A SUCCESSFUL SCHOOL IMPROVEMENT INTERVENTION AT THE MICRO LEVEL: IS THIS ENOUGH TO ACHIEVE SUSTAINABLE CHANGES IN THE ARGENTINE EDUCATION SYSTEM?

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1. Introduction

For decades the Argentine education system was structured as a centralised pyramid, where decisions were made vertically with great prescription and control. In 1960, signs began to surface indicating that this educational structure did not adapt to new pedagogical trends or to the changing economic conditions of the country (Gvirtz, 2004).

Today¹, compared with other Latin American countries, Argentina's education system reaches a broad population sector. The country's compulsory education requirements are set at nine years of schooling; average school attendance for the general population is currently estimated to be 8.5 years, well above the overall Latin American average of 5.9 years (World Bank, 2003). With respect to degree of coverage, 70% of children and youngsters between the ages of three and twenty-four are served by the formal education system (Oiberman and Arrieta, 2003).

However, Argentina's education system is currently undergoing a profound crisis; the massive increase in school enrolment has not gone hand in hand with either equity or quality for all stakeholders. Thus, today dramatically segmented educational circuits exist, as well as marked gaps in the education given to children from differing social strata. Furthermore, the highly centralised structure of the local system hampers cooperation and networking both between schools as well as amongst different regions. The statement indicating that 'the hierarchical model is at the heart of inequalities in education' (Aguerrondo, 2002) would appear to be correct, given that current models of organisation and distribution of power are still centralised as far as decision-making is concerned, and consequently policies are designed with the 'average' school in mind. Such an approach cannot possibly be suitable or adapt well to the diversity of schools functioning at present.

To further illustrate this point, the non-promotion, repeater and dropout rates are shown below (Charts 1, 2 and 3). These clearly indicate that on top of unsatisfactory quality, the education system has poor retention rates, and does not afford access to higher educational tiers for a significant number of children and young adults.

In summary, the Argentine education system is broad in its coverage but poor in its retention capabilities. Solutions need to be found to overcome this situation, which holds a fate of exclusion for a large number of children and youngsters from the neediest families in the country.

¹ The following diagnosis has been extracted from Gvirtz's paper entitled 'Hacia un sistema educativo justo, democrático y de calidad: construyendo un futuro para la Argentina del siglo XXI' (2004). Translator's note: 'A more just and democratic quality education system: building a future for Argentina in the twenty first century".

During the 1990s, 460,000 youngsters, representing over 7% of the total school-age population, either dropped out of, or even never attended the primary school system. According to DGCyE data, the number of dropouts has steadily increased over the past few years: 2.9% in 2000, 3.1% in 2001 and 3.3% in 2002. Source: SUTEBA, 2003.

If the non-promotion rates are analysed for each of the three schooling tiers, their progressive increase as instruction advances becomes clearly evident, the most remarkable figures being those observed for the Polimodal (secondary) level². The following situation is illustrated in Chart 1:

Chart 1: Non-promotion rate (%) - Country Total.

Level	1996	1998	2001
EGB 1 and 2	6.8	7.14	8.4
EGB 3	14.8	13.3	15.6
POLIMODAL	14.2	14.8	19.7

Source: Oiberman and Arrieta- DINIECE

Likewise, both repeater rates and interannual dropout rates show that many youngsters are excluded from the upper echelons of the educational ladder. Although the proportion of repeaters is greater in EGB 3, the Polimodal level stands out for its high dropout rate, which exceeds its counterparts at the other school levels (Charts 2 and 3).

Chart 2: Repeater Rates (%) - Country Total

Level	1996	1998	2001
EGB 1 and 2	5.8	6.0	6.1
EGB 3	8.9	8.3	7.6
Polimodal	5.6	5.3	4.8

Source: Oiberman and Arrieta- DINIECE

The following structure was adopted by the Argentine education system in 1993, with the enactment of the Federal Law of Education.

