PROGRAM
UPGRADING TEACHERS IN EDUCATION

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Many investigations show that among the potential impacts of the Information and Communication Technologies, when applied to education, include the impacts on the abilities and motivation of the teachers and on the practice in the classrooms. AME is an educational program of the Fundación Cisneros and its general objectives are 1. To give relevant educational programs to teachers in service and in pre service in Latin America, using interactive learning on line and tele-education, ensuring equality.2. To familiarize teachers with technological cultures using environments and communities of virtual and interactive teaching learning. The Program offers several short courses, which are formulated, developed, and evaluated by Latin American and Spanish universities and has developed a Web application using a database SQL Server. The process of teaching/learning and all the administrative and academic functions are through the Web page (www.ame.cisneros.org). AME is currently in nine (9) Latin American and Caribbean countries. Among the impacts and results are the formation, training, didactic improvement, social learning and work through projects in class, schools and communities. Since 2003, 1.689 teachers or direct beneficiaries have approved the courses offered by AME.
Keywords:I interactive learning, tele-education, upgrading teachers, AME, Fundación Cisneros.

1. The need of quality education in Latin America

Quality education should train people so they can fully develop their individual potentials in a constructive way. For education to have quality, it has to be relevant, allow more equality in the access to learning and respect for the individual rights of the students. In Latin America, the persistence of poverty and inequality has made it difficult to have a quality education.

UNESCO points out that the process happening in the classroom is one of the most important factors that influence the quality of education. This is where the curricular impact is felt, the teacher's method and the student's motivation to participate and learn to learn.

The quality of a teacher is very difficult to define and it does not only depend on visible indicators like the previous ones but on their behavior and the nature of their

relationships with their students. To prepare a teacher for the challenges of a changing world means to provide them with expertise of knowledge in specific areas, in effective teaching practices, in an understanding of the technology and the ability to work in groups with other teachers, with members of the community and parents.

2. Introduction of Information and Communication Technologies in the Schools

The potential impacts of the Information and Communication Technologies (ICT) when applied to education include changes in the teachers. The teachers can acquire familiarity with the computers for regular use in their professional development (e learning, formation of virtual professional communities), management (evaluation of students and reports to parents), and in tasks done out of the classroom (searching for educational contents in the Web and the planning of lessons).

Several investigations about the introduction of the ICT in the school, the learning of ICT and their effective use in education by teachers, show that these processes are developed in four phases: 1. Discovery: administrators and teachers begin to explore the potential use of the ICT. 2. Application: the teachers start using the computer and a word processor, database and explore specific software. 3. Infusion: The ICT are used as tools and are integrated to the curricula. 4. Transformation: The major reconstruction of the classrooms is during this phase and is centered on the students and the ICT are used to explore a variety of real world problems.

The introduction of the ICT is not necessarily going to change the behavior of the teachers at the beginning but, with a good support and relevant access to the ICT, their behavior can change over time.

3. THE AME PROGRAM

AME is an educational program for teachers from the Fundación Cisneros. Its vision is to contribute to improve the quality of basic education in Latin America. Its mission is to contribute to improve the processes of teaching/learning through the strengthening of training and updating of teachers of basic education in Latin America using the Information and Communication Technologies (ICT), and tele-education.

Its main general goals are 1: Provide relevant educational programs with equity to access to teachers in service and pre service in Latin America 2: To familiarize the

teachers with the technological culture using environments of virtual and interactive teaching/learning and virtual communities of teaching/learning.

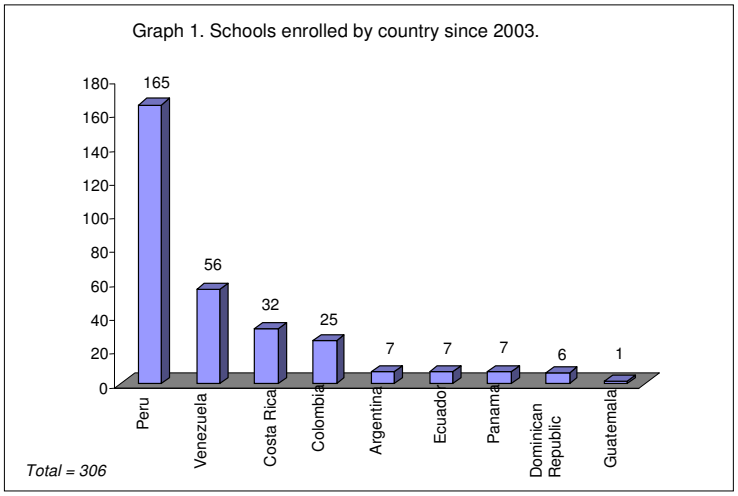
The courses are 1: New Information and Communication Technologies; 2: Scholar Communication and Organization; 3: Reading and Writing; 4: Mathematics; 5: Peace education and conflict resolution; 6: Health Education; 7: Ethics; 8: Environmental Education; 9: Education, Human development and overcoming poverty. Other courses being prepared are learning to Think through Art and HIV/AIDS Prevention.

