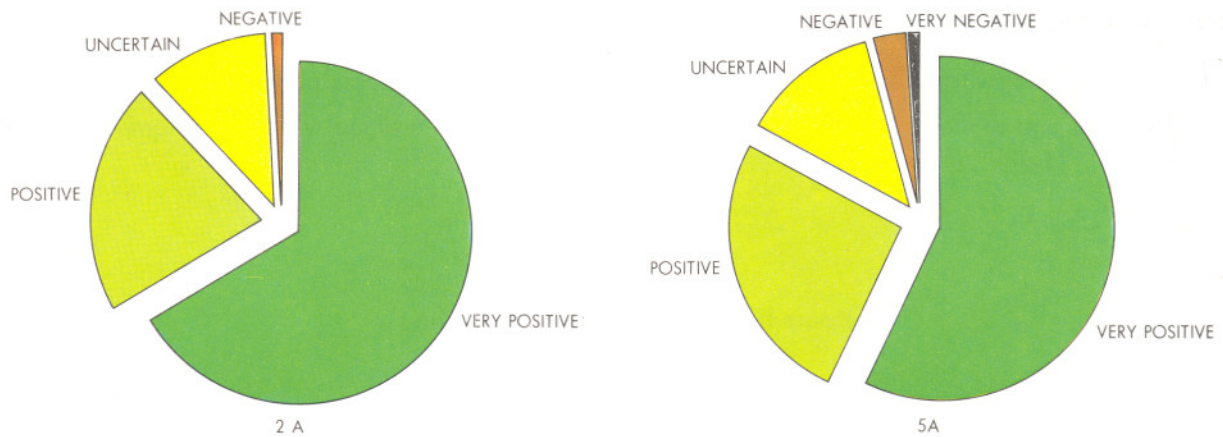
– Almost all the pupils in model A speak in Spanish to schoolmates or neighbourhood friends; 93% in 5th form and 99% in 2nd form.

– They sometimes watch ETB (the Basque TV channel), although the majority only very occasionally. (It should be taken into account that in 1984, when this survey was made, ETB had only just started operating).

– There is a very positive attitude towards Basque. There is almost no one with a negative attitude.

Fig. 10

Children's attitudes towards Basque



6.2. INFLUENCE OF FACTORS ON 2 A

76% of pupils are grouped around scores of 1, 2 and 3 in Basque. The only test that shows a normal distribution is Basque Oral Comprehension. In general, the other sub-tests in 5 A. can be found within those limits; they can understand simple sentences and express (orally or in written form) odd words or a very simple sentence.

The tests used to measure the level of language impose certain limitations. Model A appears as a group situated on the lower limit. The majority of the tests are too difficult. There are enormous differences existing with respect to model D (upper limit).

One should always take into account that we are faced with two different phenomena:

Almost all 5 A students, like those in 2 A, are in a similar situation regarding the variables examined. These hardly show any influence.

But, on the other hand, 5% of pupils are Basque-speaking. Despite the fact that this is a marginal group, its level of Basque is much higher and that is the only difference that can be detected in the variables studied.

What is the difference between these Basque-speaking pupils and the rest of the pupils in 5 A?

Undoubtedly, the difference lies in the following groups of influential variables:

1. Family language environment.

The more Basque is spoken, the higher the score obtained on the test.

The most important variable is the language used among siblings: the more Basque is used, the better the level. The more Spanish is used, the lower the level in Basque, as is to be expected.

The language used with the mother in the early years has also proved to be influential.

2. Neighbourhood language environment.

An important variable is the language used with neighbourhood friends. The same occurs with the language used with adults in the neighbourhood or village. The more Basque is spoken, the better the results and viceversa.

In spite of all this, it is clear that the abovementioned variables hardly make a distinction between the Spanish-speaking pupils.

7.- MODEL B.

7.1. DESCRIPTIVE DATA

This is the newest model. Both Basque and Spanish are used for imparting education.

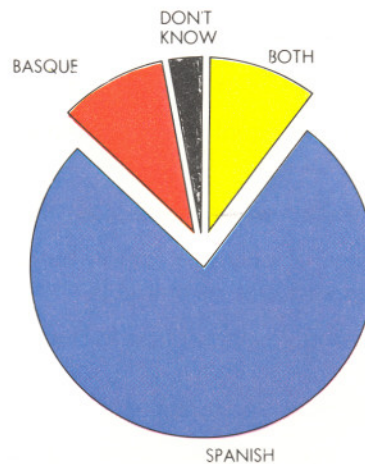
Model B is quite widespread over all the socio-linguistic zones, except for zone 5.

There are model B classrooms in all types of centres (ikastolas, public and private schools).

Mathematics is mainly taught in Spanish. Basque is used more in Social Sciences and Experiences.

Fig. 11

Language used to teach Mathematics



With regard to complementary material, Spanish is used mainly for written texts and Basque for audiovisual methods.

There is a positive attitude towards Basque, better than in Model A, but not as good as in model D. There is also a good attitude towards Spanish.

