

MEXICO

Evaluating the effects of educational contents with the use of technology in basic education in Mexico. Pilots Unete 2.0

1. Aims

UNETE, the Union of Businessmen for Technology in Education, is a nonprofit organization that aims to improve the quality and equity in the education delivered in Mexico. In addition to providing public schools with Information, Communication and Technology (ICT) equipment, supplying them with connectivity, training teachers and accompanying their digital learning development, UNETE also focuses on determining which are the best educational contents, software and applications that impact the quality of education.

To achieve so, a set of educational programs are currently being tested in pilot programs across the country in order to identify the following objectives:

- Deepen our understanding of the integration of ICT into both teaching and learning processes.
- Identify the impact on the academic performance of the integration of ICT equipment, contents and methods in school.
- Identify which are the critical elements to integrate and scale up the training and monitoring of technology.
- Identify educational innovation (best practices) related to the use and development of ICT.
- Understand the impact of implementing specific pilot programs in different schools.

2. Leadership and Partners

UNETE was one of the pioneer institutions in Mexico to address the lack of quality in education through a technological perspective. Since its founding year in 1999, UNETE has benefited 6,725 schools and over two million children every academic calendar. Along those years, the institution has managed to bring on board a large array of stakeholders, such as:

- **Domestic and international firms:** Private companies have been a constant source of funds and support.
- **Regional governments:** The local Ministries of Education have been large donors and partners in delivering our value proposal.
- **Federal government:** The Federal Ministry of Education has supported our efforts by fueling our operations and encouraging our influence across the country.
- **International organizations:** International organizations have become a more involved stakeholder for our success.
- **Parents:** Every time we equip a school, parents join efforts to provide the minimum infrastructure to support a computer classroom.
- **Teachers:** The time and effort that teachers invest in our project (both learning and using ICTs to teach) involves an extra commitment on top of their normal duties.
- **Public at large:** We have massive campaigns labeled “redondeo” (rounding) in favor of education where millions of people donate pocket money when they buy at groceries stores.

In order to validate and reinforce our value proposal, we coordinate and liaise with universities, research institutes, ICT companies, government, private firms and the civil society.

Additionally, we have promoted the independent evaluation of VALORA, a nationwide agency of educational evaluation with a strong reputation in the market.

The programs to be evaluated are the following: BRAINET, CLASSMATE, KHAN-ACADEMY, LEXIUM, READING COMPANION, SELVA LACANDONA, TAMSA, BRAINPOP, EDUCARE, GALILEO, VILLA APRENDIZAJE y VITAMINA.

3. Strategies and activities

Since early 2012, UNETE began the review of the various hardware and educational software programs, as well as different methodologies based on ICTs, to support technological resources provided to public schools embedded in low-income communities.

After the analysis and depuration of different alternatives, the institution began several pilot programs and implemented them in 128 schools installed throughout the country in 15 states. The states involved are: Aguascalientes, Baja California, Chihuahua, Coahuila, Chiapas, Guanajuato, Hidalgo, Jalisco, State of Mexico, Nuevo Leon, Puebla, Sinaloa, Tamaulipas, Tlaxcala and Veracruz.

Each education provider trained the corresponding teachers and designed a way to monitor the progress in the schools involved. UNETE, along with VALORA, made a diagnosis of each school (both teachers and students) in ICT attitudes and usage. An evaluation system with instruments (surveys) for principals, students and teachers has been structured. The progress will be compared and contrasted against a set of 49 schools defined as the control group. Finally, two stages of implementation will be evaluated with field work in June and November respectively, given that the lengths of the pilots are framed by the academic calendar. The first results are expected to be available in July 2013.

4. Context

Mexico is undergoing profound changes in its Constitution pertaining education public policies. The long-awaited reform aims to end with obscure practices in the education system and strengthen accountability and teacher qualifications to promote a professional development. These changes consider training and individual evaluation of more than one million elementary school teachers; hence, a big effort to focus on quality teaching.

This context represents an interesting opportunity for UNETE to share its expertise on understanding the effects of ICTs in the academic performance and using the best practices available to promote quality in education.

