

# ANNUAL REPORT 2017





**“I LIKE TO ATTEND THE  
COMPUTING ROOM BECAUSE I  
LEARN A LOT FROM MENTORS”**

Jesús David Huh, 3rd grade Primary School



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# INTRODUCTION

E

Education is the cornerstone of every nation's progress, as well as the key to transform people's lives by providing access to more opportunities. As a society, it is our responsibility to ensure Mexican children and youth can access a quality and equitable education.

At **UNETE**, we acknowledge the great commitment from companies, organizations, government and people that have become **UNETE** Partners. We are grateful to them because we have succeeded in benefiting 2.6 million children during 2017 by equipping 8,700 schools with Media Labs in over 49% of the country's municipalities.

Likewise, in 2017 we carried out big projects that resulted in benefiting communities from the State of Mexico, Puebla and Chiapas. For example, some of our achievements were the beginning of a collaborative program performed in conjunction with the Cuatro Ciénegas municipality and Google, as well as the development of the first volunteering program in Latin America with Dell as a partner, among others.

From the Board of Trustees and **UNETE** collaborators, we are grateful to those who have joined us and have become part of this change in our country. We have succeeded in transforming thousands of children and youth by providing them with access to more opportunities for a better future.



**Roberto Shapiro**

Chairman of the Board of Trustees



e have tirelessly worked for 18 years to improve education quality and equity in our country. In 2017 we equipped 200 Media Labs in the State of Mexico and 200 preschools in Puebla. We began a collaborative project with Google.org and joined the Cuatro Ciénagas 2040 Plan. Besides, we developed and executed the first global volunteering campaign in conjunction with the Dell LATAM collaborative staff. I want to thank our major benefactors: Ministry

of Public Education, Nacional Monte de Piedad and Google.org. Thanks to the government of Chiapas, Puebla, State of Mexico and Campeche, to the municipal government of San Andrés Cholula, and to all companies and organizations that have become part of this great dream: Dell, Fundación del Empresario Chihuahuense A.C.(FECHAC), Televisa foundation, Coppel, BBVA Bancomer foundation, MoneyGram and the Consejo Coordinador Empresarial of Hidalgo.

Of course, I want to thank all of our UNETE Partners and over 500 teachers that have joined this great initiative.

In 2018, our great commitment with Mexico's children and youth is to provide them with quality education to make them continue shaping their future.



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iWE ARE  
UNETE



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We are a non-profit corporation with over 18 years of experience contributing to improve education quality and equity in Mexico by empowering teachers to integrate technology in their classes. We believe every child in Mexico needs to access a quality education in order to build a better future and transform his or her life.

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A blurred black and white photograph of a classroom. In the foreground, the back of a student's head and shoulders is visible. In the background, several other students are seated at desks, each with a computer monitor. The overall scene is out of focus, emphasizing the text overlaid on it.

# MISSION

To improve education quality and equity in Mexico.

# VISION

To achieve equal opportunities in public schools through access to technology, where students can have a better quality education in order to build a fairer and dignified country, reflecting a clearer sense of love for Mexico and counting on the active involvement of the entire society.

# VALUES

Solidarity, Confidence, Equity,  
Quality, Ethics, Responsibility,  
Transparency, Commitment, Loyalty,  
Tenacity, and Accountability.



# COLLABORATORS

The UNETE family counted on over 350 collaborators during 2017, which worked from their field of specialization in 28 states of the Mexican Republic.

The multidisciplinary profile of all collaborators allowed us to achieve goals impacting our beneficiaries. We acknowledge their commitment and dedication for turning Mexico into a better country.

Collaborators not only contributed with their creativity, inventiveness and intellectual resources to achieve goals but also reflected their loyalty and enthusiasm to make children and youth access a better future.

## ATTRACTION OF TALENT WITH SERVICE VOCATION

*“There is a driving force more powerful than steam, electricity and nuclear power: the will.”*

Albert Einstein

For UNETE, the most important will is to ensure service vocation and integrate collaborators into an inclusive organization. To achieve this, we have developed talent attraction strategies related to generation changes, thus we have intensified our presence in social networking.

We have also strengthened our relationship with universities and authorities from 15 states of the Mexican Republic.

We have applied more than 3,000 online evaluations and 1,000 on-site evaluations to ensure that the acquired talent had appropriate competences for the positions offered and that they could be characterized by their vocation to help.

## UNETE VOLUNTEERS AND TALENT INCUBATORS

*“If people could see the change that comes about as a result of millions of tiny act that seem totally insignificant, well then they wouldn’t hesitate to take those tiny acts.”*

Howard Zinn

In 2017, 39 youth from different universities worked on their social service, professional practices and/or volunteering work. Their tasks summed over 100,000 hours of collaborative work. All of them performed their projects under a “win-win” philosophy. College students succeeded in improving other people education, and they acquired experiences and learning for their professional growth.

This year, the Talent Incubators program could incorporate 6 out of



the 39 students into job positions at UNETE headquarters.

We acknowledge the valuable support from the following educational institutions:

- Universidad Nacional Autónoma de México
- Universidad Iberoamericana
- Universidad Anáhuac Norte
- Instituto Politécnico Nacional



- Universidad del Valle de México
- Universidad Tecnológica de México
- Universidad del Valle de México
- Universidad Politécnica del Valle de México
- Universidad de Helsinki

## UNETE ORGANIZATIONAL DEVELOPMENT

*"You can buy a person's hands but you can't buy his heart."*

Stephen Covey

We have created an organization with enough flexible structure to meet every need from UNETE projects. Every day we have promoted respect and enforcement of our values.

In order to strengthen our

collaborators, in 2017 we provided training on different topics: Fundraising, Methodologies for Educational Intervention, Management Skills, Tax Update, Civil Protection, among others.

We were also involved in events and activities promoting teamwork, which created an environment of confidence, pride and belonging to UNETE.



1 out of 2 children  
**is under educational  
backwardness**

educaciónfutura.org



8 out of 10  
indigenous children  
**have insufficient learning**

INEE 2016

# WHY WE DO WHAT WE DO?



Mexican teachers  
**are not updated from their  
initial education**

SEP 1999, 2011



In Mexico only 4 out of  
10 primary schools  
**can access technology; this  
increases the digital gap in our  
country's basic education**

INEE - Panorama Educativo de México 2015



# HOW DO WE DO IT?

We empower teachers so that they can integrate technology into their classes; we achieve this through a trainer who physically supports a school during one school year.



We equip Media Labs with technological devices



We develop digital skills in teachers and students



# WHAT DO WE DO?



We develop the 21st Century skills in students



We provide access to digital contents, pedagogic advisory and technical support

# WHERE DO WE DO IT?

We have equipped schools in 49% of Mexico's municipalities  
(1,208 municipalities out of 2,457)

Update figures up to December 1st, 2017



EDUCA

# ATION

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During the school year 2016-2017, we tirelessly worked to continue improving education quality and equity in Mexico. We acknowledge every teacher for his/her daily commitment within his/her teaching practice since they give their best for all students access a better future.

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**“I WAS EMBARRASSED OF READING  
BUT NOW WORKSHOPS HAVE  
HELPED ME TO PRACTICE AND READ  
TOPICS I REALLY ENJOY.”**

María Areli Lopez Basurto, 5<sup>o</sup>C José Vasconcelos Primary School, Chihuahua.



# MENTORSHIP PROGRAM

## SCHOOL YEAR 2016-2017

The **UNETE model** was implemented in 399 public schools thanks to support provided by several donors and educational authorities from different government positions. The following table gathers quantitative information on educational management and pedagogic intervention activities resulted from the Mentorship Program (MP).



399  
Benefited schools



230  
Education Technology Instructors (ETI)



13  
Education Technology Coordinators (ETC)



23  
Districts where benefited schools were located



5,539  
Benefited teachers from UNETE Model



123,651  
Benefited students from UNETE Model



3,493  
Teachers assisted by the Mentorship Program



14,702  
Students in out-of school workshops from the Mentorship Program



36,445  
Sesiones de  
asesorías en el  
Aula de Medios



42,035  
Horas de  
capacitación  
con docentes



7  
Proyectos  
educativos



1,296  
Cursos sabatinos  
dirigido a docentes,  
directores y  
supervisores



1,068  
Productos y Metodología  
Aprendizaje Basado  
en Proyectos  
(ABP)



227  
Maestros  
participantes  
en encuentros  
docentes



5,123  
Diseño de planes de  
clase con integración  
de la tecnología



11,816  
Productos de alumnos  
como evidencia de la  
implementación de planes  
de clase con integración  
de la tecnología



22,137  
Bitácoras de  
actividades del  
Programa de  
Acompañamiento

## REFERENCE FRAME

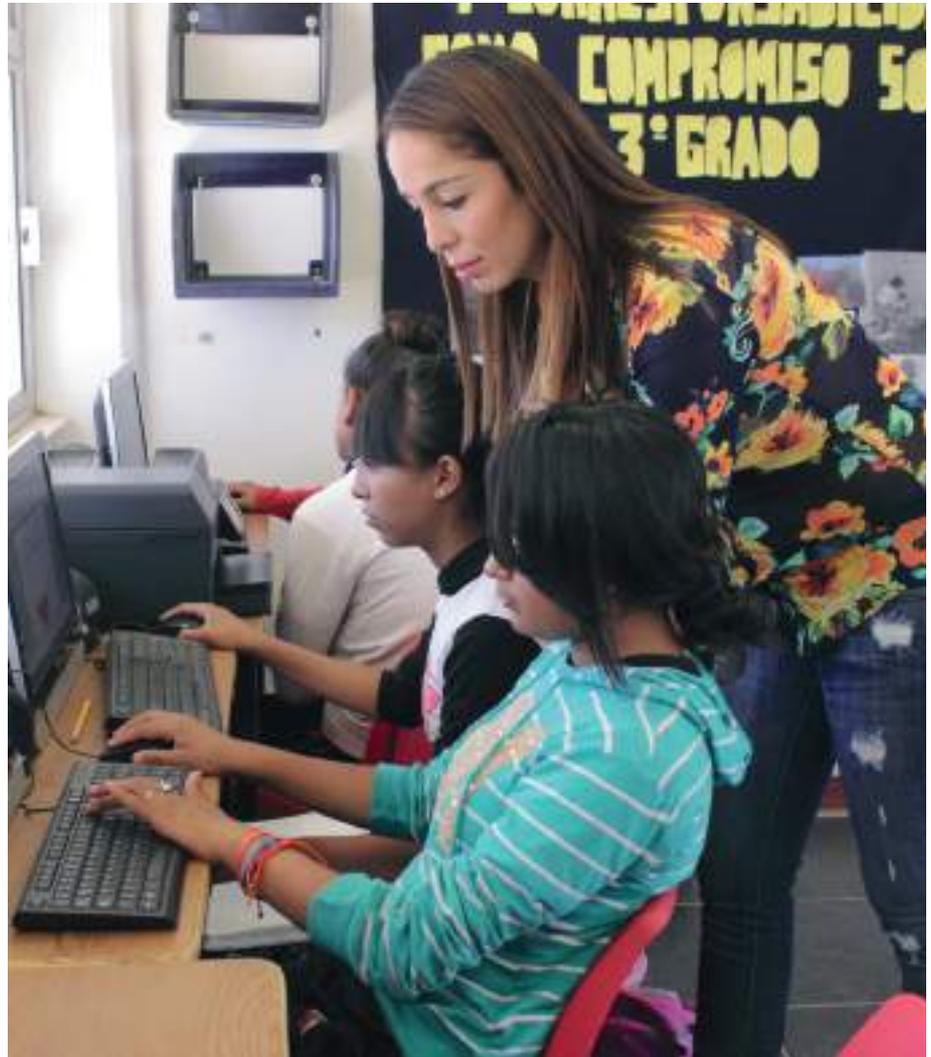
**UNETE** has positively transformed educational practice at Mexico's public schools; this is evidence of 18 years of uninterrupted efforts where either teachers or students have shared a positive experience of education with technology. For this reason, **UNETE** has opened the pathway around the mission to improve quality and equity, turning the reality of every school benefited by donors engaged with the same cause into a different reality, and joining the effort to turn our schools unique within their context.

As our understanding is that technology should follow the teacher and not the opposite, **UNETE** has integrated the best practices to impact the development of digital skills. Based on this approach, acknowledging the right to access technology is the starting point while mentoring teachers through their interaction with alternative learning environments sets the path. This is our way to act and we also lead them on the use, design and construction of learning strategies with integration of digital programs.

Supporting teachers with training on educational technology involves big challenges since the speed in technology research and production is moving very fast. On the other hand, activities Mexico's public classrooms are asynchronous with educational technology, thus it is important to develop digital skills, a learning that allows teachers to incorporate processes without trying to follow the accelerated steps of technology.

It can be noted that after a report issued to UNESCO of the International Commission on Education for the Twenty-first Century, chaired by Jacques Delors, nations promoted educational policies oriented to equipment and use of educational technology. In Mexico, initiatives like Enciclomedia and Habilidades Digitales para Todos (HDT) have resulted from the abovementioned report; these actions involve reducing the digital gap and providing schools with computers. However, the problem is still present since technology itself does not make teachers use it, thus it is necessary to promote training that leads teachers through a harmonious examination, use and incorporation.

With this overview, UNETE is at the forefront in Mexican institutions that transform teacher and student education using technology; that's how the study "Empowering all students at scale" for the 21st Century skill development, edited by Fernando M. Reimers (Ford Foundation Professor of the Practice of International Education, Harvard Graduate School of Education).



