

The Basque Educational System: from the lack of data to Diagnostic Assessment

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The context

When we talk about Educational Assessment, it is sometimes associated with “control”. In this sense, the Basque Education System spent its life since taking on its competences in Education in 1980, almost “without control”, as the System did not start to be externally assessed until 2001 with the creation of the ISEI-IVEI. However, in Spain, the first assessment of the Educational System, in which the Basque Country participated, dates back to 1995.

Educational system assessment representing a control is also somewhat debatable. Moreover, if the educational agents do not work in the same direction. It is not even clear that this is essential for obtaining results. It depends on the system. There are “*paradoxical*” education systems like the Finnish one, where they were about to introduce more assessment (external assessments or inspections virtually does not exist) just when they realised that they were the best in the world in the PISA study, without even trying. However, it is also true that systems like the Alberta and Hong Kong systems (different from each other at the same time) reach the same result from opposite directions, in other words: assessment with consequences, clear objectives and accountability.

The Basque Country is one of the communities with Basque Culture in Spain, as are Navarre and the French Basque Country (that together with Bearne forms the Pyrénées-Atlantiques Department in France).

The Basque language or Euskera is spoken in all of these territories, a pre-Indo-European language unrelated to any of the families of languages existing nowadays in Europe which is currently in a difficult situation and a minority language in its own territory. That is why its incorporation in the educational system is so important.

The Autonomous Communities have authority on Education in Spain, and those with their own language, like the Basque Country whose own language is Basque, decide 45% of the curriculum. We also have our own financing, a historic right that only the Basque Country and Navarre have.

Educational system assessment

Our Educational System has traditionally been centred on input, in other words the curriculum, the prescribed contents that have to be taught. Many of the discussions, even up to very recently, were focused on what should be taught. Some people see the curriculum as the perfect tool for the own cultural standardisation of state-nations, the introduction of all types of values, etc.: dictating what should be taught to each and every pupil in all the schools. It is a role (the use of the school for linguistic, cultural and ideological standardisation) for the school that I do not believe in and which does not usually work although it is preferred by some political parties.

Our concern for output is more recent, and we are just starting to discover it.

The lack of control (in assessment) in the System has apparently not bothered us too much until now. There is no tradition of focusing on the results in my country. The distribution of resources is not carried out knowing the pupils' results and this is not a criterion for this distribution. Decision making is not linked to the results of the educational centres or how we fulfil our educational mission seeing what the pupils are capable of doing. The concern for what the pupils have really learned is recent, has gradually arisen and is not very widespread in our system yet. However, we are about to make a decisive step forward.

Until the System Assessment started, we did not have any data on what the pupils were really learning. The decisions on grade promotion and graduation in Compulsory Education are taken by each teacher or group of teachers from each educational centre in the Basque Country. The data on failure rates (not graduated in the 4th cycle of Compulsory Secondary Education) are a mere compilation of those decisions, decisions made with local references as there is no common or external examination on all of the pupils until sit the University entrance examination.

The system assessment attempt to, in our case, inform on decision making, diagnose the strengths and weaknesses of the system and improve the results of the pupils as far as possible with this type of assessments.

The Basque Assessment and Research Institute (ISEI-IVEI) was created in 2001. From this moment on it went for several types of system assessment: international like PISA and TIMSS, Spanish and its own (see: <http://www.isei-ivei.net>). Our own assessment have been centred on Primary, Compulsory Secondary Education and on very important aspects in a bilingual system like ours: What language level are our pupils capable of reaching with regards to the Common European Framework of Reference for Languages (CEFR)? (Council of Europe, 2001).

http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

Interpreting the data

Our educational system's profile can be perfectly defined with all types of indicators that are even comparable on a European level:

- We probably have one of the highest schooling rates in Infant Education in the world: 90% of 2 year olds are in school and 100% of the 3 year olds and over.

- 80% of our pupils finish Post-Compulsory Secondary Education, 3 per cent over the European average.
- The rate of 18 to 23 year olds who leave schooling (early drop-out) is lower than the European average.
- Our expenditure per pupil in education is the highest in Spain.
- Our graduate rate in Science and Technology is the highest in Europe.

However, these indicators should be interpreted in light of the pupil performance data in the different studies to be able to establish if it is a comparatively efficient system or not and in which aspects.