The flexibility, speed and execution track record that UNETE has developed so far is an attractive asset to test education initiatives in the public school sector. It also brings the possibility to provide a quick feedback to the government in order to fine-tune massive educational programs before implementation and raise the standards of basic education through the appropriate use of ICT. Therefore, the initiative for this project comes at a critical time for better quality in the education system of our country.

5. Resources

Most resources for project UNETE 2.0 come from donors committed to improving the quality in our country. Additional resources are from the suppliers that have been associated with UNETE to carry out this project, which is expected to have an impact, not only nationally but also in Latin America.

6. Development over Time

The initiative of UNETE 2.0 was developed in early 2012. It took the institution months of meetings with content providers and the process of evaluating which programs were worth of testing in the pilots. By the end of 2012 several pilots started and the rest, depending on their specific characteristics, were implemented subject to the academic cycle and the availability of the schools involved.

Currently the pilots are in the process of evaluation and we expect to have the corresponding results by July and November of 2013.

The reach had to be modified because of budget concerns. Initially, we aimed to evaluate many contents, but the institution did not have enough resources to achieve so.

7. Evidence of effectiveness and efficiency

So far no reports we have produced with regards to the pilot programs, only qualitative observations diagnosis (both providers and expert's observations of students and school teachers in pilot schools). Quantitative results that respond to the objectives are going to be available by July and November this year.

However, it is worthwhile mentioning that in 2011 UNETE was evaluated by Filantrofilia, an association dedicated to assess and improve the performance of civil associations in Mexico. They determined that the social return on investment that UNETE achieves by equipping public schools was 22 Mexican Pesos for every peso. Moreover, an independent study from VALORA measuring the 2009-2010 academic cycle concluded that the schools supported by UNETE had an average grade in the ENLACE test (the Mexican version of the PISA examination) of 521, against 496 of the national average, an improvement of more than 5%.

8. Success Factors

A success factor of this project is the relevance that the Federal Government has given to the aim of improving the quality of education in our country. A second success factor is the partnership with other agencies to achieve a common goal of successful use of ICT in education. Finally a third success factor is the experience of our CIO who for many years has worked to the benefit of education, especially in the use of ICT.

9. Tensions and impediments

A first obstacle facing us is at the state level, where decision makers that we already knew through the relationship for several years (education leaders and directors of distance education), have been changed or replaced so start relationships has been a bit tedious and delayed the start of several pilots in some states. A second factor that we face is the fear of change by many school leaders and teachers who do not show up to training and do not follow the instructions properly.

10. Sources

The chart below includes the pilots, states and number of schools is in *Annex 1*.

You can check our page explaining the drivers:

www.comunidadunete.net

You can also check the various webpages of the pilots for analysis:

<http://www.vitaminaeducacion.com/>



<http://www.grupoeducare.com>

<http://www.lexiumonline.com/>

<http://www.villaprendizaje.com/>

<http://www.tamsaac.com.mx/>

<http://www.readingcompanion.org/>

www.brainpop.com.mx

<http://www.galileo2.com.mx>

11. Annex

Annex 1

DISTRIBUCIÓN DE PROGRAMAS PILOTO UNETE PARA ESTUDIO 2013

	AGS	BC	CHIS	COAH	GTO	HGO	JAL	MEX	NL	PUE	SIN	TAMP	VER	total
SUB TOTAL ETAPA 1	1	10		1	1	6		1	11		9	23	6	69
BRAINPOP		3				4			3			5		15
EDUCARE		4				2								6
GALILEO	1			1	1			1			7	4		15
LEXIUM Primaria	-								2		2	6		10
LEXIUM Secundarias	-								1			6		7
VILLA APRENDIZAJE													6	6
VITAMINA		3							5			2		10
SUB TOTAL ETAPA 2			10			2	10	10	4	15	4		1	59
BRAINET									2		2			4
BRAINET / EDUCARE									2		2			4
BRAINET / MULTIMEDIA ESCOLAR							10							10
CLASSMATE						2								2
KHAN-ACADEMY								10						10
LEXIUM Secundarias	-													3
READING COMPANION Primaria										14				14
READING COMPANION Secundaria										1				1
SELVA LACANDONA			10											10
TAMSA													1	1
SUB TOTAL CONTROL		4				4	6	8	5	5	5	9	3	60
Total general	1	14	10	1	1	12	16	19	20	20	18	32	10	188