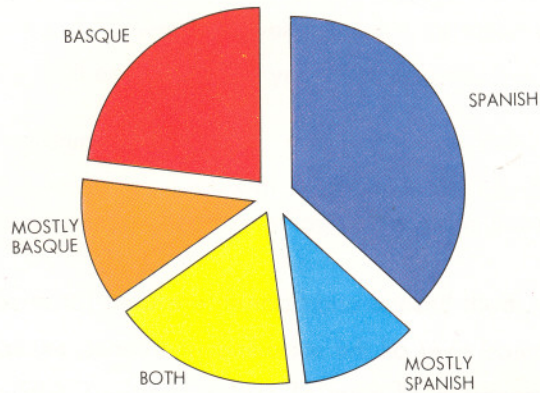
Approximately half of the parents were born outside the Basque Country, and 86% do not even understand Basque. It is therefore very similar to model A in this respect.

The language used in the early years, for 85% of the survey, was Spanish.

Forty eight percent always or almost always speak Spanish with the teacher outside class. Only 35% always or almost always speak Basque. The others use both.

Fig. 12

Language used with teacher outside the classroom



Between children too mainly Spanish is used (80-90%).

More than half rarely watch the Basque TV channel, ETB.

7.2. 2 B - INFLUENCE OF FACTORS

With regard to marks, 38% had around 1-2-3 points, on the same level as those of model A.

There is an intermediate level of 38% with 4-5-6 points.

The remaining 24% attained a score equal to that of model D subjects with 7-8-9 points. (See figure 3.)

What is the reason for these marked differences?

We cannot speak of the influence of only one factor, but it is clear that we are faced -as far as the results are concerned- with two or three types of model B.

Below are the most important variables in relation to the results of this model.

1. Family and neighbourhood language environment.

The variables most strongly related with high scores are the language used in the family, in the neighbourhood and during the child's early years. If Basque is the family language this alone guarantees a high score.

These variables have a greater influence than others such as teachers, school type, ... etc. However, the majority of model B subjects did not have Basque as a home language.

If we leave the above variables to one side we find ourselves with others which relate to the different types of model B.

These secondary variables are centred on the school.

2. School language environment.

Language used with the teacher outside class. Those who always speak Basque with the teacher obtain better scores.

It would appear that the language used in relations with the teacher reflects the degree of «Basqueness» of the school.

As regards the classroom, the language used to teach mathematics is of great importance.

The language of written reference work is also important.

3. School Characteristics.

There are considerable differences in results according to the type of school (public, private or ikastola) and its language make-up.

In this sense and on average, the highest scores were obtained in ikastolas and the lowest in public schools.

4. Others

Individual variables also show a clear relation to scores, as in the case of the intelligence quotient and school performance. However, they are not as important as the others with regard to influence.

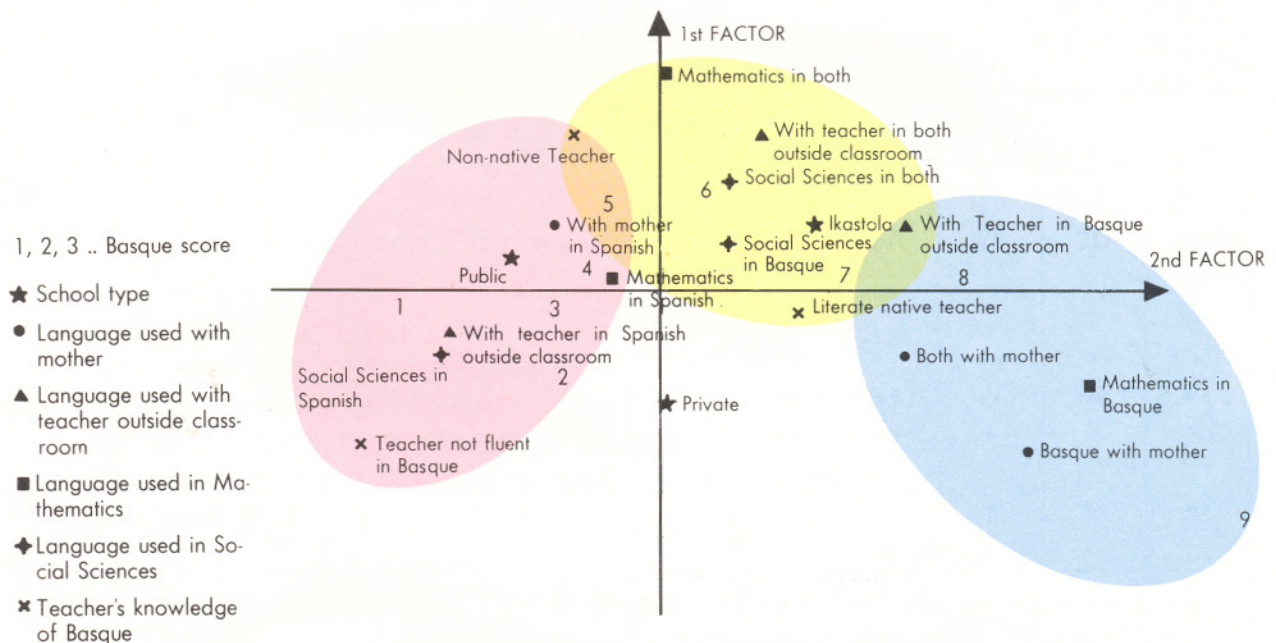
7.3. MULTIPLE CORRESPONDENCE ANALYSIS

In accordance with the above, one can distinguish various B models. The most important features of these «submodels» can be described with the help of factor analysis (multiple correspondences).(See fig. 13.) Each score or mark has some variables projected around it, indicating a «link» between them.