PISA 2003 and 2006, for example, studies we take part in with our own comparable and representative sample. The results returned by PISA (OECD. 2007. PISA 2006 Vol. 2, Page 247-310) are quite clear on many aspects, the image of our system, in comparison to the OECD has an eloquent profile:

Table 1: Countries at the same level as the Basque Country in Science

COUNTRY	SCIENCE SCORE PISA 2006
OECD	500
Poland	498
Denmark	496
France	495
BASQUE COUNTRY	495
Croatia	493
Iceland	491
Latvia	489
USA	489
Lithuania	489
SPAIN	488
Slovak Rep.	488
Norway	486

- Mean results, compared to the OECD, in science (improvement in 2006), mathematics and reading (decline in 2006). We obtained the same score as France for example in Science and Reading and higher than France in Mathematics.

- High equity, expressed in a low difference between the worst and best pupils. Gerard F.M. (2001) defined: *“Le concept d’équité est lié à la justice sociale: un système éducatif est d’autant plus équitable qu’il réduit les disparités entre les plus forts et les plus faibles, entre les groupes favorisés et défavorisés.”* Our difference in score between the 5 and 95 percentile is lower than Finland's, for example.
- Less percentage of pupils than the OCDE in the lowest performance levels.
- A social, economic and cultural status index (ISEC) almost at the OCDE average (-0.04).
- Higher efficiency than the OCDE average with pupils with a low index of socio-economic and cultural status (ISEC).

However, it also produces aspects with a lot of room for improvement:

- Lower percentage of pupils in excellence levels than the OCDE in all subjects.
- A result in science below that expected for our ISEC.
- Less efficiency than our neighbouring systems bearing in mind our expenditure per pupil or our per capita GDP.
- Less efficiency than the OCDE average with pupils with a high index of social, economic and cultural status.

It is important to know the profile of our educational system. Although it changes from study to study, there is a common base that is repeated. How difficult it is to undertake efficient educational policy changes based on these data.

We think that it is necessary to underline the role of international assessments such as PISA, increasingly influential in educational policy decisions around the world.

National and state assessments

As I have already mentioned, the Basque Country has been taking part in state (Spanish) assessments since 1995, which were at first interesting as they overcame some myths. The first was the widespread belief that on being a bilingual country and having a bilingual educational system our results would be worse. This myth was proven to be false with the first comparisons with Spain: our results were comparatively good. However, these state assessments soon lost interest, as the publication of the results between Autonomous Communities (17 in Spain) were banned and these assessments became rather meaningless. Many communities have preferred to take part in the OECD-PISA international assessment with their own sample to know their real compared performance.

Our own national assessments have been based on random samples from schools and pupils. In all cases, the samples are stratified by public or private systems (50% of Basque pupils study in private centres subsidised by state funds) and linguistic model (there are three models, two with immersion in the Basque language and one in Spanish with the Basque language as a subject). So our national assessments were System-Assessment without results by school or student.

In general, the results give a reasonably stable image of our system: the state-subsidised private centres obtain better results because their pupils belong to higher socio-economic statuses. When the effect of the socio-economic and cultural variable is taken away, the

results are almost always the same as the state system's results. The results from the different linguistic models are also influenced by this socio-economic and cultural variable. The language in which the test is carried out also has an effect: in many cases, the bilingual pupils do not reach a similar level at school in the second language as the native speakers and are therefore more efficient when they carry out the tests in their own language, Spanish in the majority of cases.

The assessments of European Framework levels B1 and B2 in the Basque language have been particularly important as they have highlighted that the pupils' command of this language is not as high as expected. In some, this command clearly fails the objectives established by law: that all the pupils learn Spanish but some do not learn enough Euskera or Basque to speak this official language fluently.

These assessments have triggered a curricular reform and reform of the laws that defined the linguistic policy in the Educational System. This reform is still ongoing.

Limitations of this type of assessment

There are many countries where, in addition to taking part in international assessments that allow them to compare themselves, they carry out national studies based on samples, as we do also. France has the "*L'état de l'École*", other countries, like Spain, carry out assessments by levels, Primary, Secondary...