Digital Skills in Education are the sum of creative answers a teacher explores around the use of technologies in order to let learning happen.

How do we DO IT? Having the belief that educational community gratefully accepts support whose impact relies on improving education quality. Based on this premise, several donors find in UNETE a channel to make their companies, government and associations be

socially responsible. Results are tangible: for each peso invested in UNETE, \$25.63 are received as Return of Investment (Filantropía A+) that, among different elements of the model, are channeled to the substantial component: Mentorship for teachers and students.

## MENTORSHIP PROGRAM (MP)

It is part of the pedagogical intervention methodology for the development of digital skills in teachers and students. The mentorship is performed under real conditions at public schools through a figure known as Education Technology Instructor (ETI), which is responsible for leading teachers through the use, design and application of learning strategies by incorporating digital programs.

The MP highlights mentors as key persons involved in the student comprehensive education, who are positively accepted by teachers when they are mentored in Edtech strategies focused on the needs within the context they are developed. One of the functions developed by an ETI is to identify the training needs, his/her mission is to transform the perception teachers have about themselves facing the use of technology.





The idea of the mentorship is based on the user (teacher) responsibility by trying to arrange his/her own strategy (vocational journey) and effectively use resources at hand, but also to verify difficulties other users often experience at performance.

Exposure to technology is not enough for teachers to develop digital skills; in order to achieve this goal, educational mentorship identifies needs from teachers, builds professional relationships integrating mentors as peers, it is flexible at school processes and sensitive to situations where they develop their job. When teachers and mentors spend time together in an extended learning environment, they build bonds founded in engagement for a common good, they create generations of students benefited from the teacher digital experience.

Educational mentorship involves sharing an orientation towards future, which in terms of Zimbardo y Boyd (2009), this requires stability and consistency in the present; otherwise, a person will not be able to make a reasonable estimation of the future consequences of his/her acts.

The result of the MP directly impacts the way teachers see themselves before the use of technology and effectiveness of intervention relies on being next to them at initiation times. Perceptions

## EDUCATION TECHNOLOGY INSTRUCTOR (ETI)

**During the school year 2016-2017, 230 ETIs were involved and distributed in 399 educational sites**

From a professional view, an ETI holds a Bachelor's Degree in Pedagogy or similar areas, he /she concentrates qualities with the Academic College, serves as a liaison between UNETE and the school, needs to be available under actual working conditions, provides teachers with collective or individual training on the use of technology and assist them at the MEdia Lab.

**87 FTE  
hombres**



**143 FTE  
mujeres**

teachers transform about their own intelligence and capability make a positive impact on their confidence to integrate technology into their classes.

Although the MP is founded on the principle to facilitate teaching functions through integrating technology into learning processes, the fact that they get involved in the mentorship program requires persuading them about this service's benefits.

In order to make teachers accept mentorship requires ETIs show virtue of patience, temperance and strength, mentoring skills, mediation and conflict resolution,

as well as abilities in didactics, Edtech and communication. For the aforementioned, the ETI acknowledges and respects the teaching profession.

During the school year 2016-2017, 230 ETIs were involved and distributed in 399 educational sites. As the MP is developed on-site during the school year, every year we call for new ETIs to cover the school dispersion.

Talent retention is an institutional challenge since achieving an ETI to stay for a longer period mostly depends on the school location with regard to his/her place of residence.

1. Qualified advisory sessions provided to the teaching personnel and school in order to support continuous academic processes and professional development. This enables teachers to have theoretical and methodological elements in order to build learning environments. This term suggest respect to the teacher's freedom and autonomy, and also promotes a close support to his practice in terms of time, space and content. SEP (2017). Educational model. Mexico: Author.
2. Pérez, E. (s/F). El acompañamiento social como herramienta de lucha contra la exclusión. Navarra: UPN.
3. Zimbardo, P., & Boyd, J. (2009). La Paradoja del Tiempo. Barcelona: Paidós.

# DISTRIBUTION OF SCHOOLS BENEFITED BY THE UNETE MODEL, SCHOOL YEAR 2016-2017

To acknowledge a nation within its multicultural composition originally based on indigenous people of Mexico is the basis of the UNETE model. Thus, every year we have engaged in the task of proposing potential donors about new schools so that they receive the benefit of the MP; such schools should be located in regions without support from other organizations.

This challenge involves acknowledging unique schools within their context and appreciate result

**NIVELES EDUCATIVOS**

**Durante el ciclo escolar 2016-2017 apoyamos a 399 escuelas distribuidas en cuatro niveles educativos:**

- 50 de Educación Preescolar (ocho son indígenas).
- 208 Escuelas Primarias (ocho son indígenas).
- 134 Escuelas Secundarias.
- 3 Centros de Estudios de Educación Media Superior (Bachilleratos).
- 4 Casas del Niño Indígena (Albergues CDI).

achievements from the MP based on variables making a direct impact on the educational development:

1. Educational level
2. Geographic location and
3. Educational scope.

**From 399 schools, 123 are located in rural zones and 276 in urban zones.**

EDUCATIONAL TYPE	EDUCATIONAL LEVEL	EDUCATIONAL CATEGORY	SCOPE	SCHOOLS
Shelter	Shelter	Shelter	Rural	4
High School	High School	High School	Urban	3
Basic education 392	Preschool 50	Overall Preschool	Rural	2
			Urban	40
		Indigenous Preschool	Urbana	8
	Primary school 208	Overall Primary school	Rural	70
			Urban	130
		Indigenous Primary school	Rural	5
		Urban	3	
	High school 134	Overall High school	Rural	24
			Urban	60
Technical High school		Rural	8	
		Urban	21	
		TeleHigh School	Rural	10
			Urban	11
<b>Total</b>				<b>399</b>

## LOCATION OF THE BENEFITED SCHOOLS



The MP success is related to the ETI's ability to integrate into the educational community; this allows the Mentorship Program to be flexible to local needs in order to let the mentor to build bonds of reliability and start from the baseline under actual working conditions. It is pleasant for UNETE to share the vision to improve educational quality with ETIs serving as mentors, who are also

part of the alumni of that school; this creates bonds between the ROI and the lawful engagement with their teachers.

The social impact is indirectly noted in ETIs involvement since local economy activates by offering professionals in education a job in municipalities where teachers would not have a job related to their profession if the Professional

Teaching Service from the Ministry of Public education didn't offer these jobs. Gratitude UNETE shows to ETIs is mutual since we have founded trust in their performance and, after completing their intervention, they take part in a selected group of graduated trainers. Working at Mexico's public schools means acquiring a non-formal academic level but it's possible to empower the educational reality.

# MODEL OF SERVICE TO SCHOOLS

Educational Technology Instructors develop the Mentorship Program in accordance with a Service Model (SM), which is described through a ratio of 1:1, 1:2, 1:3 or one ETI per every four schools (1:4).

The Service Model directly depends on the geographic location of schools with regard to the address where the Educational Technology Instructor lives. The second criterion for allocation is the donor's contribution to make schools be mentored in conjunction with a predetermined Service Model.

The Mentorship Program ensures the Service Model is adapted to local conditions where teachers develop for ETIs to mentor them in

targeted topics and graded by their complexity.

During the school year 2016-2017, 54% schools were serviced with the compared model, which indicates that spreading campuses allowed a mentorship ratio of 1 to 2: 3: and 4: where the ETI had the opportunity to perform his functions in more than one school.

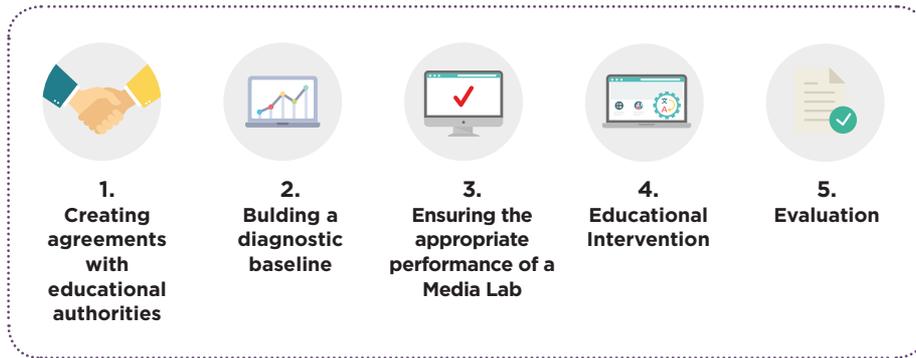
MODEL OF SERVICE	ETI	%
1: 1	106	46%
1: 2	90	39%
1: 3	23	10%
1: 4	11	5%
<b>Total</b>	<b>230</b>	<b>100%</b>

## CHALLENGES AND LEARNINGS

- Schools assisted under the 1:1 model achieve expected results in a shorter period of time, comparing with schools having 1:2, 1:3 or 1:4 models.
- A second criterion to identify the level of complexity of the service model is the number of teachers assisted by an ETI in every campus.
- In attention models 1 to 3 and 4, distance mentoring sessions are required for teachers to keep their learning rhythm.



# PROCESS OF THE MENTORSHIP PROGRAM



## 1. Creating agreements with educational authorities

This process allows to carry out different planning meetings hold with educational authorities and school principals, where both create agreements and sum commitments so that the Mentorship Program can be developed at schools; also pedagogical intervention activities between teachers and students are approved.

- The first action is introducing the MP to state educational authorities; this results in approving an ETI to access a school.
- Secondly, an ETI is introduced to the principal of the campus and both create collaborative agreements to develop the MP. The ETI's success while preparing his activities at the school mostly depends on his ability to integrate the principal into this spirit of collaboration.
- The third stage of agreements can take up to one month since the ETI performs several demonstrative actions for

a great number of teachers be persuaded of the MP benefits and sign collaborative agreements.

## 2. Building a diagnostic baseline

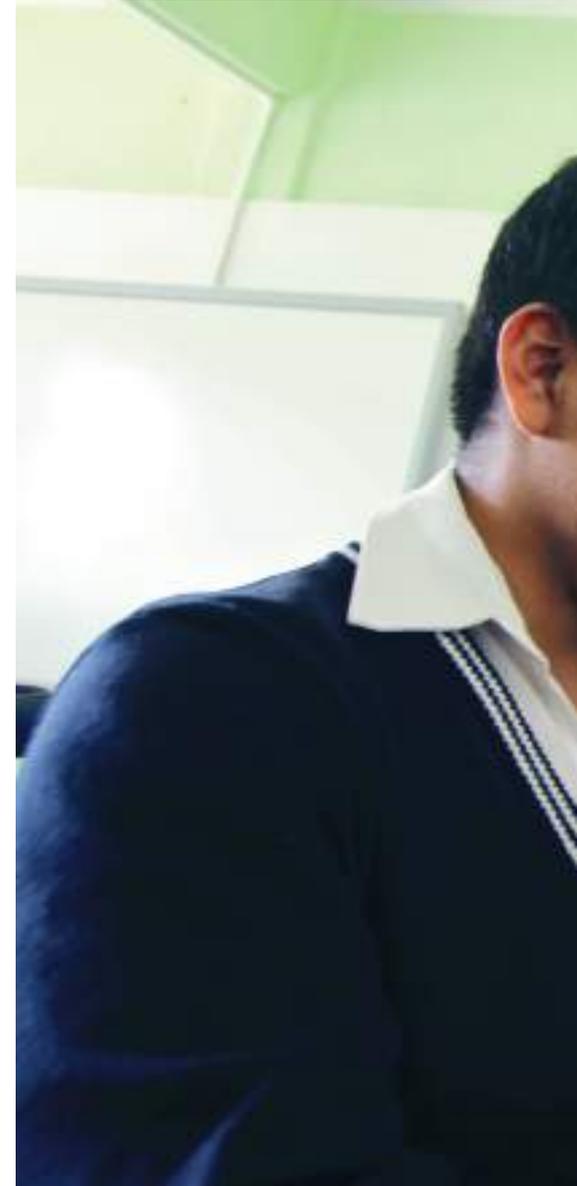
Socio-educational diagnosis and teaching perception diagnosis are taken to analyze information from some characteristics such as the school context and teachers' digital skills, which is a starting point for the Mentorship Program.

## 3. Ensuring the appropriate performance of a Media Lab

A third application instrument is a technical diagnosis, with which the state of functionality of the technology installed at a Media Lab is assessed; likewise, connectivity and obsolescence features from equipment different from UNETE's equipment are assessed. Resulting information enables the intervention of a help desk to solve problems and provide technical support.

## 4. Educational intervention

A continuous process where



advisory sessions on pedagogical training and update using technology are performed. An ETI designs a schedule of monthly activities with every teacher, where both of them plan collective and individual sessions for every school supported. Sessions and workshops are performed at the Media Lab aiming to lead educational projects of teachers. As control elements, an ETI informs about his activities



on a weekly or monthly basis, where he describes and recovers good practices and success stories with teachers and students.

##### **5. Evaluation**

Evaluation is a continuous process where the state of implementation of the mentorship program is evaluated, as well as scopes on the development of digital skills with teachers. Information allows

to anticipate actions and make decisions contributing to the program.

In order to assess the impact, external evaluations offering a comparative analysis of results are performed, which allows to know the level of contribution once a teacher completes the mentorship program. This frame is offered within the process of the

Mentorship Program at schools benefited with the UNETE model.