Level	Length	Nature
Kindergarten (3 to 5 years old)	3 years	The first two years are optional, the last year is compulsory
EGB (primary school level) 1 (6 to 8 years old)	3 years	Compulsory
EGB (primary school level) 2 (8 to 10 years old)	3 years	Compulsory
EGB (pre-secondary school level) 3 (10 to 12 years old)	3 years	Compulsory
Polimodal (secondary school level) (13 to 15 years old)	3 years	Non-compulsory

Chart 3: Interannual I	Dropout Rate ((%) - Country T	otal
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Level	1996	1998	2001
EGB 1 and 2	2.5	1.9	2.2
EGB 3	12.7	7.6	8.0
Polimodal	15.1	13.4	14.8

Source: Oiberman and Arrieta - DINIECE

The Polimodal level (secondary school) show the highest number of dropouts and the lowest graduation rate - 61% in 1999 -, whereas the EGB graduation rate for the same year amounted to 75.3%.

The **equality** of the system is thus seriously affected: dropout and non-promotion rates affect the poorer sectors: only two out of every ten students in poor sectors either complete or go beyond their secondary studies. In the more privileged sectors, this ratio increases to five of every ten (Judengloben *et al.* -DINIECE, 2003). A critical subgroup can be identified in the 15 to 17 age range. This subgroup is comprised of many youngsters who have dropped out without even having received the basic education required for integration into the lower-end labour market. Furthermore, according to INDEC's national data, 71% of children in Argentina of up to 14 years of age fall below the poverty line.

Llach's survey³ bears proof to the dramatic differences observed both between public schools and private schools— with the most affluent students (i.e., those from the higher socio-economic strata) attending the latter -, and from one public school to another, as a result of the populations served by each institution (Llach, Montoya and Roldán, 1999, see Appendix 1).

As a result, the public education system seems to deliver better educational services to those schools that serve higher income quintiles.

Thus, as pointed out by Braslavsky (1985), diverging quality circuits are created, which in turn determine equally diverging educational achievement levels.

2. PEF: AN INTERVENTION PROGRAMME

Various solutions and intervention proposals for addressing the profound inequality currently facing the Argentine educational system exist: alternative proposals available may be based on meritocracy, compensatory mechanisms and intervention projects per se.

1. Meritocracy: based on this mechanism, talented students are selected from within an underprivileged population, and are supplied grants enabling them to receive better education. This social approach facilitates educational accomplishments amongst the most

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³ 'Educación para todos' (Translator's note: 'Education for all')

talented on an individual basis. However, it does not solve the problem for the remaining students.

- 2. Compensatory mechanisms: these mechanisms involve such things as free lunch services, diners in school, as well as family subsidies, textbook purchases, etc. Unfortunately, such mechanisms are not sufficient to make up for existing differences.
- 3. Intervention Projects: these projects involve direct intervention, and are targeted towards modifying existing conditions and building up capacity at particular schools.

PEF is aligned under this last type of intervention because its members are convinced that it is possible to contribute to the improvement of educational quality and equity as a result of direct intervention in school work modalities.

In 2000, the School of Education at the University of San Andrés became involved in educational quality improvement projects targeting disadvantaged schools. The Schools of the Future Programme (PEF) originated as part of this endeavour. Its purpose is to implement changes against the backdrop of each institution's reality – i.e. at the micro-political level – rather than from the macro-political standpoint. This programme is based on surveys and research that contend that:

- 1. Significant differences in educational quality exist among schools serving similar social sectors, and as a result, academic performance does not depend *solely* on student social or economic extraction⁴.
- 2. Macro-policies do not necessarily produce an impact at the micro level.

At the micro-social level, inequalities observed within educational institutions become even more severe as a result of lack of appropriate intervention. A habit of profound resignation and a culture prone to assigning blame elsewhere, tend to obliterate all chances of intervention. The resulting poverty circuits are difficult to overcome if the school is unable to embrace its role as an agent of change. It is for this reason that the micro-political approach was selected for PEF implementation.

