

# INTEGRA

## Newsletter

1

No. 6, June 2006 <http://www.integraproject.org>

6

### ✕ Contents

1. [Editorial](#)
2. [A global vision on the projects](#)
3. [Focus on the regions](#)
4. [CedeIs introduce themselves](#)
5. [Virtual communities](#)
6. [News and reviews](#)
7. [Future activities](#)
8. [About us](#)

## ↓ 1. Editorial

### ✕ Sustainability and how to achieve it

A critical aspect of the effective inclusion of new technologies in education is the link between the policies set out at a macro level and what happens on a day-to-day basis inside the schools. To a large extent, it is precisely on this link that the sustainability of projects looking to disseminate the use of ICTs in learning and teaching depends. The projects carried out by the CedeIs are not an exception.

In this field, INTEGRA has something to say. The analysis of public policies carried out in Argentina, Chile and Uruguay allows to identify three key factors:

- First of all, **the continuity of efforts of the educational authority**, an indicator of the existence of a global and consistent educational policy, stemming, from a happy combination of partial goals that may be conflicting between them.
- Second, the **system changes** leading to appropriate pedagogical approaches, new administrative processes and incentives to foster the desired reforms.
- Third, the existence of **clear roles to be played by the staff providing support** to the educational institutions. Teachers, principals, technical managers, they all need to know who to resort to when necessary. To a large extent, the results achieved depend on the existence of such a back office.

In order to strengthen one of these roles, a course on technological benchmarks is being implemented in La Pampa. The purpose of this course is to systematize and provide meaning to the facilitating role granted to the ICT policies and those concerned by them: pupils, teachers and the community.

At the same time, two recent INTEGRA experiences also show the usefulness of establishing networks to support these processes in schools. However, one often forgets that the work carried out in a network is a means, not an end in itself. Two meetings held between related schools, in one case technical schools, in the other teacher training institutions, which have led to two articles published in this Newsletter, allow us to clearly set forth that the motivation of people to work in a network is directly proportional to the expectation of clear-cut advantages. Cooperation cannot be considered as "just another load".

INTEGRA also allows us to sense another sustainability factor, i.e., the existence of *implementation networks*: these are players located on different levels of the educational system, supportive of an intelligent use of ICTs and who are capable of interactively establish the link between global policies and the day-to-day realities of the classroom. INTEGRA shows that, whenever there is a certain technical complexity, experimental projects are an efficient way of allowing them to get off the ground and be consolidated.

## ↓ 2. A global vision on the projects

### ✘ ICTs in schools (I): the teacher makes the difference

Dominic McEvoy, National coordinator of the Initiative for the Competencies of teachers, of the National Center for Technology in Education of Ireland (NCTE [www.ncte.ie](http://www.ncte.ie)), a Government agency responsible for the use of ICTs in education, visited IIEP-UNESCO, Buenos Aires, in February, as a partner of the @LIS – INTEGRA project. Drawing on the experience of his country and as a benchmark in new technologies management inside schools, we hereafter transcribe some of his ideas on the integration of ICTs in schools.

#### What was your experience in the integration of technologies in schools? Can you give us an example?

We refurbished old computers and connected them in classrooms which were equipped with a TV set. We had no interactive connections in schools, not even a network, whereby we had to establish networks in classrooms distributed all over the school. After the first 15 teachers had access to a computer – there were 45 teachers in that school – all the other ones started to demand a computer, which was a good signal. The integration process started to push computers outside the computer systems classroom towards the regular classroom, and I think that is important.

#### One of the discussions under way relating to the equipment for schools is where to put the computers: in the lab, the classroom, elsewhere... What do you think about this?

On the one hand, the computer systems room responds to the blueprint whereby all similar technologies have to be placed together in the same place, such as the workshops or the science lab. This idea might be revisited. On the other hand, when there is a lab in a school with 40 sections, every child gains access to that space only a few times a year. A way to distribute computers must be found, and the

easiest one is to take them out of the computer room and to place them in the classrooms, connecting them in a network. The other problem with the computer room is that it is not always necessary to use the ICTs for a full period; it is a tool that is there just to provide support and it may well be necessary for the teacher to get connected to the Internet only for 10 minutes in order to show a specific website or for a pupil to explain something regarding his/her homework. Another issue to analyze is the fact that when kids are taken out of their classroom, they think they have a free hour, which underpins the idea that the computer is something to play with. That is one of the reasons why the strategy aiming at distributing computers outside the computer room is highly recommended.