AME has developed a Web application with a SQL Server database for its program. This web is constantly updated with new tools and information. All of the processes of teaching/learning and all the administrative functions inherent to an educational process are done through its Web page (www.ame.cisneros.org). AME has also established an Organizational Manual that contains information about the functioning of the program.

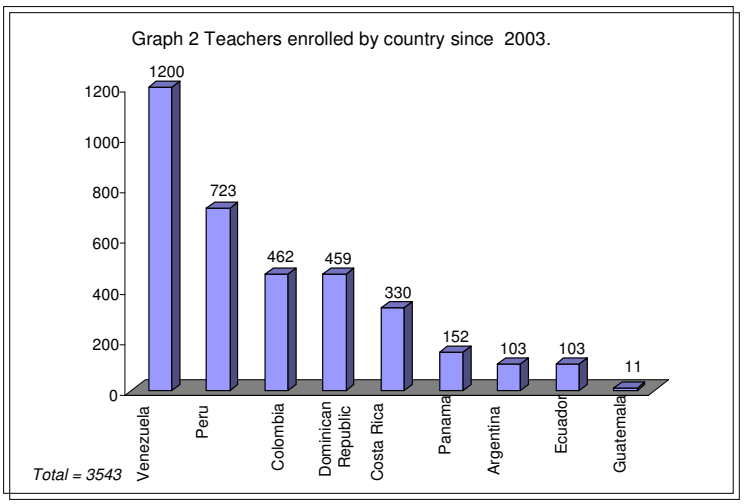
The program is currently implemented in Guatemala, Costa Rica, Panama, Colombia, Venezuela, Dominican Republic, Peru and Argentina and is based on the establishment of alliances of multiple partners such that:

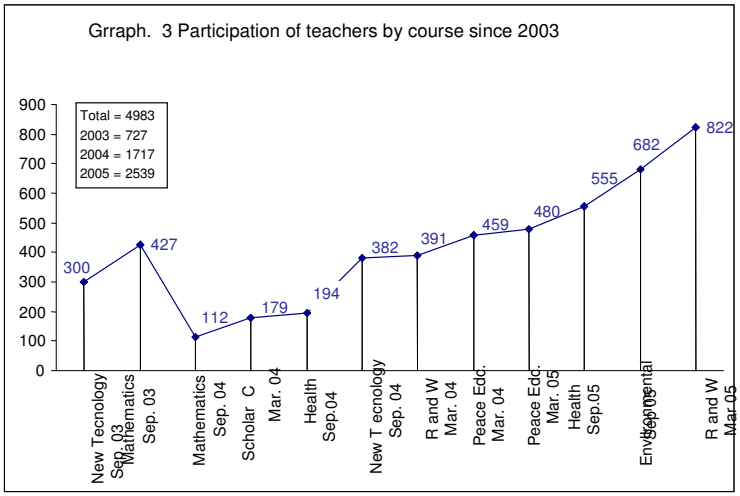
- The Fundación Cisneros has provided all the funds for the economic sustainability of the program; the strategic planning, the administrative support and assures its transparency and governance
- Five universities from Spain and Venezuela generate the contents, evaluate the teachers and hand out the accreditations.
- A private television channel (Cl@se), and another one from a university, transmit the audiovisual contents non-profit.
- Local schools, public and private, rural or urban, training teachers centers, academic sectors, private Foundations (Fundación Backus in Peru), and governmental sectors provide the necessary infrastructure, the connectivity to Internet and the training in situ. Two Education Ministries directly certify the accreditations given by the universities together with the Fundación Cisneros.

Graphic Nº 1 presents the distribution of participating schools by country from 2003. In 71% of the schools, the central or local government contributes with its financing together with the community and 92% are schools whose social economic levels are medium, medium-low and low