However, as we will see, these **sample based** system assessments have their limitations:

Both the international and state assessments and our own assessments are based on a pupil sample. No matter how representative and stratified his sample may be (as is our case with the linguistic modes and public or state character of the schools) to go into the results in depth, the data obtained are general. They are adequate for providing a global image of the system, detecting strengths and weaknesses and also reacting generally: with new regulations, training or programmes aimed at strengthening certain aspects...

I would especially like to mention the case of the assessments aimed at educational policy that have a significant comparative value but also use interesting indexes such as the socio-economic and cultural index, the equity index, and other indexes related to motivation aspects.

The data from the sample assessments allow for knowing which Basque educational centres with the same type of pupils, the same socio-economic status for example, obtain very different results, but it is impossible to know why. The sample does not allow for an analysis by schools and does not allow for analysing all the schools. The aforementioned stratum has to be limited.

Those in charge of or deciding educational policies may have the false idea that changing the structure, timetables, regulations with laws, decrees, orders, etc., even promoting general innovation programmes, will suffice to maintain the strengths of a system and solve its weaknesses. However, the major figures in any educational system, the pupils, the teachers,

the parents and the schools (management teams, staff) do not really feel involved when they read (the few that do) this kind of assessment report.

In addition, I believe that the real change is the one the educational centres can carry out, knowing their situation and problems, starting up their solutions with the necessary resources, knowing their data and taking responsibility for them: taking responsibility.

When the results of large assessments such as PISA, TIMSS, PIRLS are published or the ones carried out by each country with an impact in the media, we witness a spectacle in the Basque Country and many other places that usually includes the following ingredients: catastrophism (educational disaster, at the bottom of the pile in results, the pupils do not know, they fail...), making the minister of the moment responsible (although they have only headed the ministry for two years) and the laws, decrees, etc., enacted by the minister. The major figures are usually the press, the opposition parties, the teachers and ministry unions. Very often, we get the impression that in these media debates the parents or the minister of education is to blame for everything and they are only good for making political criticism in a country like ours where there is no consensus on education. However, this does not seem logical.

Sample assessments are only as important as you want them to be. Another type of assessment is necessary for other objectives.

One step further: curriculum assessments that allow for accountability

Assessing all the pupils from several levels, either to the achievement of standards or to check curriculum compliance is not at all new in many countries.

As an example, the following are some cases I have information on: Quebec, Alberta, the majority of the USA, Hong Kong, Sweden or Chile.

An example is the SIMCE in Chile, who we are indebted to in our training. They have been testing all the pupils for 20 years: 500,000 pupils simultaneously every year.

As they have stated “The SIMCE assesses if the pupils have reached the Fundamental Objectives and Minimum Compulsory Contents in the national curriculum.” (<http://www.simce.cl/index.php?id=199>)

On the use of the assessment, they say: (<http://www.simce.cl/index.php?id=286>)

“The information offered from the SIMCE is used by the Ministry of Education to:

- Monitor the quality and equity of the education from the perspective of the subjects the pupils handle in different curricular areas. The Ministry of Education can know to what extent the pupils are achieving the curricular objectives and if there has been progress in the achievement of these objectives over the years. They can also monitor to what extent different pupil groups (e.g. pupils from different socio-economic status) are achieving these objectives.
- Identify schools that systematically present low results in the SIMCE and require external support to improve the performance of their pupils.
- Assess the effectiveness of the intervention programmes whose aim is to improve the performance of the pupils in the different curricular areas.

- Give incentives to the schools that maintain high scores or those that systematically improve.
- Learn from the experience of countries who reach high quality and equity standards in education.
- Know the main features of the school and family environment in which Chilean pupils and pupils from other countries around the world study. This context information can be very valuable to know our results better".

Curriculum assessments are linked to accountability in education and to transparency.

The *Alberta Teachers' Association* defined accountability as "Accountability is best defined as the process through which individuals or organizations in the education system take responsibility for their actions and report on these actions to those who are entitled to the information. Accountability also implies an obligation to find ways to improve the capacity and performance of those responsible, not just measure the achievement of outcomes (Canadian Teachers' Federation 2004c, 1). (<http://www.teachers.ab.ca/NR/rdonlyres/F07B25F6-23C7-4964-95D1-AB18326C7580/0/AccountabilityDiscussionPaper.pdf>)

Accountability therefore implies taking responsibility for and also being committed to improving beyond just measuring results. It implies consequences after the assessment.