1. Creating agreements with members of the educational community
2. Designing a diagnostic baseline
3. Ensuring the performance of the technological equipment
4. Educational mentorship under actual working conditions
5. Evaluating the scope of the Mentorship Program

The following reflects the results and impact of the Mentorship Program within its five processes developed in 399 schools distributed in 23 districts during the school year 2016-2017:

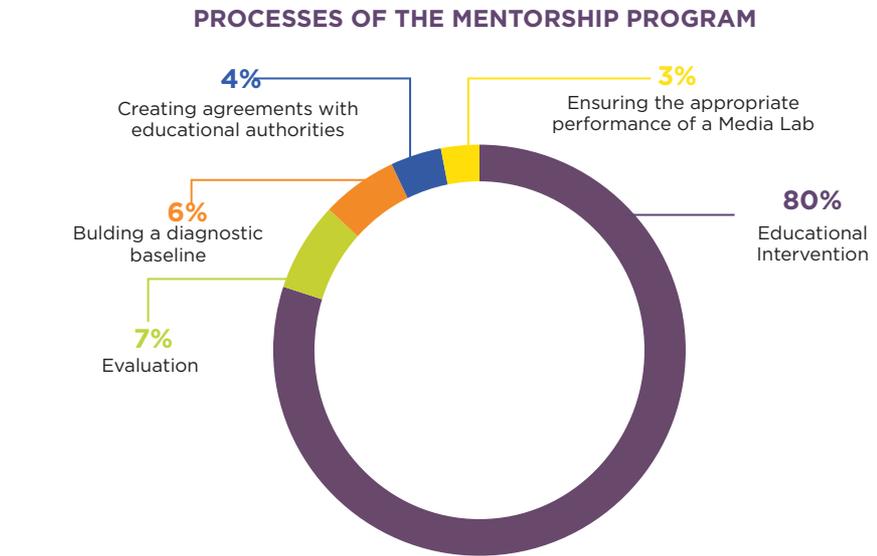
### 1. Creating agreements with authorities

If a school is looking to be benefited by the UNETE model, it must be engaged to develop the Mentorship Program.

The commitment is signed by the Principal as the school representative, the President of the School Technical Board and a member of the Parent Society. At this moment, the necessary management actions are taken in conjunction with the Distance Education Coordination of every district and local authorities. The second moment where agreements are created to develop the MP is directly performed between an ETI, teachers and the staff supporting education.

Teachers should freely and openly express their desire to take part into the ETI's guidance, where they reflect their acceptance by signing a local agreement. This task can take up to one month since persuasion does not happen immediately thus it's the ETI's task to show the benefits of the MP, as much as it is desired, so that teachers get involved.

To achieve this, we request the Distance Education Coordination to access schools, the MP is introduced to members of the school community, the ETI does whatever it takes to gain teachers' trust, a



**Total activities of ETIs to develop the Mentorship Program:  
21,322**

Although processes 1,2,3 and 5 are developed within two months, they only represent 20% activities of an ETI. The major intervention is considered in educational intervention, where the ETI leads teachers through the technology integration process.

training schedule is designed and advisory sessions start.

First challenges are noted within this process:

- The rotation of principals and the continuous disconnection between the day shift and afternoon-evening shift result in the challenge to persuade new principals of continuing with their predecessor's agreements. On the other hand, the ETI carries out mediation activities among principals and parents for the different shifts don't deny this benefit to students. It was observed that disagreement among school shifts can be hostile; in overall, the shift with greater administrative control refuses the use of the Media Lab either to teachers or students of

the other shift.

- After the principal receives the equipment from UNETE, he/she must register it in the System of Documentary Goods Inventory of the Ministry of Public Education (Sistema de Inventario de Bienes Instrumentales de la Secretaría de Educación Pública-SIBISEP); in accordance with the 12-18-2016 standard to register a good, it is necessary to indicate the responsible for protecting such good. The principal usually signs the form of the protected good, which explains that he is able to reserve the right to use the Media Lab due to his supervision scope. Another factor is the investment made by the Society of Parents to adapt the Media Lab. When

investment is not equitable, the shift with a greater investment is empowered with the administration and access to the Media Lab.

- Results show that the job of an ETI to support UNETE has succeeded in making new principals recognize the benefits of the program; however, the conflict among shifts still exceeds educational authorities' management.
- A very relevant agreement is to differentiate ETI's functions to prevent their activities at the school from being confused with teaching functions: Responsible for the Media Lab (RML) and Educational or Administrative Assistant. As achieving this requires time, the ETI supports these functions on a first stage by showing disposition to serve in order to gradually gain teachers' trust until he/she is positioned to his/her actual function as educational mentor.
- As a result of the intervention, some ETIs have been oriented for their admission to educational centers in terms of the Professional Teaching Service, where they agree with professors to perform a supportive and collaborative work without adding different activities from teaching



functions. Part of the MP success relies on this agreement, where teachers acknowledge the ETI as a collaborator.

- It was possible to transform the way an ETI is perceived since his/her presence might be misunderstood by other teachers as the new teacher that will substitute them or the SEP inspector. For this reason, the ETI refers to the MP as an independent project whose main goal is to mentor teachers throughout the development of

their digital skills.

- Lastly, identifying the budget code teachers have allowed us to understand the time they are able to invest in the MP. As teachers in High School don't have a full-time job (at least 40 hours a week), they usually have two or more employments.
- Based on data provided by UNETE, from a total population of teachers in a school, only 60% signs collaborative agreements, from which 70% completes activities.

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5. As a reference, there are 18 federal programs schools cover: Education Amendment Program (Programa de la Reforma Educativa), Full-time School Program (Programa de Escuela de Tiempo Completo), Your Teacher Online Program (Programa Tu maestro en Línea), School Always Opened Program (Programa Escuela Siempre Abierta), External Evaluation of Federal Programs Mexico in PISA 2006 (Evaluación externa de programas federales México en PISA 2006), Program for the International Evaluation of Students (Programa para la Evaluación Internacional de los Estudiantes), Binational Program for Migrant Education (Programa Binacional de Educación Migrante), Supportive Program for the Development of High School (Programa de Apoyo al desarrollo de la Educación Superior), Transparency and Accountability Program (Programa de Transparencia y Rendición de Cuentas), Enciclomedia Program (Programa Enciclomedia), Safe School Program (Programa Escuela Segura), Quality Schools Program (Programa Escuelas de Calidad), National Reading Program (Programa Nacional de la Lectura), Program to Improve Educational Achievement (Programa para la Mejora del Logro Educativo), Good Sight for a Better Learning Program (Programa Ver Bien para Aprender Mejor), Special Programs and Institutional Programs for the Education Sector (Programas Especiales e Institucionales del Sector Educativo), programs derived from the National Development Plan 2013-2018 (Plan Nacional de Desarrollo 2013 - 2018), Food Health, and All of us are Juárez (Todos somos Juárez)..

## 2. Building a diagnostic baseline

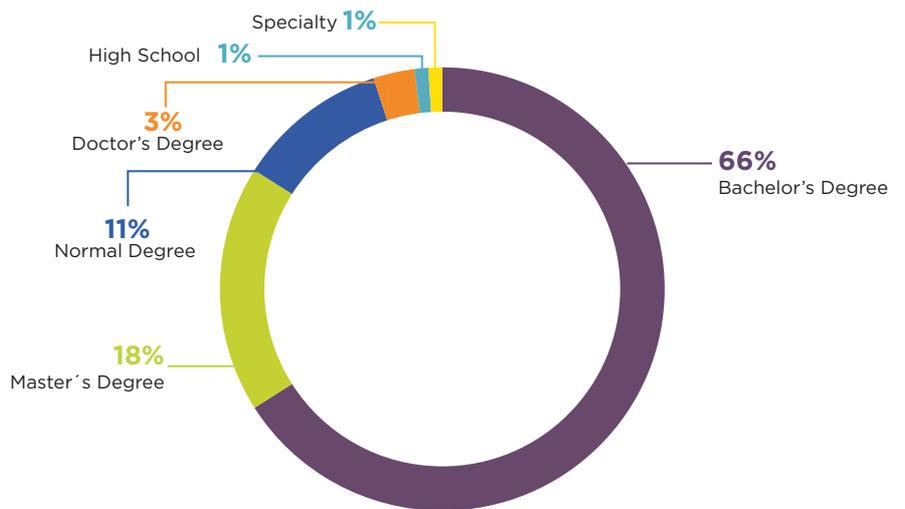
In order to know the needs and social context of schools and teachers, the Mentorship Program collects relevant information through two types of diagnostic questionnaires: Socio-demographic context of schools and level of digital skills from teachers and students. The first type is provided in this section while the second type is covered in the Evaluation section. This is very useful information for UNETE since it allows to understand the initial state of schools and measure their achievements based on their context and complications.

Regarding the socio-demographic context, it can be highlighted the fact that, from those teachers who are part of the Mentorship Program, most of them are women (66%) with good academic education. This proportion (66%) has graduated from Bachelor's Degree, 11% represents normal school graduates, and 18% has a Master's Degree. Most teachers give classes in Primary School: the first grades are represented by 22% while 4th, 5th or 6th grades represent 38%, and High School grades equal 29%. Regarding the teaching working position, although most teachers work a full-time shift (57%), the remaining proportion only works 3/4 parts of the time, some hours or they work a part-time shift, which means that 43% partially stays at the school. This condition plays a very important role in the time teachers designate to sessions provided by the Education Technology Instructor.

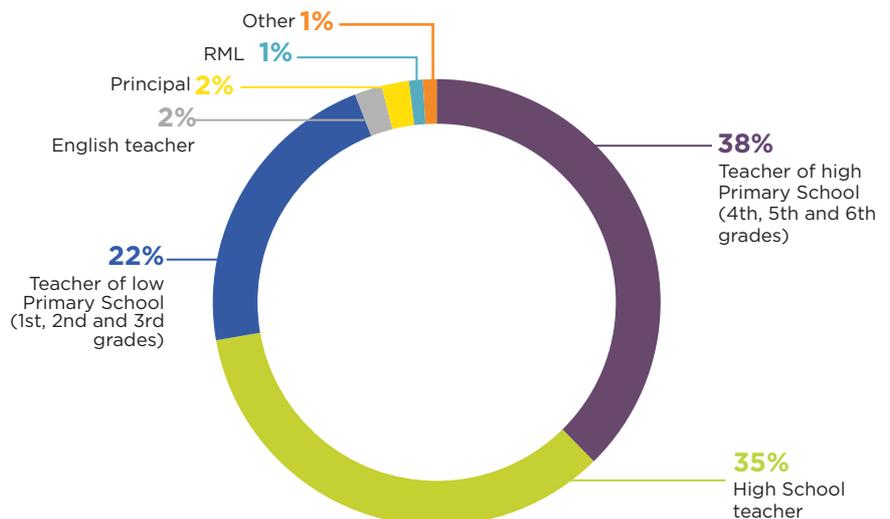
TEACHERS BY GENDER



EDUCATION LEVEL OF TEACHERS



WORKING ROLE



Total de docentes: 3,493

As the Mentorship Program also operates in indigenous schools, 20% teachers work at this type of campuses. It is worth mentioning that schools with multigrade groups represent a minority (12%). Lastly, in terms of safety at a campus, principals and teachers have reported that 32% and 6% are safe and very safe, respectively. However, a very concerning proportion of 17% mentioned that schools are not very safe while 6% mentioned that they are not safe at all.

The problem of school bullying as a social phenomenon is undoubtedly a factor that has influenced these data at national level.

### 3. Ensuring technical performance of a Media Lab

Before performing intervention activities with the MP for teachers, the ETI agrees with the principal who will play the role of the Responsible for the Media Lab (RML) to make a teacher accept this function. Based on the information provided by principals, only 39 out of 399 schools have a RML with budget code. This value makes sense since most UNETE schools don't have any Media Lab previously installed and for some districts it is a requirement before designating a RML.

It has been identified that schools without a RML are less prone to use a Media Lab due to the perception some people have about this classroom as a computing room and the RML as the responsible for the group. This has been transformed by the ETI's work aiming the RML to accept his functions as the mentor

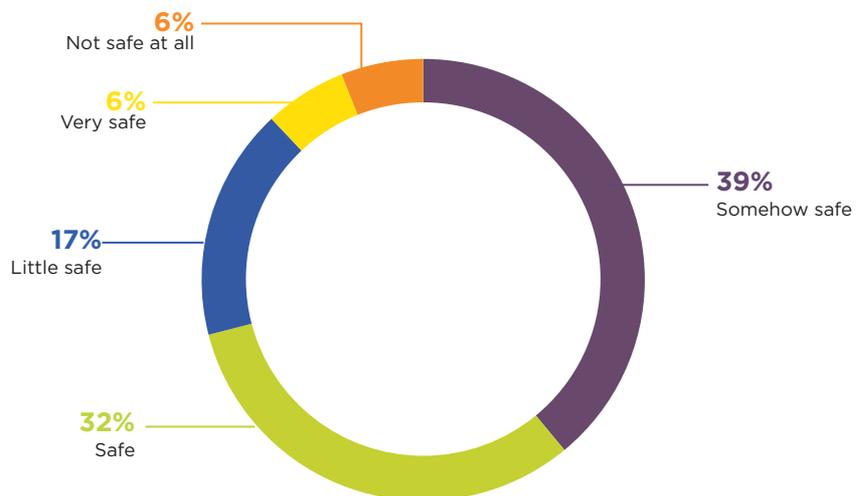
**PROPORTION OF TEACHERS BY TYPE OF SCHOOL**



**SCHOOLS WITH MULTIGRADE GROUPS**



**SAFETY ENVIRONMENT AT SCHOOL**



**Total de docentes: 3,493**



of the educational process and by making teachers attend this room with their students to develop their classes. Once a RML is designated (usually a teacher per group), a technical diagnosis of the classroom is performed, where it is ensured that all equipment is functioning, they have been preloaded with content of UNETE community and there's access to Internet, as long as the equipment model includes it or has the Mexico Connected Service (México Conectado).

