

# **“Flor de Ceibo”<sup>1</sup> Project**

## **Universidad de la República, Uruguay**

### **Report of Proceedings - August to December 2008**

#### **Executive Summary**

#### **March 2009**

## **INTRODUCTION**

### ***Presentation***

By mid-October 2008, two hundred and thirty-eight college students and twenty-four teachers were preparing to go out and meet Plan Ceibal's community. More precisely on October 23rd, a teacher with ten students in her care, landed in the first place. Then other similar experiences followed. In total there were ninety-seven outings to various locations throughout the country.

It was intended to combine two major objectives: to contribute to the formation of a college student actively engaged with the reality(ies) of his country and support the implementation of Plan Ceibal, providing contributions to it through many different tasks. Both pursued the same course objectives, the construction of citizenship.

At least 38 schools nationwide were contacted by Flor de Ceibo, mostly schools with “community teachers” due to their social settings. In this unique figure of the educational system a large part of the project's expectations was deposited, in the sense of finding connections to the poorest families and the most affected by the processes of social exclusion.

### ***Justifications, Restrictions and Scope***

The imponderable consequences of Plan Ceibal on education and children's lives or their social environment, will be the subject of many studies. The complexity of the new reality created by the Plan required a multiplicity of sights and learnings. Acknowledging that those sights and learnings are not innocuous to reality itself, it is indispensable to account for the observed.

What is offered next is the account of a travel --unique adventure of a human collective-- that, like any story, does not deny its status as fiction. It has, therefore, claims of plausibility, but not statistically representative of the information to convey, in spite of being the result of a search for regularities and peculiarities in the data collected.

The "report guidelines" that guided the observations and records of each group, which in turn prepared their own report, contemplate the most common assumptions in the current debate on

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1 “Ceibo Flower”

digital literacy. In turn, each report was the basis for composing this global report.

If Plan Ceibal has been a big question since its projection --built on a multiplicity of arguments and counter-arguments--, this first incursion of Flor de Ceibo has allowed to dismiss some assumptions, adjust many of its hypothesis and develop new questions.

In summary, the enunciates that are provided in the following pages --statements, questions, conjectures-- are only working hypothesis for 2009. They are intended as a contribution to the authorities of Plan Ceibal in their hard task of implementation. As for Flor de Ceibo, they will collaborate on the reformulation of its future interventions, in the adjustment of the recording instruments and the design of a research strategy.

## **VISITS TO TERRITORY**

In the visits participated 24 teachers and 238 students from Flor de Ceibo. A total of 97 visits to 38 schools in 9 departments were conducted.

The time of exposure to XO in schools ranged from a maximum of seven months and a minimum of zero in the case of the department of Maldonado where some visits coincided with the delivery of computers.

In activities within the schools there were directly involved in approximately 3589 children, 297 teachers and 572 parents or relatives. There were also visited at their homes 137 people and 558 were contacted informally in the vicinity of the school and in neighborhoods. The number of children in the schools visited is 14,024.

Quantitative data concerning the use of XO was surveyed, based on the protocol provided by the Coordination of Assessment of the Social Impact in Plan Ceibal. Methodological discrepancies between different surveys make it impossible to draw reliable indicators over the entire population. However, one can draw the following indicators.

Of a total of 9,385 children, 1,541 are not taking their XO to school. This represents 16.4% and the percentages in the different schools range from 1% to 66%.

Of a total of 13,387 children, there are 3,714 computer problems. This represents 27.7% and the percentages in the different schools range from 1% to 71%. There are computers with problems that are carried to school as their use is not entirely impossible, that explains why this percentage is higher than that of the preceding paragraph.

From this set of 3,714 problems with computers, 35% are damages associated with a misuse of the machine, 42% damages that are not associated with misuse of the machine, 15% are blockings and in the rest (8%) the source of the problem is not known.

Among the problems encountered are broken keyboards, broken screens and blockings. There are no quantitative data on the matter.

# CHANGES PERCEIVED

## *In social practices*

From the information obtained by the teachers of Flor de Ceibo in visits to schools and communities of critical context in 2008, ideas, questions and hypotheses arise that are interesting to understand better the impacts of Plan Ceibal.