Nevertheless, curriculum assessments are also linked to:

- The unfair publication of centre rankings. In the name of transparency, centre rankings are compared in which the type of pupils is totally different. A school with socially underprivileged pupils cannot be directly compared to others with social elites.

One of the best educational specialists in the USA, Andy Porter, wrote: (Porter A., Polikoff M. 2007) "NCLB school accountability is based on levels of student achievement—specifically, the proportion of students labeled "proficient." But with the requirement of yearly testing in grades 3-8, many states have attempted to estimate school value-added to student achievement. This measure of change is fundamentally different from the measure of level currently used to determine AYP. Each indicator has its strengths and weaknesses. Proponents of level argue that equity is only served when all students reach high levels of achievement; gains in achievement are not acceptable if levels of achievement remain low. Proponents of value-added argue that accountability for levels of achievement is unfair to schools with large numbers of low-achieving students, as it holds them accountable for all the learning and inequity that occurred before they entered school."

Value-Added

Fortunately, there are several states in the USA, the DFES in the United Kingdom, etc., that are progressing in the calculation of the **Value-added** of schools and teachers, a ranking that is a lot fairer. (<http://www.shearonforschools.com/TVAAS.html>),

Hershberg et al. define the assessment of Value-added (2004):

http://www.cgp.upenn.edu/pdf/revelations_of_value_added.pdf

"Value-added assessment provides a new way to measure teaching and learning. Value-added uses the annual test scores that are now being collected for students and analyses them to

reveal the progress students are making each year. In its focus on growth rather than solely on levels of absolute achievement, value-added broadens our understanding of the contribution instruction makes to student learning. While family income remains the best predictor of absolute achievement, achievement, good instruction is 10 to 20 times more powerful in predicting student growth. By following individual students over time, value-added accounts for student background characteristics over which schools have no control and that tend to bias test results. And in what is perhaps its most unique contribution, value added enables educators and the public to identify not only the progress made by students but also the extent to which individual teachers, schools and districts have contributed to it.”

The state of Tennessee published a ranking of the schools with value-added (http://www.education-consumers.com/ecf_vaaa_2007.php).

However, the calculation of the value-added is not easy and affordable for everyone. Porter (Porter A. 2005) commented that there is not a perfect way to measure the value-added: “Every way of doing it carries some assumptions, and the assumptions won't be exactly right.” But it is the future for us I think.

A new opportunity: diagnostic assessment

From 2009, the Basque Country will assess the acquisition of the Key Objectives once a year in all the pupils in the 4th year of Primary Education and the 2nd year of Compulsory Secondary Education.

Article 36 of the Basque Curriculum Decree establishes that Diagnostic Assessment “Will not have academic but rather formative and guidance effects for the centres and information effects for the families and the educational community as a whole”.

Key Competences

The OCDE in its DeSeCo project (OECD 2005, page 4) defined the Competences as “A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilising psychosocial resources (including skills and attitudes) in a particular context”.

Focusing on assessing what the pupils are capable of doing and not solely on the curriculum represents a qualitative step on its own.

On its part, the European Commission defines the Key Competences as (European Commission, 2004, page 6): **“Key competences represent a transferable, multifunctional package of knowledge, skills and attitudes that all individuals need for personal fulfilment and development, inclusion and employment. These should have been developed by the end of compulsory schooling or training, and should act as a foundation for further learning as part of lifelong learning”.**

The Decree 175/2007 describes and defines the Key Competences

(<http://www.euskadi.net/bopv2/datos/2007/11/0706182a.pdf>) :

1. Competency in science, technology and health
2. Competency for learning to learn
3. Mathematical competency

4. Competency in linguistic communication
5. Competency in information treatment and digital competency
6. Social and citizenship competency
7. Competency in humanistic and artistic culture
8. Competency for personal autonomy and initiative

The inclusion in the Competency in linguistic communication of a specific objective to be reached at the end of the Primary and Secondary stages is particularly novel. Pupils should reach the MCER B2 level at the end of Compulsory Secondary education and the B1 level at the end of Primary Education in both the Basque language and Spanish language.

The objective of this diagnostic assessment is therefore to improve the basic competences of the pupils. For this reason, they are carried out two years before the end of the stage and should enable the educational agents to correct the existing problems in time for the pupil to reach the objectives marked by these competences.