If failures are detected in any equipment and an ETI cannot fix it, the UNETE help desk intervenes so that equipment can be remotely

restored or repair protocols are followed. Otherwise, the UNETE technical staff attends the site to make the required changes. The help desk and connectivity desk monitor the Media Lab condition to prevent the main usage task for learning from stopping.

**Main challenges:**

- Although the number of schools located in rural zones (30.8%) is lower, schools at urban zones are located in regions of moderate poverty, crime and margination. The sum of these factors place schools in a vulnerable situation as furniture are stolen or damaged.
- According to the region or type of weather, strong rainfalls have caused failure in schools' power supply resulting in breakdown and blackouts that have damaged equipment.
- As access to Internet from the Mexico Connected Service is irregular, UNETE help desk performs management actions to prevent flow from stopping, ensuring the corresponding bandwidth.
- Loss of keys and peripheral devices: As students are curious for electronic devices, sometimes they remove keys or take out the mouse or antennas. From the moment they attend

sessions to learn how to use the hardware, they are able to acknowledge the importance of not disturbing the equipment.

- The use of audio programs allows teachers to implement group control strategies since equipment don't include headsets, which makes every student concentrates his/her attention on the sound from the computer. This challenge makes some teachers avoid programs which "make sounds".
- UNETE equipment include free-access programs and contents; however, when working with OpenOffice, teachers find their applications limited.

#### Main learnings:

- Most teachers indicated they felt sure when installing their personal computer and connecting it to a projector prompting content before teachers and parents.
- All teachers learnt how to save PDF files and turn image and audio files into other formats. Its importance relies on the fact that they are currently able to build evidence folders, which is a requirement of the Professional Teaching Service evaluation.
- In schools equipped with tablets, teachers learnt how to transit between operative systems like Android and Windows, being the first one the most accepted since they are more familiar with mobile phones.
- In schools equipped with Chromebooks, it was noted that teachers developed skills to

## The help desk and connectivity desk monitor the Media Lab condition to prevent the main usage task for learning from stopping.

handle digital repositories such as Drive, and transformed their practice by using less paper.

- As part of special projects, equipment was provided with graphing calculators to a High School located in Mexico City. Results show that students increased their appraisal towards mathematics after using devices.
- Students and teachers learnt the appropriate use of the mouse. Particularly, preschool children discovered their abilities to handle a device.
- In most schools of Mexico, a learning session lasts 50 minutes, from which the teacher invests up to 30 minutes to standardize the use of digital programs among his/her students. The ETI continuously supports the teacher to perform these tasks by reducing technical adaptations up to 20 minutes.

### 4. Educational intervention

#### Participants of the program

According to the MP scopes, ETIs activities are focused on advisory sessions for teachers; however, when taking class plans into practice at the Media Lab, students are also directly benefited from the training acquired by their teachers.

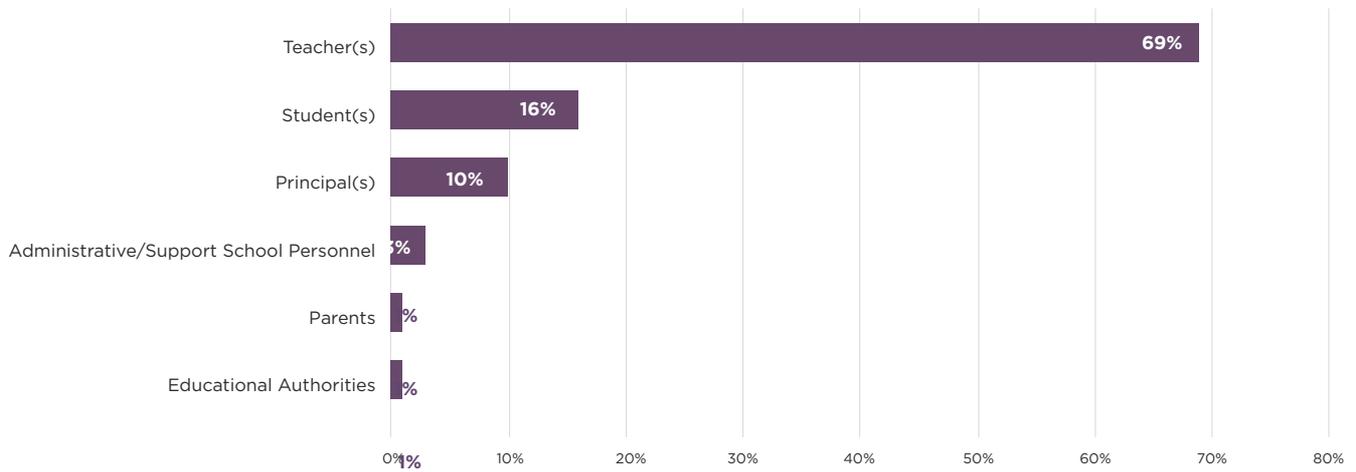
When it was known that teachers held advisory sessions at the Media Lab, the proportion of attention from students was 70% and 16%.

Despite it is a low proportion, we have also developed working sessions with principals, administrative personnel and educational authorities. Attention is focused on leadership management, school administration and Web search.

- Teachers from preschool education use technology to make students improve their motor and auditory skills, as well as to follow instructions. In Primary school, the use is focused on learning subject contents while teachers from High School use technology to deepen in data analysis.
- The use of technology in students and teachers is not limited to their age range as students have shown digital skills from preschool education to High school.
- Expectations principals have from their teaching personnel make a direct impact on motivating teachers to develop the MP. The higher the principal's involvement is; it increases teachers' motivation to attend advisory sessions provided by an ETI.



**PROPORTION OF ACTIVITIES WORKED WITH PARTICIPANTS OF THE MENTORSHIP PROGRAM**



**Total activities worked with MP participants: 24,461**

## Activities of the Mentorship Program

Activities performed by an ETI to develop the MP involve the following eight aspects:

### 1. Designing a class plan

Teachers design class plans (sequences of educational activities based on learning goals) integrating digital programs. The ETI assists teachers to identify the appropriate digital content to be used in class.

### 2. Training for teaching staff

ETIs get all teachers together to hold sessions where they identify common learning needs and they also get trained on the use, exploration and application of technology.

### 3. Individual training

It is a training strategy where ETIs concentrate their advisory sessions into particular topics related to the teaching practice. In overall, teachers use individual sessions to clarify doubts that sometimes are not easy to share with a group.

### 4. Training for principals

In order to strengthen the school management, principals get trained in productivity tools such as a spreadsheet or text processor. Likewise, they are provided with the best strategies to optimize time in administrative processes

### 5. Advisory sessions at the Media Lab

Once teachers have received training and have designed their class plans including technology, they attend the



ETIs assist teachers and principals on out-of-school tasks making an impact on the community.

Media Lab to practice under actual working conditions. At this stage, ETIs adopt a supporting role to make the teacher gain more confidence and develop his/her class.

### 6. Involvement in the Technical Board

As a relevant aspect is to inform the school community about the program advancements, the ETI takes part in the School Technical Board.

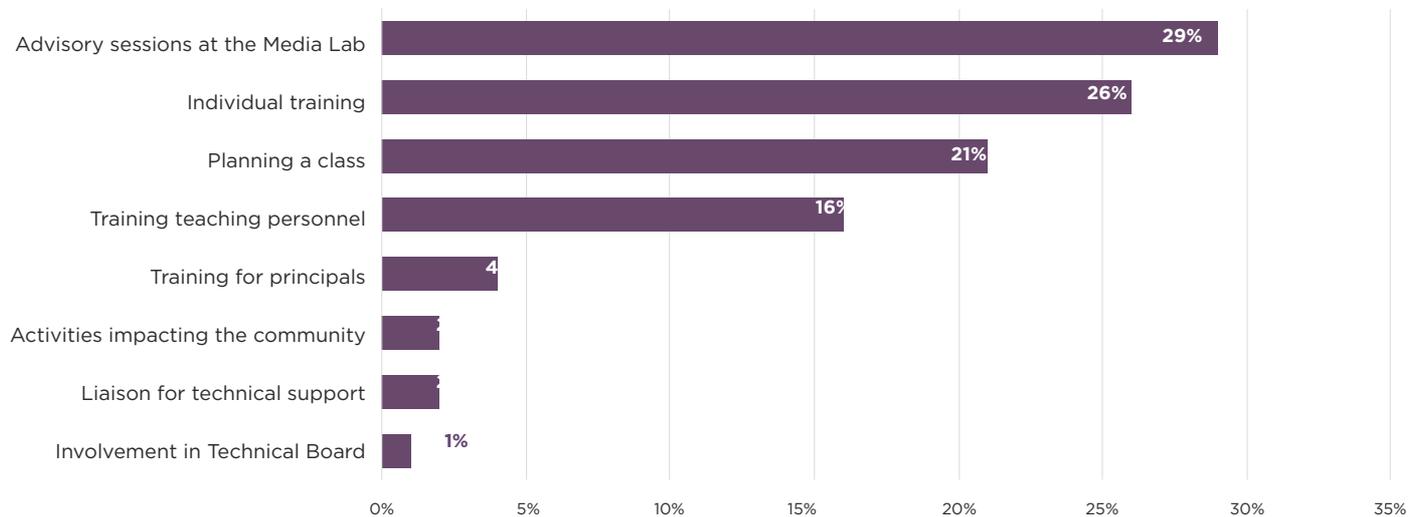
### 7. Activities impacting the community

The dynamics at school centers requires educational players to take part in different supporting tasks, either at the school or out of it. At this stage, the ETI assists teachers and principals with out-of-school tasks making an impact on the community.

### 8. Liaison for technical support

To achieve goals, the Media Lab needs to be kept in optimal conditions, thus the ETI and teachers are supported by the UNETE help desk and connectivity desk.

### PROPORTION OF ACTIVITIES PERFORMED BY THE ETI TO DEVELOP THE MP



#### Total mentorship activities performed by ETIs: 24,461

A great number of actions performed were focused on advisory sessions at the Media Lab (26%); this means that ETIs have led teachers to hold a session under his/her guidance but teachers have performed a predominant role at this first stage. This is outstanding since teachers get more involved in learning sessions using technology when they are mentored.

Activities were switched so that teachers could retake their role as learning strategists and design their class plans integrating technology. It is important to highlight that they are starting to integrate their own material and associate it with different technological tools they have at hand; this increases their level of autonomy regarding the use of technology.

#### Main learnings

- Teachers show higher

confidence when attending a Media Lab supported by an ETI and they are able to focus on the planned Didactic Sequence. Besides, they attend the Lab once they have been oriented on the use of digital programs and have designed class plans integrating technology. On the other hand, they show autonomy when the level of technical ownership perceived is higher.

- Teachers who start learning Edtech need an ETI to carry out their first practices with their groups of students. It is common for teachers to practice without the presence of an ETI once their level of ownership in technology improves.
- Collective training sessions are better accepted through a technique to analyze cases related to study plans

and programs. Meanwhile, individual advisory sessions are focused on the use and ownership of technological devices. Collective pressure covers two aspects: 1. It is positive when teachers are challenged among themselves to show outstanding results and 2. It is negative when they don't express their doubts because they are afraid of being perceived as neophytes; for this reason, individual training sessions are held to set the route for advisory sessions according to each professor's needs.

- They use the Media Lab as a driver to make students enjoy learning. This has allowed to observe that students with an introverted personality improve their capability to communicate; team work is promoted since students collectively support



themselves to solve operative problems, and they show a positive attitude towards learning subject contents.

- Work performed at the Media Lab requires the teacher to be familiar with the command sequence to easily communicate it to students; otherwise, they would not choose the appropriate functions from the program and they would need to ask the teacher to show them how to go back to the activity. If the

teacher misses this, students would leave the task.

- Teachers identify sessions performed at the Media Lab as the moment to take acquired learning at the classroom into practice, thus this turns into an experimental lab.