#### Are there other options for classrooms to be equipped with computers?

Yes, to use trolleys with laptops connected to the internet. There should be 10 laptops, that could be moved from one classroom to the next, it would be something like a mobile computer laboratory. Another option is for the teacher to have a laptop and a projector in his classroom.

#### Besides buying computers, what should be done for the technology integration process to be successful?

The present rationale is that before buying new computers, people should think what they want to do with them. It is up to each school to decide whether computers should be placed in a computer room or in the classrooms. The NCTE consultants have made many recommendations regarding equipment purchasing and distribution. There is an ICT consultant within NCTE for each region in Ireland. But it is ultimately to the principal to decide what he/she wants to buy. That is why we believe the role of the principal to be so critical in this process. To support his/her task we carry out different actions. Right now, we are setting up a virtual learning environment for principals and there is a group that is responsible for leadership programs. Some principals will be trained through this environment, which we hope will be interactive and cooperative, much like a successful

program in the UK called Talking Heads, which is basically a cooperation space for Directors.

#### How would you define the role of an ICT advisor?

He or she is a pedagogical advisor, not a technical one. Obviously, if they see that the printer is not working because the ink cartridge is empty, they may suggest to change it, but that is not their role. Their role is to provide pedagogical advice on the use of ICTs to their peers.

#### How would you sum up your experience over these past years?

Sometimes wonderful things can be achieved with one or two computers and a lot of imagination. You can also have the best computer equipment in the world without anything happening, and that is precisely where the teacher makes the difference.

#### ✘ Open code and socialization of knowledge

**What is freeware? Why implement it in schools? What does it bring to the knowledge society?** Those were the questions addressed by the seminar “Freeware in the educational environment: discussions and experiences”, carried out in Buenos Aires between February 27 and March 01.

Regarding the first question, the key is to be found around four freedoms: that of executing the program with any purpose (private, educational, public, commercial, etc.); studying and changing the program (and to do so it is necessary to gain access to the valuable source code); copying the program and, finally, to improve the program and to disseminate those changes for everybody to enjoy the new release.

Specialist Marco Guastavigna structured his response around certain selling points that emphasized the social and cultural motivation behind the open source operational system. To begin with, he said: the rationale behind freeware recognizes an educational value even prior to the technical one and, on the other

hand, he added that the general discussion around its economic, social and cultural value is linked to the development possibilities of countries.

In this framework, the specialists underscored that this “collective” base provided by the Linux operational system, one of the paradigms of the open code, allows for the working methodology not to be imposed but proposed. Actually, it was possible to observe how participants, even those who had no knowledge of the software, could become familiar with it and use it without any problems.

Freeware is not a limiting commercial factor, but it is obvious that it provides for a better design and ownership of knowledge. On this last issue, specialists emphasized the cognitive and operational potential of ICTs in the field of education.

### ↓ 3. Focus on the regions

#### ✘ The key factor: building bridges

A recent encounter between two technical schools taking part in INTEGRA clearly illustrates the possibilities offered by cooperation between organizations willing to share both problems and solutions. During two working days, May 18 and 19, 25 teachers (besides the corresponding educational authorities involved) of school No. 35 in Buenos Aires and EPET No. 1 of La Pampa participated. At the end of the meeting, one of the participants said: “I think it was a very positive exchange, both from the technological and pedagogical points of view; we found many points in common and managed to set very clear goals for the future”.

Building on a similar educational proposal of both technical schools, the purpose of the encounter was to know and disseminate technical and pedagogical materials and productions; to share strategies and experiences relating to the use of ICTs, and to plan for

a joint task. The topics covered involved the curriculum regarding the automotive industry and its didactics, advantages and applications of the school intranet, the use of the Skype program for a long-distance cooperation, among others. The discussions focused on two key aspects: the use of ICTs for teaching specific contents and the quality of educational software.

The first of these topics evolved around a central question asked by Mr. Petrosino, one of the participating experts: **What can a teacher do with such technologies? The participants discussed issues such as: Do ICTs play a key training role?; Who is accountable? Is it enough to give an opportunity?; Can a teacher teach a topic he/she was not trained to teach?; Is working with ICTs of any assistance or is it just another problem?**

Another expert, Marcelo Estayno, talked to the notion of quality of software and the difficulties intrinsic to its development and enhancement. When we speak about quality of educational software, we are actually talking about three different issues: the quality of the contents, of the platform and of communication with users.