The greatest impact registered, primarily, seems to be the one happening in public spaces. The appearance of children and adults, looking for connectivity in expected places but also in unusual places is a major transformation for the local societies. This brings about social dynamics of various kinds, not only for the inclusion and exchange among people, but also undesired social practices (some of them housed at the edges of the law or outside it). The school itself converted into a public space has resulted in a loss of security. It would be interesting to know more about the different alternatives used to solve this problem by the school authorities.

The information obtained gives an account of very large and obvious changes in terms of recreational activities that have been modified, extended and enriched by the introduction of the XO, especially given the previous difficulties of the social groups contacted for accessing these new technologies. Also, there are major changes in communication between pairs that go beyond the use of technology, because interactions and attitudes of a collaborative nature, cooperation and teamwork are produced.

Changes in the relationship between generations were also perceived. A strong and substantial change in the relations of type "knowledge-power" was observed. Children acquire a certain degree of power against the adult world as a result of the knowledge, skills and opportunities offered by the XO and Internet access (to information and knowledge).

Both in families and at school the reactions to these changes are very different. Strong changes in family dynamics are not perceived, although an increased dialogue and communication between siblings is pointed out specifically. In homes where adults show interest in learning there is more communication and exchange although sometimes children are not willing to teach.

Finally, it should be noted that a significant number of issues to be further analyzed in depth arise from this first incursion into the field, which account for the impact of Plan Ceibal and the importance of conducting surveys and systematic analysis of the process.

## *In school practices*

One of the most important questions raised by the implementation of Plan Ceibal aims to elucidate the impact it will have on education in Uruguay. Surely this is not the time for answers, the time of implementation is still short. But it is a time of monitoring and searching for early signs of transformation.

These early findings are intended as inputs for future research, should be taken as tentative guidelines. No statistical claim accompanies nor guarantees them.

To arrive at them ten variables were established, namely: motivation, production, homework, creativity, critical thinking, restlessness, conflicts, sexuality, solidarity, family-school relationship. The ten variables were discriminated against as a positive change, negative change or neutral (no change).

It is clear from the records of Flor de Ceibo that changes are perceived positively in most cases, taking into account the different items. Concomitantly, few changes for the worse have been observed. However, the accounts of actors who say that they do not detect any significant modification yet are not exceptional.

It is important to note that although there have been no systematic studies from the teachers on the impact of the introduction of the XO, there is a perception that Plan Ceibal would help reduce the problems of learning and therefore the degree of drop-out and repetition, which would have an impact on self-esteem and on the motivation to continue the studies.

This aspect of the "increased self-esteem" was reaffirmed by teachers who posed it especially for children who had difficulties in their learning.

## **FINAL SUMMARY**

We describe below how Plan Ceibal is perceived by the different actors in the community contacted, grouping the most recurrent findings according to strengths, weaknesses, demands or suggestions. In each section, these considerations are sorted by category and according to the frequency with which they were expressed.

### ***Strengths***

#### **Socio-cultural field:**

- There is broad consensus to grant Plan Ceibal a democratizing nature, while providing new opportunities (technological, informational, communicative, educational, practical, recreational, social) to the neediest people of Uruguayan society, benefits which otherwise they would not have access to. In this point the objectives of the project and its implementation are differentiated, the latter not getting the same level of adhesion.
- Production of new movements in the community: the creation of new social organizations (RAP Ceibal, Flor de Ceibo, etc.) and multiplication of joints between the new and the existing ones.

#### **Mental dynamics (affectation of singularity):**

- Production of favorable effects on infant narcissism ("self-esteem") and the "primary identity". Collaborates in this circumstance, by way of recognition, the feeling of having something of their own, which previously seemed inaccessible, the XO and knowledge about it.
- Increase in child's curiosity, which does not always reverts to motivation towards the school. There is a greater enthusiasm for school in children who had learning and/or behavior difficulties before. Reduction of diminishment produced by motor difficulties in relation to the written code.
- It is not possible to draw clear conclusions about the decline in anxiety and evacuational

behavior.