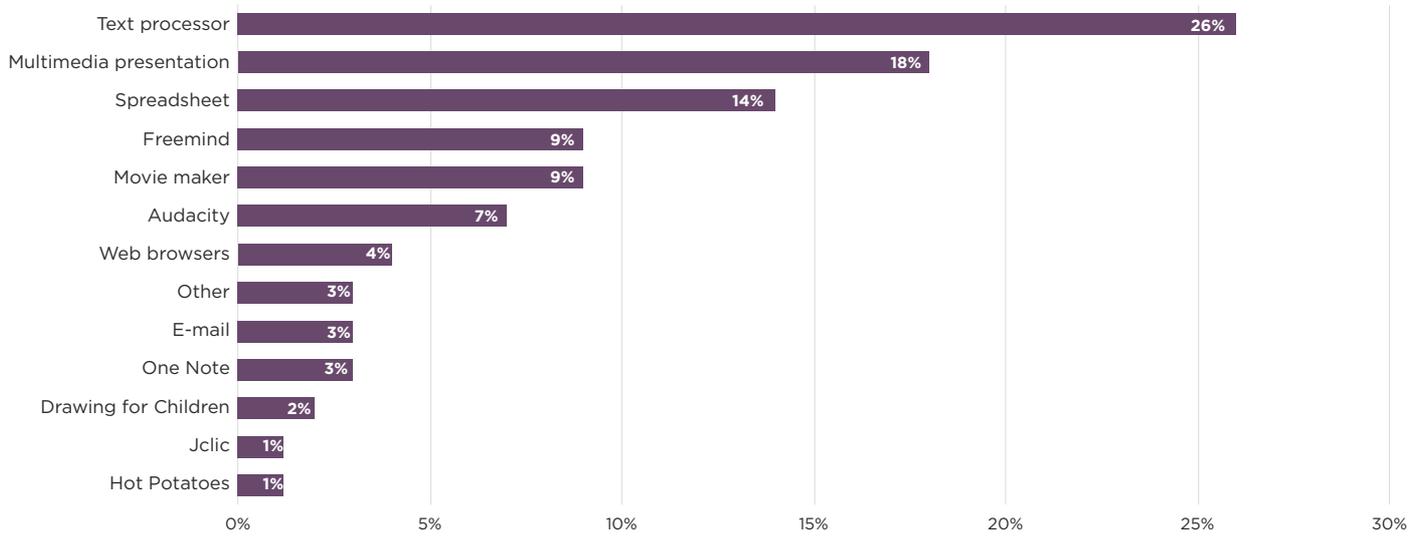
#### **Training in digital programs and their relationship with subject matters**

Training sessions with teachers are focused on the didactic use of preloaded digital programs. It's part

of the use of office IT consisting of text processor (Word), spreadsheet (Excel) and multimedia presentation (PowerPoint).

Although the MP is not invasive with class plans previously designed by teachers, it starts with learning goals teachers identify in their sessions and it teaches them how to integrate technology in order to provide the same content. Similarly, teachers are guided through Web browsers, the use of e-mail and the application of free-license programs.

**TRAINING ACTIVITIES IN DIGITAL PROGRAMS**



**Total training sessions in digital programs: 21,323**

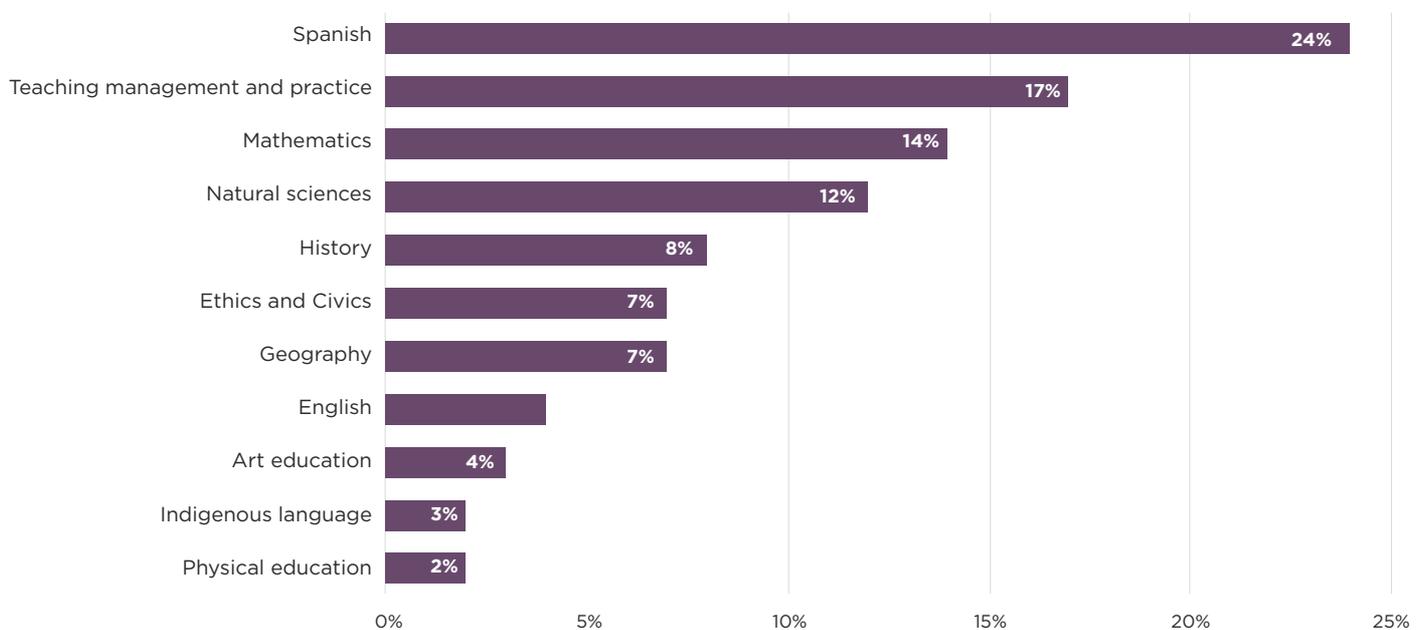


A teacher shows his/her skills on the use of technology when he/she easily integrates it into his/her learning sessions. According to study plans and programs, teachers work with their students on specific theme contents associated with

subjects. In this regard, the use of digital programs is promoted among teachers in order to develop a class at the Media Lab. Subjects with a higher usage were: Spanish, teaching management and practice, Mathematics, and practice, Mathematics, and

Natural Sciences, as well as topics that are permanently present in every school's agenda. Particularly, they used office IT programs (Word, Excel and PowerPoint, respectively).

### INTEGRATION OF TECHNOLOGY INTO ACADEMIC SUBJECTS



**Total training activities with digital programs associated with academic subjects: 20,098**

#### Main learnings

- Teachers' creativity can be promoted from exploring different digital programs; indeed, most of them discovered innovative ways to work with academic content. In overall, teachers ask ETIs what to do and use to teach any subject, but they get the answer as they discover and identify educational goals they can set based on technology.
- Teachers identify the text processor as a mean to protect their class plans since many of them keep them handwritten; besides, they find the text processor, spreadsheet, multimedia presentations, Movie Maker or FreeMind as productive tools where students are able to write, measure, summarize, exhibit or record while predesigned programs such as Hot Potatoes or JClíc are used to explore and support learning.
- A way to learn from the technology explored by teachers is through downloading office IT files they modify to understand steps required to get any result. The text processor was used as a mean to learn the Spanish subject, practice reading and writing, design administrative formats and assessment questionnaires; particularly to

design class plans.

- The spreadsheet was particularly accepted by teachers to work on statistical contents with students and it was very useful to design checklists such as attendance lists for students, record grades and estimate evaluation average grades.
- Multimedia presentations were used to carry out individual and collective exhibitions, as well as to show results to the School Technical Board and parents. Teachers invested their time in this tool since many of them still practice the descriptive method to give classes. The challenge was to use multimedia presentations as didactic tools but not as “flipcharts” to be used to pay full attention on them.
- Free-license programs different from office IT programs require more training time to explore their potential. The success derived from using these programs is related to ETIs acceptance, who simultaneously start and foster the use of free-license programs on students.
- Students and teachers used web browsers to find similar contents to real-world content and e-mail in order to share learning products, follow up online workshops, browse information from the Ministry of Public Education and manage procedures.
- Mathematics is a subject that can be easily and better used in Excel, where teachers make questions to students about how to make formulations and what type of information they



get from results. The biggest challenge of information found on the Internet or Wikipedia is for subjects like Social Sciences since students tend to copy and paste without interpreting information.

- Teachers persist on the use of digital programs setting challenges and they get familiar with their application in a deeper way when they adopt ownership goals instead of performance goals. For example, preschool education and low primary school identify Freemind (a

free-license program to design mind maps) as a useful tool to learn concepts and definitions.

- Movie Maker was well accepted by students as a program to make videos and document learning projects; however, the time required to design and edit a video might represent teachers leave the task without publishing their videos.
  - Teachers include the Audacity program in their class plans, and students work on recording voices, editing music and sounds.



**Digital skills**

Completing efforts made on the program relies on the perception teachers get from developing digital skills. As it can be noted, the use of technology (37%) is the ability with a higher ownership level teachers were able to successfully interact with and they were able to know its functionality; this made them be able to use it successfully in several class situations.

Some functions can be considered as universal, such as erasing, moving, exiting, etc., which can be standardized among programs so that the user doesn't need to vary its execution among programs. Students and teachers acquired

technical language as they explored digital programs and questioned the location of functions that allowed them to analyze and process information.

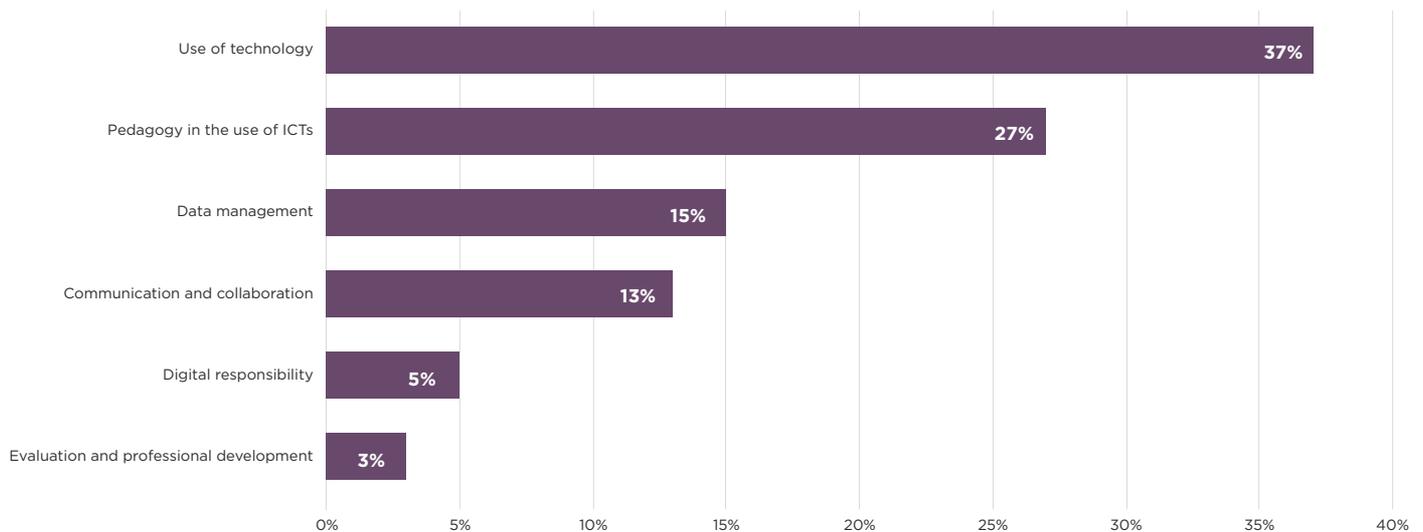
The second relevant aspect is Pedagogy with the use of ICTs (27%), which indicates that professors integrated technology into teaching practice processes; some of them involved designing and implementing class plans, creating supportive material and educational management.

Although the need to get teachers trained on the use of technology was identified, data management, communication and collaboration

represented a third aspect, which would strengthen teaching practice such as the use of collaborative and communication tools like e-mail, blogs, forums and instant mail services to work in a collaborative way, exchanging opinions, experiences and results with other students, as well as reflecting, planning and using creative thinking.

Evaluation and professional development, as well as digital responsibility report 8%, thus these skills should be reinforced in an autonomously way with teachers who were taught how to identify performance factors in these areas and how to take them into practice with their students.

**ACTIVITIES TO STRENGTHEN DIGITAL SKILLS**



**Total training activities with digital programs associated with academic subjects: 20,769**

## 5. Evaluation

As part of the Mentorship Program evaluation, a “Teaching Diagnosis of Digital Skills” was applied. Information was obtained at two stages: at the beginning of the program (pretest) and at the end of it (posttest). The comparison of both stages allows us to appreciate teachers’ progress during intervention months and to identify the educational impact of the Mentorship Program.

The Teaching Diagnosis of Digital Skills assesses two main aspects: the technical profile and the pedagogical profile. The first aspect refers to those digital skills a teacher shows while the second one regards how skills are used in pedagogical activities performed at the classroom.

Digital skills involved in the technical profile are as follows: use of file explorer, e-mail, web browser,

use of platforms to integrate evidence portfolios, text processor, spreadsheet programs, multimedia presentations, creation of learning objects, audio edition, video edition, image processing, and a software to create mind maps.

Scoring of every profile have been classified into three categories: basic, intermediate and advance level. Each level is described in Tables 1 and 2.

**TABLE 1. LEVELS OF DIGITAL SKILLS IN THE TECHNICAL PROFILE**

Score	Level	Definition	Example
0 to 35 points	Basic	Teachers only know a limited number of basic functions from digital programs. They are able to create very simple products with digital tools.	In the spreadsheet program, teachers are able to create a table and introduce data such as an attendance list or grading list.
36 to 80 points	Intermediate	Teachers get familiar with several functions of digital programs. They are able to perform edition and format homework on their digital projects.	In the spreadsheet program, teachers are able to edit a table considering color, font and style. They also know how to introduce simple formulations such as addition or average. Besides, they are able to put data in order from the highest to the lowest and create a graph.
81 to 112 points	Advanced	Teachers know most functions of digital programs and they are able to perform configuration homework and to enable advanced options. Teachers are supported on digital tools to achieve goals, begin sophisticated projects and create data products.	Retaking the example of the spreadsheet program, teachers at this level are able to create a grading template to be used in every two-month term, the way they treat data is more sophisticated like using dynamic tables, different types of graphs, statistical formulations and use of macros. Teachers are able to create a database with grades from previous school years and create a report of achievements.