The Schools of the Future Programme was started as an action-research project targeted at schools located in areas of extreme poverty in the northern outskirts of the City of Buenos Aires. The purpose of PEF has been to:

- Diagnose and enhance educational achievement at schools serving populations affected by extreme poverty.
- Create replicable school enhancement tools at both the management and pedagogical level.

The programme considers the school institution per se as a unit of change, and teachers working within it as key players in the innovation process. In order to achieve significant improvements in student learning and academic performance, it is necessary to make change actually happen at the institutions where youngsters are receiving their formal education. The authors consider

lines agree that the quality of education offered by schools is not influenced solely by socio-economic conditions. These authors point out that one highly influential variable is connected to institutional management and teaching methods. Based on this empirical evidence, they show how two schools situated in the same context can produce significantly different educational results. In his paper 'Fifteen Thousand Hours', Peter Mortimore (1998) also describes how schools sharing similar contexts can derive differing educational results both in terms of academic achievement as well as labour market insertion capacity.

⁴ Several researchers (Mortimore, 1998, Stoll and Fink, 1999) have demonstrated that it is possible to enhance quality of education through strategies aimed at introducing improvements in institutional performance and teaching approaches. Several studies along these lines agree that the quality of education offered by schools is not influenced solely by socio-economic conditions. These authors point out

this to be the best manner of producing profound and enduring change, and therefore strive to improve work performed at the particular scholastic institution by regarding it as a unit, and by supplying it with the necessary capabilities and expertise.

The mission for **PEF** has been established since the outset as that of a programme created to enhance quality of education for schools in disadvantaged areas. The programme attempts to trigger a **cultural change** within the schools and reinforces the specific role of schools: **to teach better and more.**

2.1. PEF objectives

Regarding the schools:

- To reduce student failure (i.e. reduce repeater and dropout rates).
- Improve educational achievement among the students (increasing graduation rates and improving quality test results).

Regarding the project:

To raise awareness and increase knowledge across the Argentine educational system
regarding better scholastic achievement strategies that may ensure greater educational
equity, namely through the design, systematisation and dissemination of training
instruments and devices that would generate replication of this positive results at the
largest number of schools possible.

The Schools of the Future Project (PEF) aims to contribute to the improvement of educational quality and equity by rethinking working systems in schools serving students at-risk. It is organised under three dimensions:

- 1. The institutional management dimension
- 2. The pedagogical-didactic dimension
- 3. The community dimension

Change should take place at all three levels simultaneously if substantial improvement in terms of the quality of education these schools provide for their students is to be achieved. Special attention should be paid to the significance of setting the internal conditions, given that pedagogic strategies alone do not ensure 'reculturing'⁵, essential for real and lasting change, once capacity building is fully in place and sustainability is attained.

Currently, PEF is being implemented at four schools in the province of Buenos Aires (See Appendix 2). Furthermore, two additional primary public schools will be included in the programme in 2005.

PEF intervention has been designed to last **three years at each school**. Withdrawal from each school is planned to occur upon conclusion of the direct intervention period, and once capacity building has been accomplished. Institutional transformation is supported by constant adaptation to time frames within different schools, functioning as a 'scaffolding', where withdrawal occurs

Stoll, L. and Fink, D. (1996). Changing our Schools, Linking School Effectiveness to School Improvement. Buckingham: Open University Press.

⁵ Fullan, M. (2001). Leading in a Culture of Change. San Francisco: Josey-Bass.

gradually, taking PEF **school network** implementation readiness into account. The **PEF School Network** has been designed both to provide support and follow-up around institutional processes, and to encourage teamwork and ongoing networking among the schools involved in the programme.