Although these issues have a general interest, the fact that they are being discussed inside the schools that share a specific problem allowed to establish an important dialogue.

The two participating schools made a commitment to a working plan and schedule. An excited participant left saying: "it went beyond all my expectations, it really is a group who is thrilled to work".

### ✘ **Teacher training and ICT seminar in Valparaíso**

Between June 14 and 16, the innovation centers of the INTEGRA project that are working on initial training of teachers met at the Pontificia Universidad Católica de Valparaíso, in Chile, to take part in the seminar "The

new technologies on the initial training of teachers".

The Cedels of Chile – Centro Zonal Costa Centro, Buenos Aires – Escuela Normal Superior N° 5 and La Pampa – Instituto de Formación Docente de Macachín, met to discuss the inclusion of ICTs in the training of teachers and the new resources for the development of classes, such as virtual platforms and multimedia. Likewise, teachers of the educational institute of the ORT University of Uruguay, IIEP-UNESCO consultants, Buenos Aires, teachers and researchers of the UCV and educational authorities of the three participating regions were also present at the meeting.

The inauguration was in charge of Teresa Lugo, of IIEP Buenos Aires, and each of the working sessions focused on a main line of work. The topic for June 14 was "Information technology standards for the initial training of teachers", that of June 15 was "virtual platforms as a complement of a virtual classroom: blended learning" and that of June 16 was "Design, development and evaluation of curricular products developed through ICTs".

The teachers who participated at the meeting were very enthused with the activity and assessed it in very positive terms. In this vein, they underscored the opportunity they had to take part in keynote speeches followed by group discussions, which were constructive because of the exchange that took place between the teachers of these different countries.

Communication will continue through a virtual platform: there will be discussion fora that will remain active until the end of the project.

### ✘ **21<sup>st</sup> Century Education**

"I designed the World Wide Web for its social effects, to help people to work together and not just as a technological toy", said its creator, Tim Berners-Lee. And on May 17, 2006 that idea was reshaped by Dominic McEvoy, from his NCTE office in Dublin during a videoconference with the ORT University for the Cedels. With the idea in mind to comment on the

“Case of professional development of SCOILNET” ([www.scoilnet.ie](http://www.scoilnet.ie)), McEvoy touched upon the mechanisms to know how to design, organize and develop a training program for teachers. The specialist said that the education of our times recognizes six keys ([www.21stcenturyskills.org](http://www.21stcenturyskills.org)) which are fundamental in the knowledge society:

- Focus on the fundamental topics and on the tools needed to learn them.
- Develop competencies belonging to this century: information and communication, reflection, problem solving as well as interpersonal and autonomy competencies.
- Using means of this century to develop such skills.
- Develop the learning tools in context.
- Teach and learn the contents of the 21st century.
- Evaluate the learning process with tools pertaining to this century.

When asked what we mean by learning tools of the 21<sup>st</sup> century, McEvoy identified them as those that provide for the socialization of people. “The education towards ICTs must be the interest, attitude and skills of the individuals towards using digital technologies and communication tools in an appropriate fashion so as to access, manage, integrate and evaluate the information, to build new knowledge and to communicate with others in order to effectively participate in society”, he added.

#### 4. Cedels introduce themselves

In the framework of the INTEGRA project, the **Escuela Normal Superior N° 5** of Barracas, South of the city of Buenos Aires, is developing the project “**Teachers with ICTs**”, a proposal aimed at integrating the new ICT

languages into the teaching practices for the benefit of basic and primary teachers training courses with which that institution is working.

With the aim of taking ownership of an idea mentioned by Ignacio Lewkowicz in 2004: “**We’ is not a scope to which one belongs, but rather a space one enters to build it**”, the project sets out to establish a working group for all graduate students, with a recognized identity.

According to María Inés Vallarino, Rector of that institution, that goal was achieved: “we occupied other scenarios working on the obstacles, resources, wishes, duties, values, rights, obligations, linking *knowing and learning*”. And she explains that her school was able to “consolidate trust as a bond of the encounter, face to face and on the network” and to set foot in the knowledge society “stemming from operational assumptions aimed at optimizing the most autonomous and critical teaching practices”.