**TABLE 2. LEVELS OF PEDAGOGICAL INTEGRATION OF ICTS IN THE PEDAGOGICAL PROFILE**

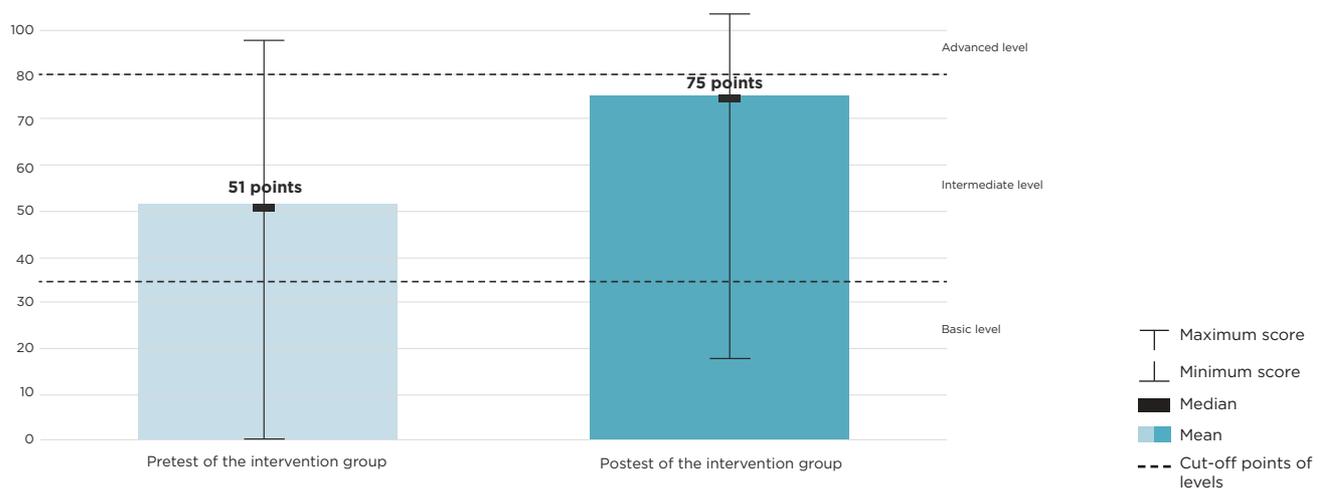
Score	Level	Definition
0 to 41 points	Basic	The use of digital tools in teaching practice is not very common. The link stated by the teacher between the use of digital tools and activities developed by students in the classroom is limited and barely systematic.
42 to 62 points	Intermediate	The use of digital tools in teaching practice is occasional. Teachers create digital products as attendance lists and class plans, create digital presentations for their class and strengthen some of their students' digital skills.
63 to 89 points	Advanced	The use of digital tools in teaching practice is continuous. Teachers rely on digital tools in a systematic way to carry out their teaching practice. They considerably strengthen their students' digital skills, create technological projects and foster digital collective work.

Regarding the technical profile, teachers get a mean of 51 points in perceived digital skills at the beginning of the evaluation. For the second stage, average score increases more than 20 units with a mean of 75 points.

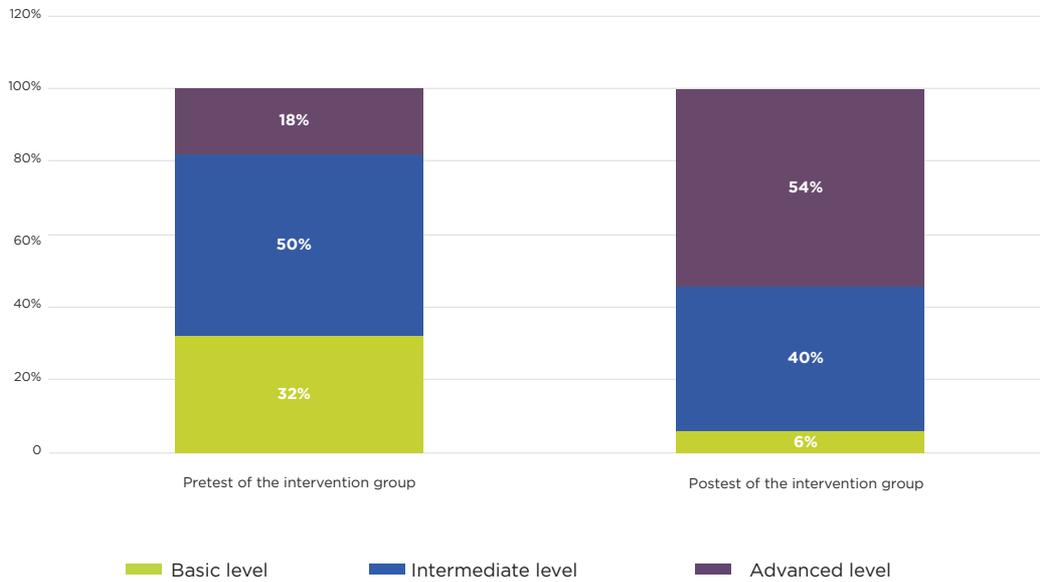
The proportion of teachers per level substantially changes too. While in the first stage of the evaluation most teachers were at an intermediate level, the advanced level predominates in the second stage with 54% (see Figures 1 and

2). Increase in perceived digital skills is very positive and it can be due to the Mentorship Program since teachers are continuously trained by ETIs thus they explore digital contents.

**FIGURE 1 - AVERAGE SCORING OF THE PERCEIVED DIGITAL SKILLS**



**FIGURE 2 - LEVEL OF DIGITAL SKILLS**

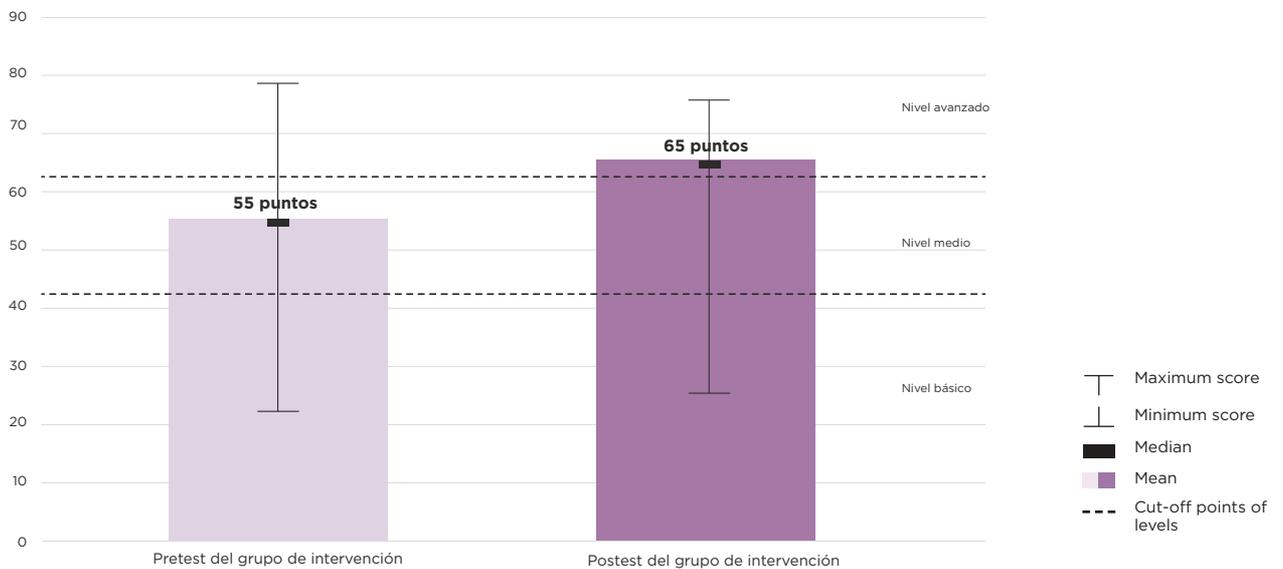


Regarding the pedagogical profile associated with the integration of technology into a classroom, results are also favorable since teachers got higher scoring during the second stage of evaluation, and the proportion of teachers at

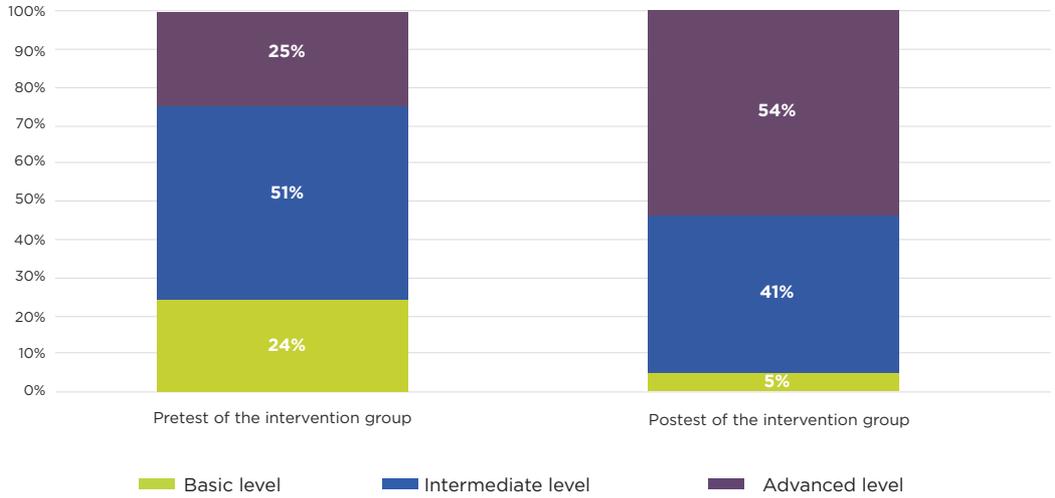
the advanced level substantially increased: from 25% to 54% (see Figures 3 and 4). We can observe that the Mentorship Program substantially influences not only in the technical aspect of digital knowledge but also in the way to

integrate it into classes. As teachers acquire a more robust knowledge in the digital area, technology plays a main role in the classroom, thus it is likely to transmit knowledge and digital skills to students.

**FIGURE 3 - SCORING OF PEDAGOGICAL INTEGRATION OF TECHNOLOGY**



**FIGURA 4 - NIVEL DE INTEGRACIÓN PEDAGÓGICA**



In a more specific analysis, information technologies more frequently used by teachers are: text processor, file explorer and the multimedia presentations (Figure 5).

The result is not casual since these programs are very useful for the teacher’s activities such as class lists, planning and didactic presentations while the file explorer is necessary to store and organize

previous products in the computer. As previously mentioned, we noted the frequency of use in all information technologies increased during the second evaluation.