2.2. Impact of PEF involvement

Before analysing some of the achievements attained, it should be noted that for the PEF team the definition of successful school improvement intervention is more than just improvement in test and examination performance, and that there are different ways of understanding what achievement means. Thus, efficient schools only measure results and are not interested in the particular processes through which these results are obtained, whereas effective schools also measure results, but at the beginning and at the end of processes implemented specifically for their improvement, where the concept of added value is essential. PEF corresponds to this type of programme.

For these reasons, the following aspects become essential in an effective school (Leithwood, K., 2001; Podestá, 2002), ('effective working systems' defined as quoted in this context):

- A shared mission, with clear and well-defined objectives
- Team work ethos with high expectations for both teachers and students
- Active and shared leadership, generating commitment and responsibility for results attained
- An information, self-evaluation and planning system that is both consistent and integrated, and projects an objective image based on a real diagnosis.
- An effective communication system that functions both internally and is integrated with the community.
- Teaching and learning strategies that allow students to learn more, in better ways, catering to diversity and optimising the time spent at school
- Active participation in learning processes by parents and by the community at large.

After five years work, slow but significant progress has been obtained. There has been steady improvement in the academic results of pupils, school failure ratios have decreased⁶, the graduation rate has improved⁷ and important advances have taken place in management due to the implementation of self-evaluation processes and efficient, systematic planning.

Furthermore, PEF has enabled identification of a number of actions that may lead to improvements within schools. Such improvements can be observed in terms of the introduction of new school management modalities and the implementation of novel curricular and pedagogical strategies.

Student-related improvements:

- Improvements were observed in academic performance
- Repeater and failure rates decreased

⁶ The percentage of pupils from EGB that did not promote decreased from 7.6% in 2001 to 4.2% in 2003 at the Santo Domingo Savio School. The percentage of pupils that had to take end-of year compensatory exams in order to be promoted in EGB decreased from 19% in 2001 to 15% in 2003.

⁷ The graduation ratio in the San Pedro Claver School increased from 40% to 60% after two years of initiating the programme at the institution.

- Graduation rates increased
- Greater motivation and interest were observed with respect to the projects implemented

Institutional management-related improvements:

- · Teamwork was successfully fostered
- Advances were made in the decision making process as result of the information systematisation
- Progress in management was achieved as a result of the implementation of a strategic planning process

Pedagogical improvements:

- Teacher expectations with regard to student capabilities increased
- New teaching strategies were implemented in subjects such as Mathematics, Language, Science, Social Studies and English as a Foreign Language.
- Kindergarten teachers were trained and their curricula were coordinated
- Articulated curriculum planning was implemented
- Teachers were allocated specific time for reflection on their teaching practices
- Capacity building efforts were made within the institutions: a number of level and area coordinators were selected with the purpose of replicating the lessons learnt among their peers.

Project-related improvements:

- A book entitled 'Mejorar la escuela. Acerca de la gestión y la enseñanza' (Granica, 2004) was published to describe the programme and its results.
- A handbook was produced detailing systematisation of work performed in the various areas.
- An instrument for internal evaluation was specifically designed (See Appendix 3)

2.3. Trends in management indicators

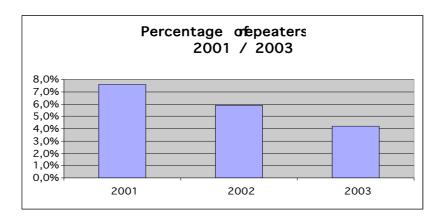
School: EGB Santo Domingo Savio

Location: La Cava. Beccar, Buenos Aires Province

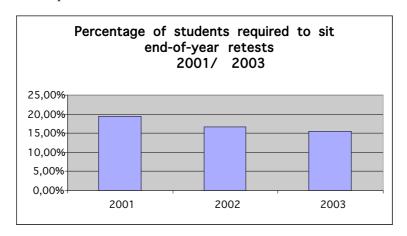
Total students: 625

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⁸ Translator's Note: 'Improving Schools: On Management and Teaching'



The repeater rate decreased from 7.6% in 2001 to 4.2% in 2003.