### **Linking field (interpersonal):**

- Fluent socialization of knowledge about the XO observed in children, possible germ of other solidarity behaviors
- Greater integration between pairs when it is possible to use “Sugar's neighborhood”.
- Detection of testimonies on the decrease in violent behavior.
- Insignificant increase in the quantity and quality of intergenerational exchanges.

### **Education field:**

- High rate of incorporation of the XO to school practices.
- Decreased absenteeism.
- Effect on the process of acquiring literacy, bringing about a faster process. There is no agreement on the scope of this influence: only the mechanical aspects of reading or understanding?
- Activation and alteration of the school dynamic, not always experienced in positive terms.
- Timid attempts to strengthen the family-school relationship.

## **Weaknesses**

### **Education field:**

- Insufficient teacher training.
- Lack of technical and educational support and sustain to enable greater integration of the XO in the class work.
- Imposition of Plan Ceibal without consultation.
- Low commitment/ownership of the Plan by many teachers, including middle management. It is noted and justified in these circumstances a marginal inclusion of XO in the class work.
- Overloading of the teacher.

### **Family field:**

- Poor integration of families in the project.
- Insufficient or no preparation of children and families to receive the XO (e.g., care of the machines, prospects and importance of them, "misuse").

### **Technical level:**

- High percentage of machines out of operation (broken, blocked).
- Difficult access to technical support and delays.
- Range, failures or lack of connectivity.
- Cost of some repairs.
- Retention of information (memory): frankly inadequate.

- Failures of the filters.
- Poor battery life.
- Accessories not available (pendrives, printers, computers with GNU/Linux).
- School and social problems arising from the limited range of connectivity.
- Faults/defects of chargers.
- Lack of flexible tools for e-mail.

### **Miscellaneous:**

- Delivery of equipment by mail as the only way.
- Fragile inter-institutional joints.
- Communication problems between the different actors.
- Hierarchization of the recreational use by children over others.

## ***Demands***

### **Towards people:**

- Teacher training.
- Implementation of workshops and other support means to families.
- Increase demand for teachers to incorporate/use the XO in the school.
- Enhance the educational outcomes of the XO (e.g., creating new software appropriate to the school's curriculum and its objectives).

### **Towards facing up some technical weaknesses:**

- "Permanent" technical assistance for unblockings and repairs.
- Decreased cost of repairs.
- Extension of connectivity ranges.
- Installing more powerful filters than the existing ones.

## ***Suggestions***

### **Education field:**

- Improve teacher training, including ways to interact with the community.
- Consider the stability of teachers' jobs and its impact on the school (internships and substitutions).
- Promote better links between schools and other social groups in the community (networking): RAP Ceibal, APEX-Cerro, PIM, zonal coordination boards, neighborhood thematic committees, Flor de Ceibo, etc.
- Implementation of workshops with children about the care of the machines.
- Implementation of formal instances of intergenerational training.

- Preservation of the machines inside the school until the second year inclusive (care of them).

### **Family and community:**

- Conduct outreach and training activities open to the community about the uses and potential of the XO.
- Development of systematic training and sustained over time with parents (optimizing the use of the XO). Conduct regular courses at the MEC centres.
- Support and customized monitoring on the use of the XO to the most socially vulnerable families (access to the XO).
- Promotion of real places of public participation in the various spaces of outreach and training, betting on the construction of a reflective vision of Plan Ceibal and projections of the technology.

### **Technical level:**

- Creation of local technical teams.
- Adequacy of equipment in schools that do not have pendrives and at least one PC with USB and CD.
- Extension of the connectivity range, installation of antennas in rural areas and squares in remote neighborhoods like MEVIR, enabling connectivity at MEC centers.
- Training of local actors to carry out repairs.
- Enabling mobile technical support.
- Provision of not shutting down the server.
- Stipulation of a single differential rate (\$300) for low-income families.

### **Miscellaneous:**

- Implementation of an advertising campaign (inform, create social awareness).
- Organization of academic activities (with emphasis on the exchange of teaching experiences and involving LATU, UR, RAP, etc.), virtual and live.
- Promotion of training activities to transcend the level of "user".