**FIGURE 5 - FREQUENCY OF USE OF INFORMATION TECHNOLOGIES**

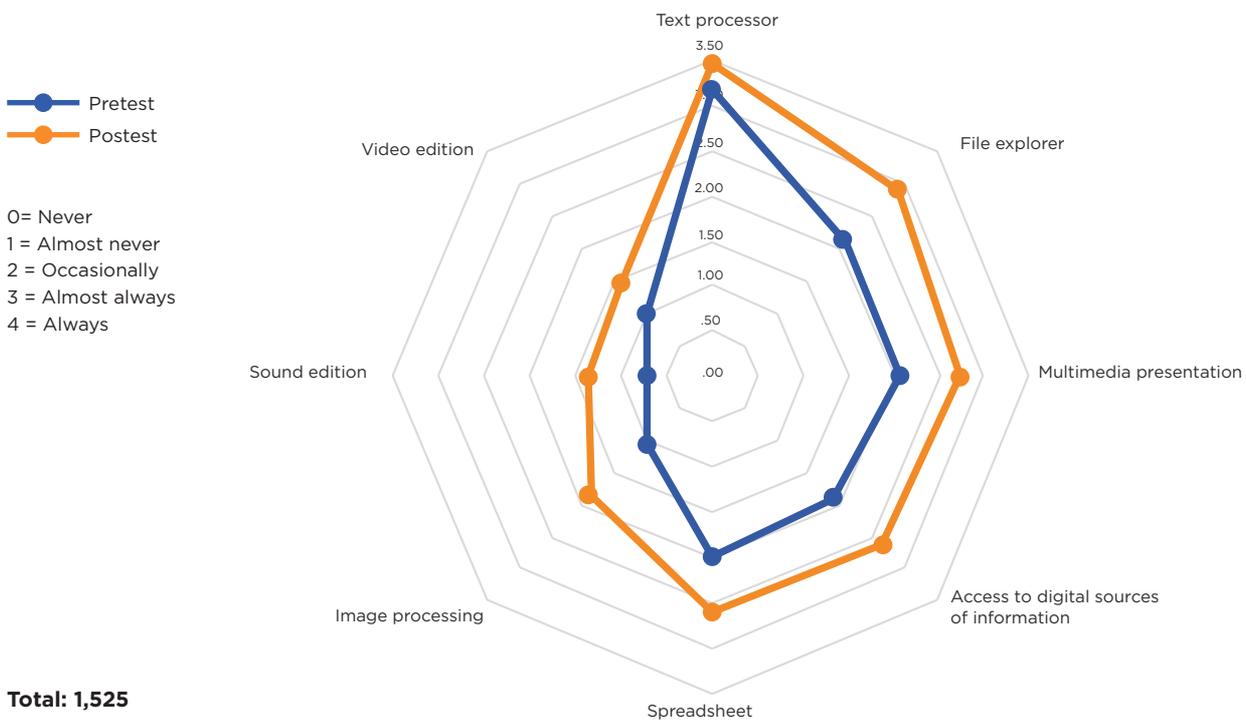


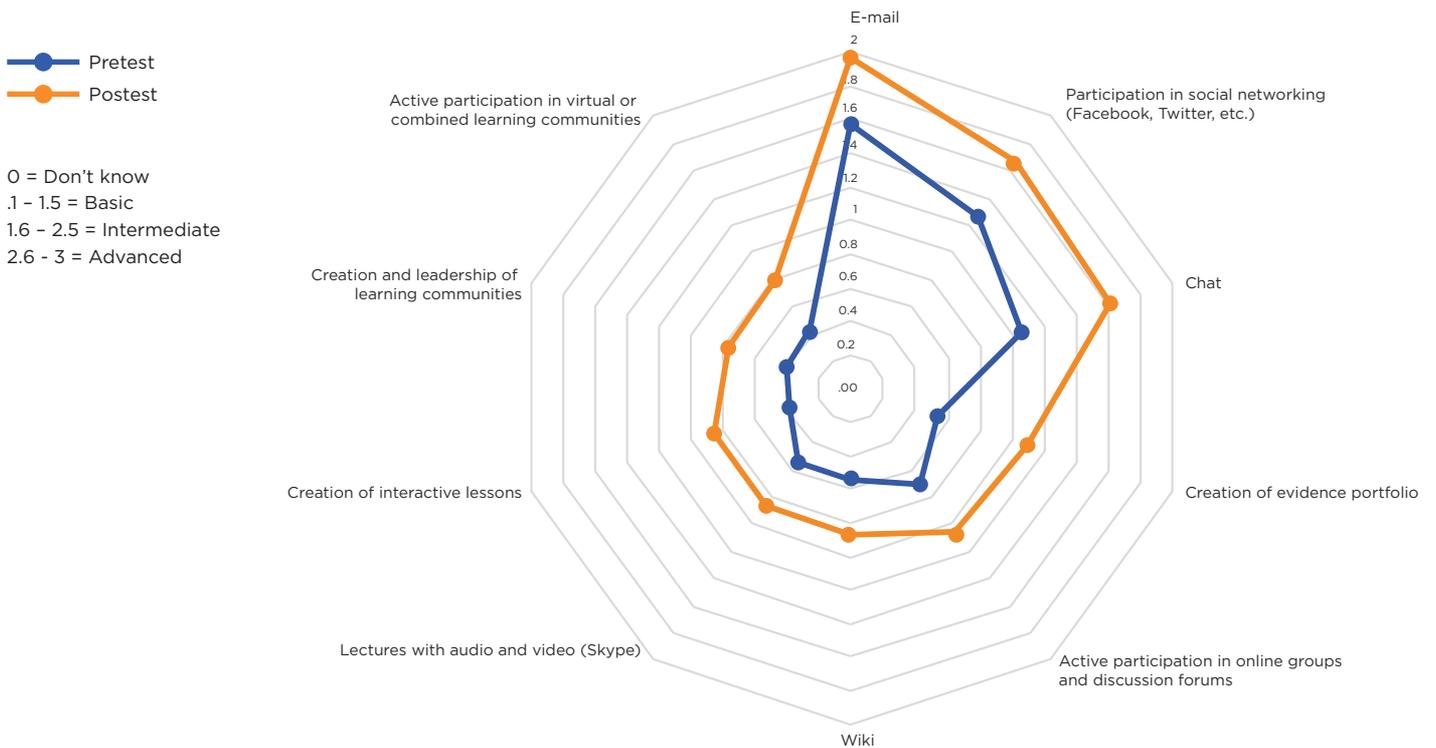


Figure 6 reflects results of the perceived ownership of online communication tools resulting in the highest scoring in posttest. The use of e-mail resulted in the

higher score with an average in accordance with the intermediate level. The use of social networking was in second place but also within the intermediate level.

This result is consistent with the global trend since society sectors are increasingly integrating these technologies into working life.

**FIGURE 6 - LEVEL OF OWNERSHIP OF ONLINE COMMUNICATION TOOLS**



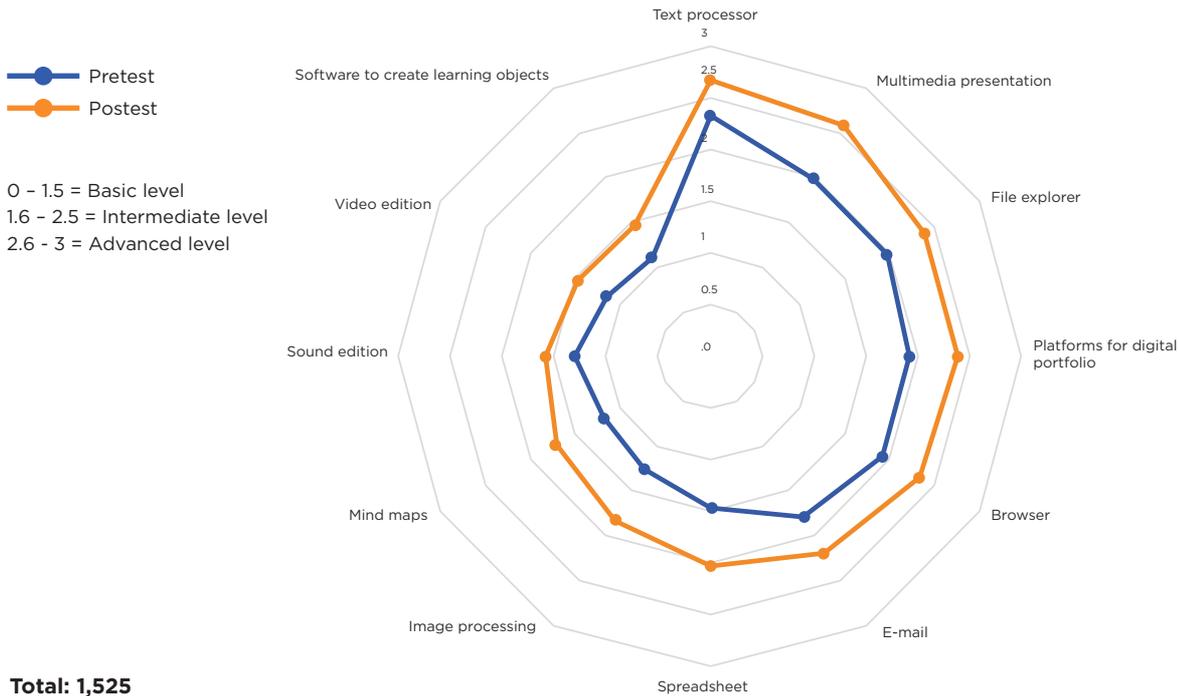
**Total: 1,525**

Figure 7 reflects the level of perceived ownership of some digital programs; results are also

favorable in posttest. The text processor, multimedia presentation and file explorer are the most

relevant programs. (see Figure 7).

**FIGURE 7 - LEVEL OF OWNERSHIP OF ONLINE COMMUNICATION TOOLS**



**Total: 1,525**

**Satisfaction of the program**

At the end of the school year, a “Scale for the Mentorship Program Perception” was applied to teachers. It is an opinion questionnaire aiming to measure the level of satisfaction from the Program, as well as from Education Technology Instructors.

This questionnaire has 16 questions considering aspects like training and execution of the instructor throughout the school year, the benefits of the Program in the teacher’s professional performance, in his/her teaching practice, in students and community. There

were other questions where teachers were asked if they would be willing to take part in the Mentorship Program for the following school year. Scoring of sub-scales were classified into three levels of satisfaction (see tables 3 and 4).

<b>TABLE 3. LEVELS OF SATISFACTION WITH THE MENTORSHIP PROGRAM</b>	
<b>Scoring</b>	<b>Level of satisfaction</b>
31 to 40 points	High satisfaction
21 to 30 points	Intermediate satisfaction
10 to 20 points	Low satisfaction

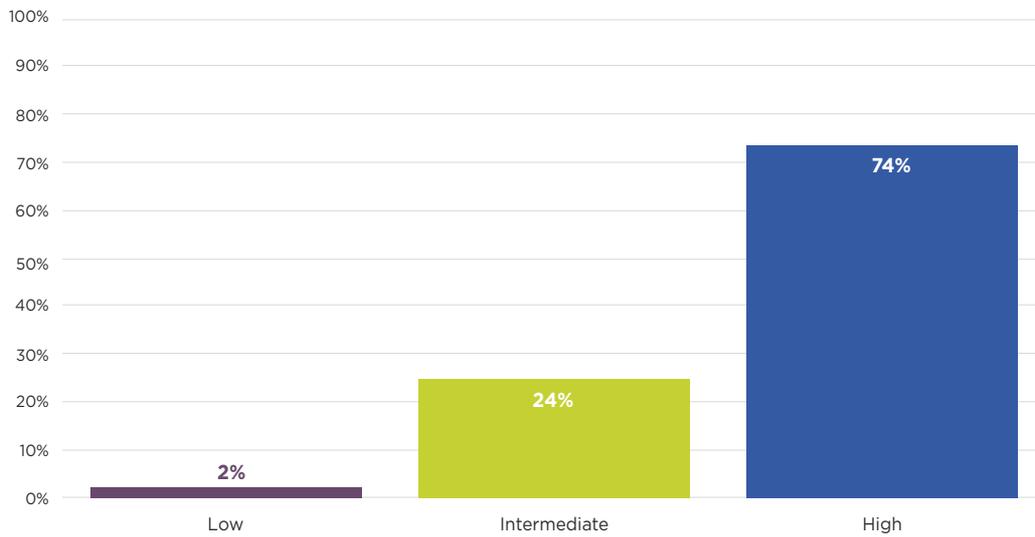
<b>TABLE 4. LEVELS OF SATISFACTION WITH THE EDUCATION TECHNOLOGY INSTRUCTOR</b>	
<b>Scoring</b>	<b>Level of satisfaction</b>
19 to 24 points	High satisfaction
13 to 18 points	Intermediate satisfaction
6 to 12 points	Low satisfaction

Results from this scale can be noted in Figures 8 and 9. Teachers have undoubtedly observed the benefits of the program for themselves and students, and they have reflected this in their answers:

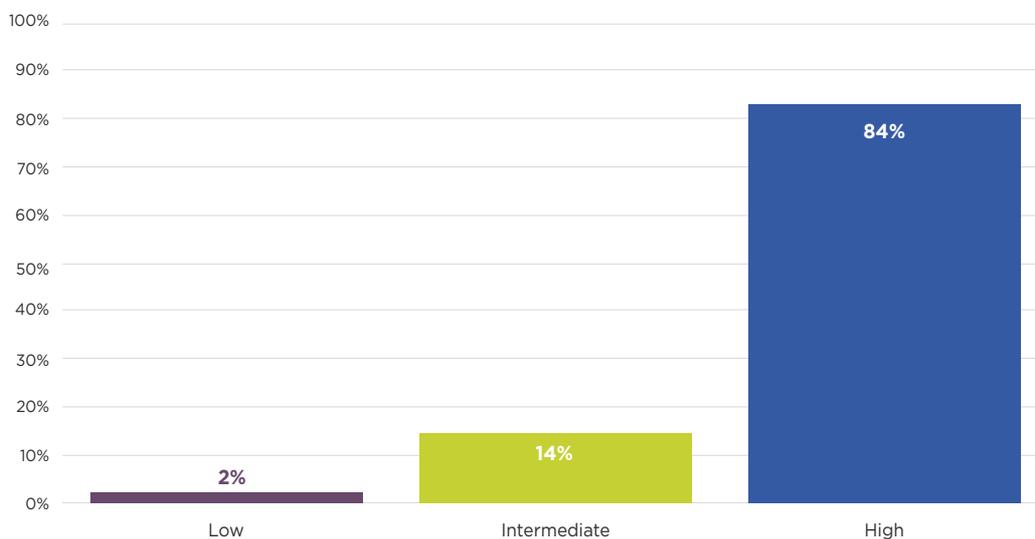
73.6% teachers have a high level of satisfaction, 24.5% show an intermediate satisfaction, and less than 2% teachers have a low satisfaction. The mentor's approval is also very positive since 84.5%

have a high level of satisfaction. This indicated the level of empathy towards the mentor and the quality of his/her mentorship.

**FIGURE 8 - LEVEL OF SATISFACTION OF THE PROGRAM**



**FIGURE 9 - LEVEL OF SATISFACTION OF THE INSTRUCTOR**





### Digital skill of students

Besides evaluating teachers' digital skills, students from 5th and 6th grade were also assessed, as well as students from 1st, 2nd and 3rd grade in High School.

A relevant aspect to consider is to know if students have a computer at home. Almost half of the evaluated population don't have a computer (Figure 10). This condition suggests that it's the first time many students get in contact with a computer due to technological equipment for schools benefited by the Mentorship Program, and it is very likely that their previous knowledge on the digital field is null. For this reason, taking their socio-economic context into account and the digital lack many students show, many results are encouraging and positive because, although it seems to be a minimum progress, it is actually outstanding.