The percentage of students required to sit for end-of-year retests decreased from 19% in 2001 to 15% in 2003.

3. IS PEF ENOUGH TO ACHIEVE SUSTAINABLE CHANGES IN THE ARGENTINE EDUCATION SYSTEM?

In order to guarantee a strong impact, it is obviously important to increase the number of schools involved with PEF the work performed at these schools however only represents the first phase of a more encompassing programme. Our experience over the past few years has shown that if intervention is not accomplished on a larger scale, that is, transcending beyond the micro-political level and the goodwill of headmasters and teachers, changes will end up depending entirely on the actions of certain individuals acting alone, and the impact of the various innovations will remain restricted to a few limited circuits, thus generating acute inequality.

Therefore, the next step envisioned for the project (PEF Phase II) will be to study institutions that govern groups of schools within the same geographical location (districts). The aim is to comprehend why the above-mentioned inequalities exist within a district, and how such a situation might be reversed so that school improvements may not depend on the 'good will' of the players involved and become a true institutional necessity shared by all the schools.

In order to clearly understand the phenomena that take place within the educational system and thus take the necessary actions to reverse inequity, we need to perform our analysis both at the micro level (i.e., within the individual schools) and at the intermediate or district level.

The school district, which acts as a go-between for the macro and the micro levels, cannot be viewed as a mere implementer of policies designed at higher tiers. A plethora of research on the role of districts in other countries bears proof to the complexity of this logic.

Recent research in the USA has analysed the school district in terms of educational innovations, and although its influence on school change is by no means new, there has been a revival of the debate on its role (Anderson 2003, Tagneri, 2003) as a result of the impact of certain school improvement strategies implemented at intermediate levels.

In the UK, the LEAs (Local Educational Authorities) are another precedent to be considered (Withbourn, 2000, Derrington, 2000). The LEAs play a complex role which has changed over the past decades. Their impact on schools, however, cannot be denied.

On the other hand, in Canada, profound interest can be currently observed with regard to analysing school districts, and ascribing renewed value to them in educational improvement programmes. At the Ontario Institute for Studies in Education (University of Toronto), significant research is currently being conducted on the role of Districts.

Thus, both levels of analysis are pivotal: the school institution is important because it is there that the actions sought by the reform policies are implemented (or not). Taking the school institution as a unit of analysis enables understanding of the reasons for organisational persistencies and reconfigurations of change programmes. Even though the discussion at this level is critical for understanding the idiosyncrasies of micro-politics within the educational system, the intermediate system, which in Argentina is represented by school districts, becomes a fundamental unit of analysis as a result of its role as an intermediary between the macro and micro levels, and as a consequence of its ability to produce an impact on equity.

Furthermore, we are convinced that within the district level a system that allows and fosters schools to work *in networks* is crucial for a school improvement process to really take place. Some districts in the USA (Wohlstetter, 2003) and in the Netherlands (Veugelers, 2002) have been implementing a different approach to school innovation: networks that rely on schools collaborating and learning through interaction between them. In school networks heads and teachers have the opportunity to improve their practices as members of a broader community. In this way reform does not need to come from the traditional top-down approach; on the contrary innovation comes from the schools actively cooperating with each other. In this way, organisational capacity is enhanced as a consequence of increasing the resources and skills available to each school.

At PEF we not only make every effort to encourage teachers to work together within the same institution, we also encourage schools to actively collaborate with one another. However, this endeavour should not be an isolated effort in one or two districts in the country. We strongly believe that changes at the 'meso' level should include a system and processes that encourage schools to establish working partnerships, so that the successful implementation of these school networks do not only depend on the will of some individuals.