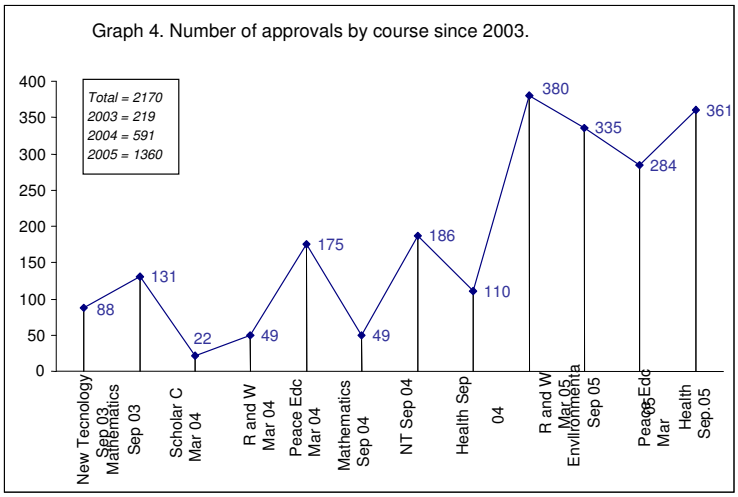


3,543 teachers have enrolled since 2005. (Graphic Nº 2) Since a teacher can participate in more than one course, there have been 4,983 participants. The majority of the teachers are in the application or infusion phase for the use of ICT in their formation processes even though there is a 63% with a university degree.





In the period 2003-2004, 2,170 teachers approved the courses. (Graphic Nº4) In 2005, the percentage of approved teachers by course was 55.33%.



The qualitative appreciations of 205 teachers in the evaluation of the courses of the AME Program can be seen in Table Nº 1.

Table Nº 1 Evaluation of the courses

Evaluation criteria of courses	New Technologies	Scholar Communication and Organization	Mathematics	Reading and Writing	Health Education	Peace Education	Environmental Education	Average
Programming Quality	100%	100%	100%	97%	100%	98%	100%	**99%**
Quality of Support material	100%	100%	100%	97%	98%	98%	78%	**96%**
Course Design	100%	100%	100%	96%	98%	100%	100%	**99%**
Schedules	65%	100%	100%	66%	93%	87%	89%	**86%**
Quality of Videos	67%	100%	100%	96%	98%	98%	89%	**93%**
Applicability in Classroom	94%	100%	100%	100%	98%	100%	100%	**99%**
Immediate applicability in Community	94%	34%	33%	54%	60%	56%	87%	**60%**
Average	**89%**	**91%**	**90%**	**87%**	**92%**	**91%**	**92%**	
Sub totals Samples	Fre= 18	Fre= 2	Fre= 5	Fre= 70	Fre= 47	Fre= 54	Fre= 9	
						Total	**205**	

The percentages represent the sum of good responses, very good and excellent.

In Table Nº 2 the qualitative appreciation of the teachers of Venezuela, Dominican Republic and Peru relative to the consequences or effects of the courses and the experiences acquired through AME.

Table Nº 2 Results

Results criteria	Venezuela	Dominican Republic	Peru
Literary Alphabetization	4	5	9
Skills	11	9	15
Values	8	3	12
Social Benefits	13	15	20
Other	4	2	6
Totals	**40**	**34**	**62**

The "other" category refers to words like "Excellent" and "Very Good", to the motivation they have to continue and the discovery of handling the Classroom Project tools transversally.

Table Nº 3 Learning

Type of Learning	Venezuela	Dominican Republic	Peru
Personal	9	6	13
Equipment	8	13	12
Educational Center Private/public	9	6	11
ICT Technology Updating	5	3	10
All of the above	4	3	6
Other	1	1	4
Totals	**36**	**32**	**56**

Table Nº 3 shows that AME is valued because it offers all kinds of learning. The "other" category refers to the opportunity of connecting with other countries and using videos as educational tools.

Table Nº 4 shows the different types of achievements. The category "other" highlights the use of the Classroom Projects and the fact that they learn without cost.

Table Nº 4 Achievements-Impacts

Aspect	Venezuela	Dominican Republic	Peru
Formation, Training, Tools, Didactic improvement	12	11	10
Social Learning, collective achievements, equipment	10	5	12
International Projection, Latin America	7	2	3
Other	7	3	5
Totals	**36**	**21**	**30**

Lack of technological culture, connectivity, time, computers and costs to reproduce the support material are among the obstacles and limitations.

4. Bibliografía

1. ICT Task Force of UN. (2005) Harnessing the potential of ICT for education. Multi stakeholder approach. Proceeding from the Dublin Global Forum of the United Nations ICT Task Force. UN. New York
2. InfoDev. (2005) Monitoring an evaluation of ICT in Educacion Projects. A handbook for Developing Countries. Pre-publication draft for circulation at World Summit on the Information Society. Tunis. 2005

3. Naciones Unidas. (2005) Objetivos de Desarrollo del Milenio. Una Mirada desde América latina y el Caribe.
4. UN Millennium Project Task Force on Education and gender equality. (2005) Toward universal primary education: investment, incentives and institution. Earthcan, Londres.
5. UNESCO. (2002) Aprendizaje abierto y a distancia, Ediciones Trilce, Montevideo.
6. UNESCO (2002). Information and Communication Technology in Education A curriculum for schools and program of teacher development. Division of Higher Education. France
7. UNESCO. (2005) EFA Global Monitoring Report. Education for all. The quality imperative. UNESCO Publishing.