Vallarino points out that the work was possible thanks to a “powerful link between theories, technologies and practices in the different curricular paths of the teacher training programs of the city of Buenos Aires (2002)” and she adds that “the decision to bring on board new tools, on the basis of other teaching traditions, was a main driver behind a new learning community”.

The work of the CedeI yielded its results, and not only from the specific purpose set out, but also as a dialogue platform between its members, and allowed for other institutional projects to become related. Thus, the “participative project of community integration”, the “promotion project of reading skills under unfavorable conditions” and the “cooperating students project” started to work together.

When pointing at the achievements, María Inés Vallarino does not hesitate to add some important and simple achievements of the CedeI No. 4 stemming from its work with the INTEGRA project: “we managed to meet in other time frames and places, to construct more interactive learning environments and

to see what there is to be thought about, starting from what already exists and not from a vacuum”.

A vacuum that is constructed out of the appropriate spaces, from common actions and bonds, and above all encouraged from concrete projects with their human bonds.

## ↓ 5. Virtual communities

### ✘ Game: set up your team and... start working!

That was the instruction received by 34 groups, each composed of 3 to 5 students and a teacher, to start working. The purpose was to work as a team and to share knowledge in the framework of INTEGRA. What are they doing? They are creating innovative and educational websites to be hosted on the project's website.

Each team produced a digital text using OSS tools. The teams had to choose topics from the following list: arts and entertainment; books and literature; business and industry; computers and Internet; travel and geography; health and safety; history and government; mathematics, philosophy, religion and mythology; science and technology; social and cultural sciences and, finally, sports and leisure.

The winning team – expected to acquire the basic competencies needed to achieve its goal – will receive an equipment linked to information and communication technologies. Besides, the participating teams will be decorated by an international jury in the closing INTEGRA workshop to be carried in Buenos Aires in July 2006.

### ✘ Skype, another door to an interconnected educational community

In the framework of the “CDI sharing seminar” organized by the AE-BA and carried out on May 18 and 19, 2006 in the city of Buenos Aires, and the “digital communication workshop – INTEGRA project” organized on June 01 at the CedeI-Escuela de Comercio N° 33 DE.18, a training seminar on Skype was organized. Distinguished persons from the technological world, teachers from the Buenos Aires educational authority and from sister schools, were all invited to participate.

This new digital technology allows to generate genuine exchanges in real time. Skype, actually, is a freeware allowing 2 or more computers to be interconnected and to hold free and good quality phone conversations with any point of the planet without resorting to the telephone network. It also allows to establish on-line conference calls.

The following CedeIs have teachers who have specifically been trained on “Digital Communication and Skype”: Técnica N° 35 DE.18, Técnica N° 37 DE.11, Comercio N° 33 DE.18, Escuela Superior Normal N° 5 DE. 5, Escuela Media N° 3 DE.19 and the following sister schools: Escuela Primaria N° 15 DE.11, CENS N° 68 DE.19, Comercio N° 30 DE.18, JII N° 1 DE.12. Escuela Normal Superior N° 7, CENS N° 6, Técnica N° 32 DE.14, EEM N° 2 DE.19 (Buenos Aires), and EPET N° 1 (La Pampa).

## ↓ 6. News and reviews

### ✘ Dschola Project: technology socialization under way

In Europe, the IIEP was present at the Istituto Professionale Statale per l'industria e l'artigianato, in the

Italian city of Asti. This institution takes part in the Dschola project, a network of regional excellence poles ([www.dschola.it](http://www.dschola.it)) coordinated by CSP, a research center on communication technologies, recognized by the Ministry of Education, Universities and Scientific Research of Italy.

The schools of the network have the necessary didactic, technological and administrative requirements needed to become benchmark structures and models for other schools. Experience has shown the potential of using ICTs in the field of education.

The Istituto Professionale Statale per l'industria e l'artigianato is equipped with a wireless network, with which it is possible, from any point in the building, to have access both to the Intranet and the Internet. During the visit, a communication between two remote schools was established, for both students and teachers to share resources and programs by means of a connection combining the Internet and the radio. Thus, it was evidenced how a school having resources can share them with another one that does not have them, or how students may have access from their homes to applications and documents hosted on the school servers.