Globally, the highest scores (8 and especially 9) are linked with Basque as a family and neighbourhood language. But only 4% of the pupils find themselves in this position. These children are similar to those of model D and generally attend ikastolas.

Fig. 13

Analysis of multiple correspondences. 2 B



The intermediate scores, 6-7-8, also occur mainly in ikastolas. They seem to indicate different types of organisation within the ikastolas.

The language used with the teacher outside class and that used to teach Mathematics and Social Sciences are related with scores of 6, 7 and 8. When all is said and done, this means the time assigned to Basque. The more time dedicated to Basque, the higher the scores.

If we go to the other extreme, one can observe that scores 1, 2, 3, 4 and perhaps 5 are primarily related to public schools. From 3 downwards, the scores are the same as in model A. It is possible to find all kinds of situations among the private schools: they are very heterogeneous with regard to results in Basque.

If we sum up the factors of greatest influence in this group, we find: on one hand, Spanish as a family and neighbourhood language; on the other, that the language relationship with the teacher outside the classroom is in Spanish; and within the school, that mathematics and experience are only taught in Spanish.

To a lesser degree, scores are also related to the teacher's (i.e. class tutor) training in Basque. If the teacher is a literate native speaker, then the higher scores predominate. The non-native teacher who has learnt the language as an adult falls into second place and finally there are those who are not very fluent in Basque.

8.- SUMMARY

8.1. IMPORTANCE OF THE GROUPS OF VARIABLES

In the two tables below, the influence of the different groups of variables in the various school years and models is clearly shown.

The influence is represented by asterisks. In each group, the most important set of variables is shown by two asterisks.

However, in order to interpret these tables, it is necessary to take group by group explanations given above into account, where the meaning of the differences is expressed more clearly.

With regard to Basque, in general, it is obvious that the variables linked to family language environment as well as those which refer to the neighbourhood language environment are the ones with most influence on all years and models. The fact of being born into a Basque-speaking family and in a zone with a substantial Basque presence creates an important difference by itself, especially in models A and B. By contrast, in model D, the most important role corresponds to the child's personal aptitudes, as this very model gives the opportunity to overcome the language conditioning factors of birth.

The apparent lack of influence of the school and personal aptitudes in model A is also significant.

The influence of the school language environment appears in model D, and especially in model B: the key to this lies in the Basqueness of the school and classroom; that is, in the importance and position given to Basque in these spheres.

INFLUENCE OF THE SET OF VARIABLES

** Main influence

* Considerable influence

BASQUE

	2A	5A	2B	2D	5D
1.- SCHOOL CHARACTERISTICS			*		
2.- SCHOOL LANGUAGE ENVIRONMENT			**	*	*
3.- FAMILY LANGUAGE ENVIRONMENT	**	**	**	**	**
4.- NEIGHBOURHOOD LANGUAGE ENVIRONMENT	**	**	*		*
5.- ATTITUDE TOWARDS SPANISH & BASQUE					
6.- PERSONAL APTITUDES			*	**	**

Table 1

SPANISH

	2A	5A	2B	2D	5D
1.- SCHOOL CHARACTERISTICS				*	
2.- SCHOOL LANGUAGE ENVIRONMENT				**	*
3.- FAMILY LANGUAGE ENVIRONMENT				**	*
4.- NEIGHBOURHOOD LANGUAGE ENVIRONMENT	*		*	**	*
5.- ATTITUDE TOWARDS SPANISH & BASQUE		*			
6.- PERSONAL APTITUDES	**	**	**	*	**

Table 2

In the set of variables that influence the level of Spanish, there is undoubtedly a different distribution, such as that which corresponds to a standardised language and for that very reason provides an interesting comparison with the distribution corresponding to Basque.

The child's personal aptitudes, that is, school performance and I.Q. play an important role especially in 5th year BGE (as occurs with Basque in model D).

To a lesser degree, the variables included in the neighbourhood language environment set have some influence, and the family language environment ones less so, especially in model D.

In any case, with regard to the Spanish language the differences between Basque-speaking and Spanish-speaking pupils are not very important, as for this age (10-11 years old) we can say without risk of error that practically everyone is Spanish speaking to a substantial extent.

Finally, certain important variables cannot be omitted when examining the total population and which were not integrated into the analysis by groups: the child's age and the model of education.

The first factor has as much influence in the process of learning Basque as it does in Spanish. There is no doubt that 10 years olds know more than 7 year olds.

The model also influences both languages; decisively in the case of Basque. Any child in any model knows sufficient Spanish; but there are huge differences in Basque.