⁹ Hannay, L. 2002-2005, ' *The Role of the District in School Improvement*', Social Science and Humanities Research Council of Canada. OISE/UT team wins major U.S. Foundation Grant: <u>K Leithwood</u> and <u>S Anderson</u>, <u>Wallace Foundation</u>, ' *Learning from District Efforts to Strengthen Education Leadership*' (research based on the relationship between the State, the Districts and school leadership).

4. CONCLUSIONS

We believe that in order to obtain sustainable results that might lead to real and profound educational change in Argentina, successfully countering problems of inequity, further actions are necessary. The proposal includes:

A. Ensure replicability by:

- a. Increasing the number of schools intervened.
- b. Generating mass inputs (books, CDs, workbooks, etc.) in order to assist other schools and districts to replicate the PEF programme.
- c. Developing a network system between PEF schools (as well as other schools) to encourage learning and mutual benefit developing productive school partnerships.
- d. Building geographical units of change in different regions throughout Argentina.
- B. Develop an appropriate school governance system through systematic research and intervention at the 'meso' level of the Argentine education system. On this regard, the University of San Andrés is currently coordinating a significant research project with a grant from the Ford Foundation in order to analyse the functioning of the school district level in four South American countries: Argentina, Chile, Perú and Colombia.

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APPENDIX 1

Test score comparisons between public and private primary schools in Argentina

Average Language and Mathematics scores per primary school type according to the socio-economic level and parental educational development - 1993-1997

	<u>1993</u>		<u>1997</u>	
	State School	Private School	State School	Private School
Socio-economic Level				
Low	40.9	52.6	45.2	48.7
Medium	46.4	57	52.9	60.2
High	57.5	62.9	59.6	68.7
Degree of education father*				
1.Incomplete primary studies	42.6	57	42.8	48.9
2.Complete primary studies	47	56.9	51.3	59.7
3.Complete secondary studies	51.5	61.9	56.3	65.8
4.Complete university studies	52.9	61.7	58.5	68.9
Degree of education mother*				
1.Incomplete primary studies	41.8	53	42.6	47.4
2.Complete primary studies	46.6	57.4	51.1	58
3.Complete secondary studies	51.7	60.4	56.1	66
4.Complete university studies	55.7	64.1	58.7	68.8
TOTAL	49.7	61.8	53.5	65.2

Source: Llach, Montoya and Roldán, 1999.

APPENDIX 2
Schools where PEF is currently implemented

School	Sections	PEF Intervention Schedule	Number of students
Escuela Santo Domingo Savio	Kinder, EGB (primary school level) 1, 2 and 3, Polimodal or secondary school level	2000-2004	1003 students
Instituto San Pedro Claver	EGB 3 and Polimodal level	From 2002 onwards	970 students
Centro Cultural San Rafael	Kinder, EGB 1, 2 and 3. (Polimodal level as from 2004)	From 2003 onwards	640 students
Escuela EGB 25 'Mariquita Sánchez de Thompson'	EGB 1, 2 and 3	From 2004 onwards	380 students
Total students			2933 students

Current Project Beneficiaries

Total beneficiaries ¹⁰ :	3326
Beneficiaries below poverty line:	3105
Beneficiaries above poverty line:	221
Children between 0 and 5 years of age	
Total:	371
Boys:	155
Girls:	216
Children between 6 and 14 years of age	
Total:	2368
Boys:	1136
Girls:	1232
Youngsters between 15 and 24 years of age	
Total:	266
Men:	109
Women:	157
Adults between 25 and 60 years of age	
Total:	221
Men:	31
Women:	190
Urban residents	3326

¹⁰ Beneficiaries include students, teachers and head-teachers.

Characteristics of project beneficiaries:

Most of the students at PEF schools live in slums where access to public utilities such as drinking water, electricity and gas is not always available.

They belong to families that exhibit 'unsatisfied basic needs' described in Argentina as 'below poverty line'. Most of the adults in these families do not have a steady job, and many receive a government subsidy of USD50 per month that is insufficient to cover food and housing needs, let alone allow for textbooks, school materials, etc.