### ✘ **The INTEGRA project in the International Book Fair**

On May 2, 2006, INTEGRA was present at the Buenos Aires International Book Fair. "This experience turned out to be highly positive for those of us who participated in the project: teachers, principals and the educational authorities of the government of the city of Buenos Aires, as it allowed us to disseminate to a wider public the processes and results of the pedagogical projects using ICTs in our innovation centers", said the pedagogical coordinator of the project, Fabiana Grinsztajn.

The Fair was also an opportunity for the schools belonging to the INTEGRA network to introduce their projects to the public. "This entailed a prior reflection and assessment exercise for the working teams, bringing about an added value to the experience", explained Grinsztajn.

## ↓ **7. Future activities**

### ✘ **Fourth Regional Workshop**

A closing workshop of INTEGRA will take place on July 11 and 12, to be attended by the CedeIs, sister schools, European and Latin American partners. Among the activities to be carried out during the seminar we may mention: introduction of projects, product fair, prize award ceremony for the student contest, conferences, workshop for the management staff. The educational administration of the city of Buenos Aires will be hosting the meeting.

### ✘ **Third workshop for the directors of the Cedels**

It will take place on Wednesday, July 12, in the framework of the Fourth Regional Workshop of the INTEGRA project. The main goal will be to reflect, together with the directors, on their experience over these past three years regarding the integration of ICTs in their institutions and to foster the continuity of the projects developed in the framework of INTEGRA. It will be a good opportunity to evaluate the value added of the projects carried out in the schools, to measure the progress made both at an institutional and individual level, to identify the main challenges for the schools that participated in INTEGRA and to prepare recommendations related to such challenges.

## ↓ 8. About us

### Ministry of Education of the Province of La Pampa

Coordination Under-secretariat - MCE  
La Pampa - Argentina  
e-mail: [mcarnicelli@mce.lapampa.gov.ar](mailto:mcarnicelli@mce.lapampa.gov.ar),  
[integra@mce.lapampa.gov.ar](mailto:integra@mce.lapampa.gov.ar)

### Education Secretariat – City of Buenos Aires

« Instancias Educativas Complementarias »  
Buenos Aires - Argentina  
e-mail: [integraba@yahoo.com.ar](mailto:integraba@yahoo.com.ar)

### Ministerial General Secretariat of the V Region

Ministry of Education  
Viña del Mar - Chile  
e-mail: [jessica.cardenas@mineduc.cl](mailto:jessica.cardenas@mineduc.cl)

### Pontificia Universidad Católica de Valparaíso

(Centro Zonal Red Enlaces)  
Valparaíso - Chile  
e-mail: [fgomez@ucv.cl](mailto:fgomez@ucv.cl)

### ORT University

Montevideo - Uruguay  
e-mail: [integra@ort.edu.uy](mailto:integra@ort.edu.uy)

### COLUMBUS

Paris - France  
e-mail: [cv.columbus@unesco.org](mailto:cv.columbus@unesco.org)

### CSP

s.c.a r.l Innovazione nelle ICT  
Turin - Italy  
e-mail: [erica.lavagno@csp.it](mailto:erica.lavagno@csp.it)

### NCTE

National Centre for Technology in Education  
Dublin - Ireland  
e-mail: [info@ncte.ie](mailto:info@ncte.ie)

### XTEC

Departament d'Ensenyament de la Generalitat de Catalunya  
Barcelona - Spain  
e-mail: [pepon@xtec.cat](mailto:pepon@xtec.cat)

*General Coordinator*

### ISMB

Istituto Superiore Mario Boella sulle Tecnologie dell'Informazione e delle Telecomunicazioni  
Turin - Italy  
e-mail: [integra@ismb.it](mailto:integra@ismb.it)

*Regional Coordinator*

### IIFE

International Institution for Educational Planning of UNESCO. Buenos Aires Regional Office  
Buenos Aires - Argentina  
e-mail : [tlugo@iipe-buenosaires.org.ar](mailto:tlugo@iipe-buenosaires.org.ar),  
[cmata@iipe-buenosaires.org](mailto:cmata@iipe-buenosaires.org)

*Organizations Responsible for this Newsletter*

**COLUMBUS** and **IIFE**

This newsletter was prepared with the financial sponsorship of the European Union. Its contents are the sole responsibility of the authors and under no circumstances do they reflect the opinion of the European Union.