The assessment model

As it is a curricular assessment and is carried out in two levels (1st year of Primary education and 2nd year of Secondary Education), it allows for a longitudinal monitoring of the pupils, and also for establishing a complete map of all the system's educational centres and their year-to-year evolution.

The assessment model is very important. There are several countries and Communities that carry out Assessments that we could call diagnostic assessments: France, Andalusia... However, there are at least two assessment models:

1. **Internal with common tests:** given, corrected and interpreted by the teachers, who normally have the results of a sample assessment carried out at the same time by the Administration as a reference.
 - a. Advantages: The job is carried out by the teachers, who do not feel supervised.
 - b. Disadvantages: the results are not comparable from school to school, as there is no controlled application and correction. The tests become public and cannot be repeated, and therefore it is not possible to see if there are any improvements or not.
2. **Standardised external:** given, corrected and interpreted by an external team on schools with tests that are not public.
 - a. Advantages: the results are reliable, comparable and allow for the centres to know their situation with regards to schools with the same socio-economic status, for example. The results can also be compared from year to year. In this way, the distribution of resources is carried out on an objective basis and improvement can be observed longitudinally. They allow for delivering individual reports that offer reliable results to the pupil and their families, which is motivating.
 - b. Disadvantages: they are costly and complicated, some teachers may feel supervised, and if no measures are taken, they may give rise to unfair rankings

(that do not bear in mind the type of pupils or setting) of schools in the press, etc.

The Basque Country has chosen a double model and a global involvement:

1. Send **test models** to the educational centres for them to voluntarily carry out internal assessments.
2. And also **carry out external tests** once a year that provide it with reliable and comparable data on the degree of acquisition of the key competences. Another important characteristic: individual reports will be handed out to locate and personalise problems.
3. Finally, in addition to the ISEI-IVEI, the Inspección Técnica y los Servicios de Apoyo (pedagogical consultants) will also be involved, for each educational centre to establish and carry out an improvement plan.

All this will be carried out bearing in mind that the regulations prohibit making centre rankings and measures will be taken to guarantee this. Each centre will receive its reports and comparisons on socio-economic status. Only the centre itself and the area inspector and consultant will see its results.

The amount of pupils to be assessed each year is relatively small, compared to other countries, but assessing 35,000 pupils a year signifies a big challenge for us.

What competences will be assessed each year? There will be three constants: Mathematical Competency and Competences in Linguistic Communication (Basque and Spanish languages) and one will be changed each year in order to assess the 8 competences. Competency in Scientific culture will be assessed in the first year. The rest will be assessed afterwards.

References

- **Council of Europe. “Common European Framework of Reference for Languages”. 2001. Strasbourg.**
- OECD. “PISA 2006, Vol. 2”. 2007. Paris
- Gerard F.M. «**L'évaluation de la qualité des systèmes de formation**» *Measure et Evaluation en Education*, 2001, vol. 24, nos 2-3, 53-77. Quebec.
- Canadian Teachers' Federation. “Accountability in Education. Background Paper”. 2005. Edmonton. <http://www.teachers.ab.ca/NR/rdonlyres/F07B25F6-23C7-4964-95D1-AB18326C7580/0/AccountabilityDiscussionPaper.pdf>
- Porter A, Polikoff, M. 2007. “NCLB: State Interpretations, Early Effects, and Suggestions for Reauthorization” *Social Policy Report*, vol. XXI, number 4. SRCD
- Porter A, 2005 “Andrew Porter and Value-Added assessment” *Northwest Education*, vol. 10, number 4. <http://www.nwrel.org/nwedu/10-04/expert/>

- Hershberg et Al. "The School Administrator, dec. 2004, p. 10". Philadelphia.
- OECD. "The Definition and Selection of Key Competences. Executive Summary". 2005. Paris
- European Commission. **"KEY COMPETENCES FOR LIFELONG LEARNING A EUROPEAN REFERENCE FRAMEWORK. NOVEMBER 2004. IMPLEMENTATION OF "EDUCATION AND TRAINING 2010" WORK PROGRAMME.** Brussels.
<http://ec.europa.eu/education/policies/2010/doc/basicframe.pdf>