FIGURE 10 - STUDENTS WITH A COMPUTER AT HOME



Total students: 4,053

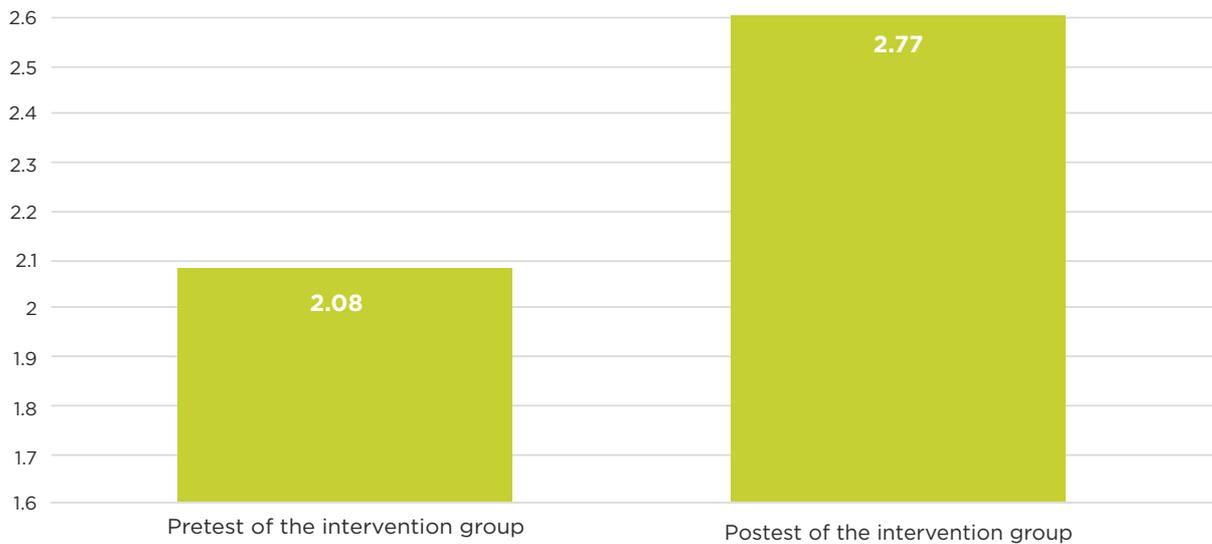
Students took a test on reading comprehension and data search in both stages: before the intervention of the Mentorship Program (pretest) and after the program (posttest). Comparing both stages allows us to identify the educational impact of the Mentorship Program. The

maximum scoring of the test is from 5 to 7 points for primary and high school levels, accordingly.

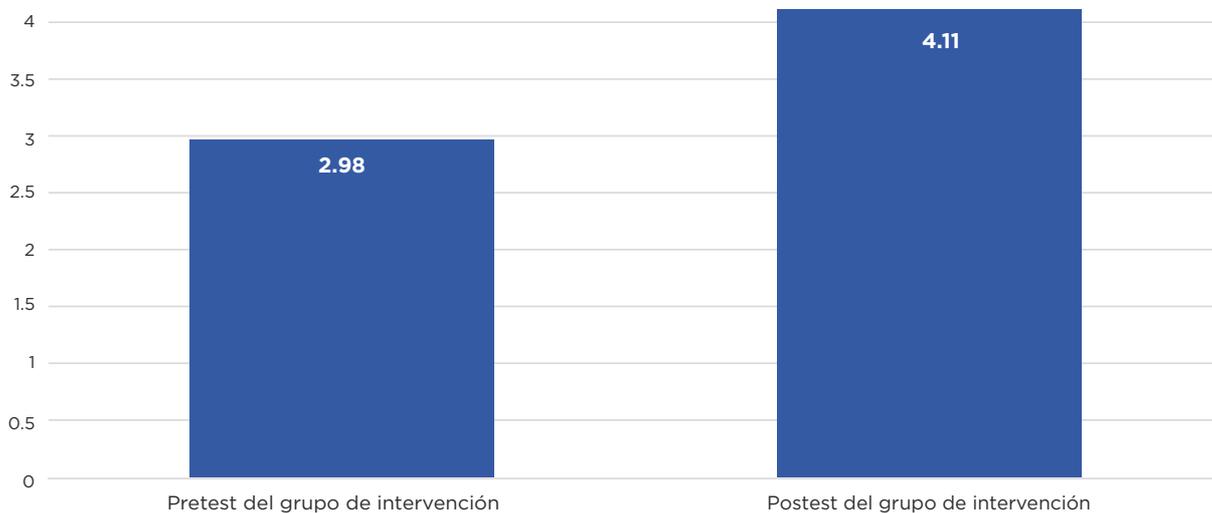
Figures 11 and 12 reflect students' performance in these tests; both primary and high school levels increased their average scoring at

the posttest, being the high school level the most outstanding. These results demonstrate the Mentorship Program helps improve reading comprehension and data search competences in students.

**FIGURE 11 - AVERAGE SCORING IN PRIMARY SCHOOL STUDENTS**



**FIGURE 12 - AVERAGE SCORING IN HIGH SCHOOL STUDENTS**



**Total students: 4,053**

Students were also asked about their ability to own the following digital programs: e-mail, web browser, spreadsheet program, multimedia presentation, image and video edition program, and the use of chat.

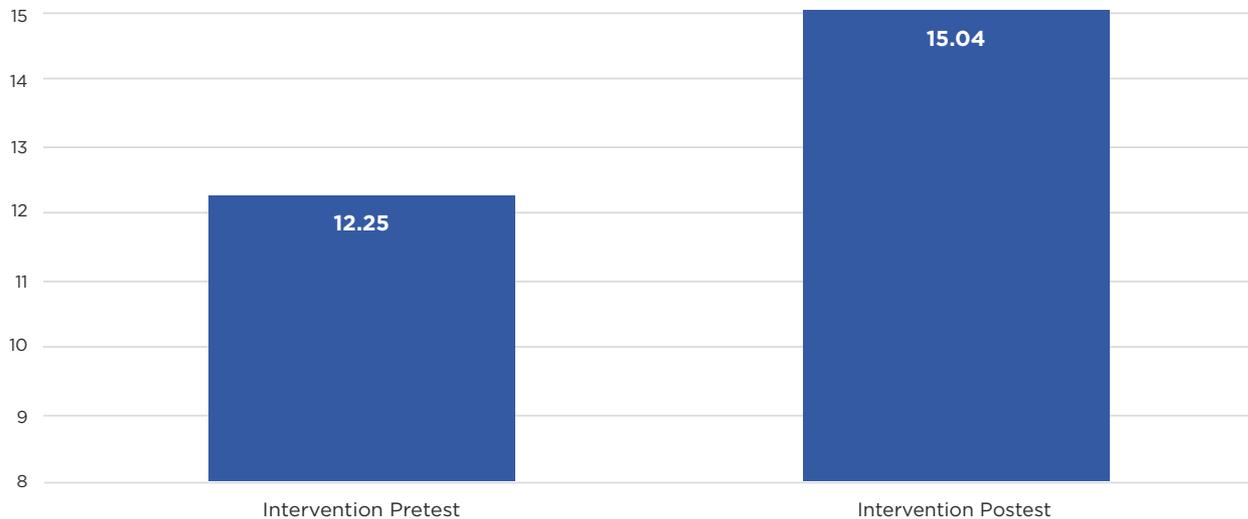
The range for this test is from 0 to 22 points with three levels of skills: basic, intermediate and advanced (see table 5). Results are also very positive since students achieved a higher score in postest (Figure 13). This increase in the perceived digital skills is not casual but it is due to

TABLE 5. LEVELS OF DIGITAL SKILLS PERCEIVED IN STUDENTS	
Scoring	Level of satisfaction
31 to 40 points	High satisfaction
21 to 30 points	Intermediate satisfaction
10 to 20 points	Low satisfaction

the increasing use of the Media Lab that teachers have fostered; this condition makes possible that

students practice and develop their skills on the computer.

FIGURE 13 -SCORING OF DIGITAL SKILLS



**Total students: 4,053**

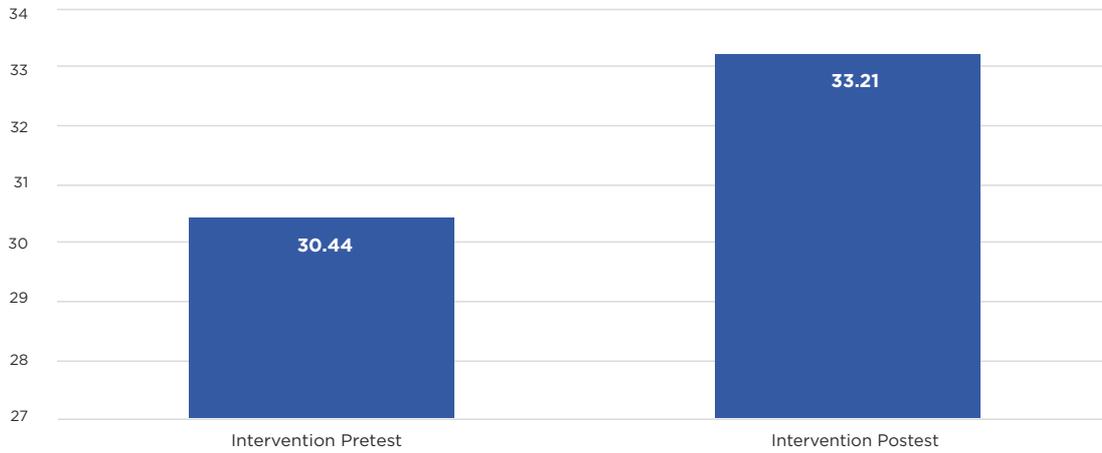
Lastly, some cognitive and interpersonal skills were measured in students, such as: school motivation, ability to solve problems, ability to collaborate, critical thinking and ability to communicate. Results are favorable in all of these skills since the average score achieved in the postest is higher than in the pretest

(Figures 14 to 18). These results indicate that the action of the Mentorship Program also makes an impact on such abilities.

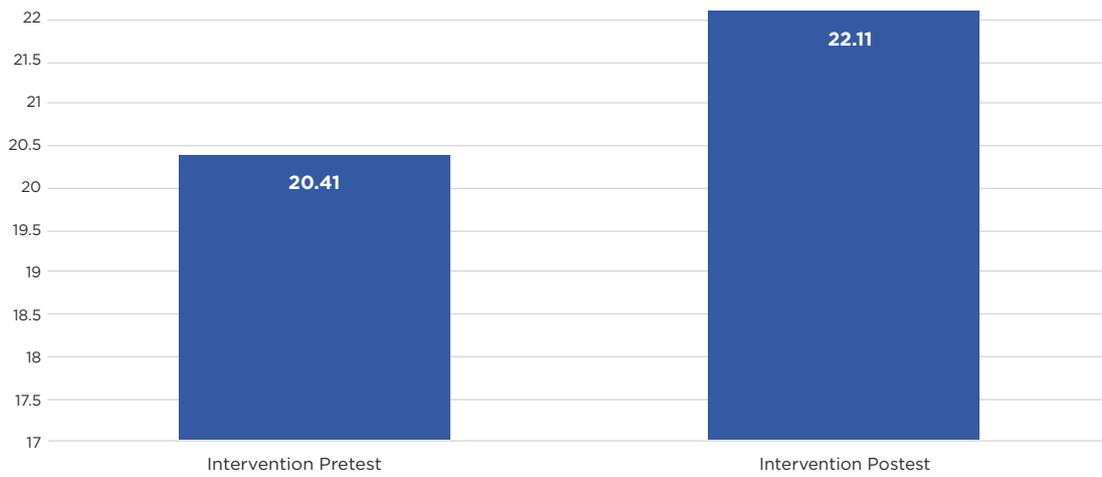
When working with technology, students show enthusiastic and their motivation increases; they also learn how to work in teams when

they need to share a computer or work on a collective project, they also learn how to express their ideas by recording them in a text or image document, and they also develop their critical thinking and the ability to solve problems on a more regular basis when creating a digital product.

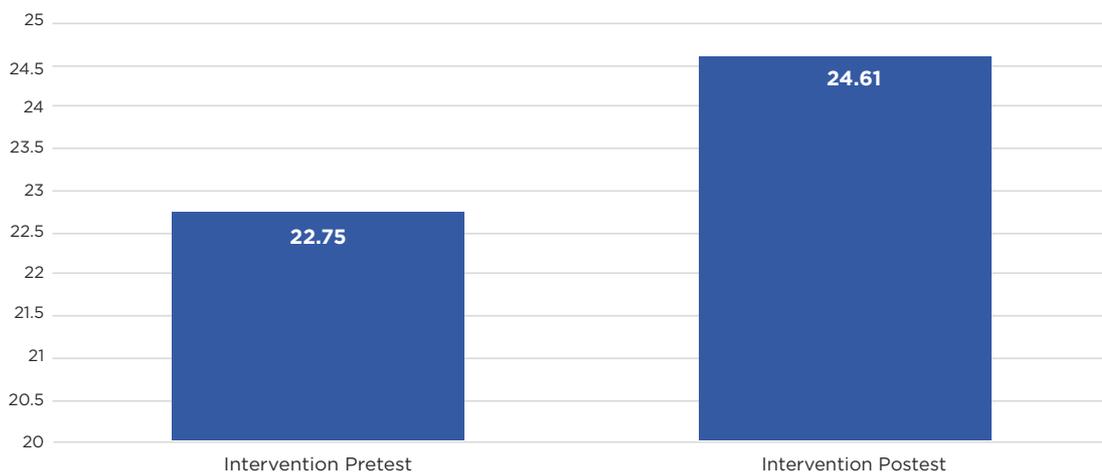
**FIGURE 14 -SCORING OF SCHOOL MOTIVATION**



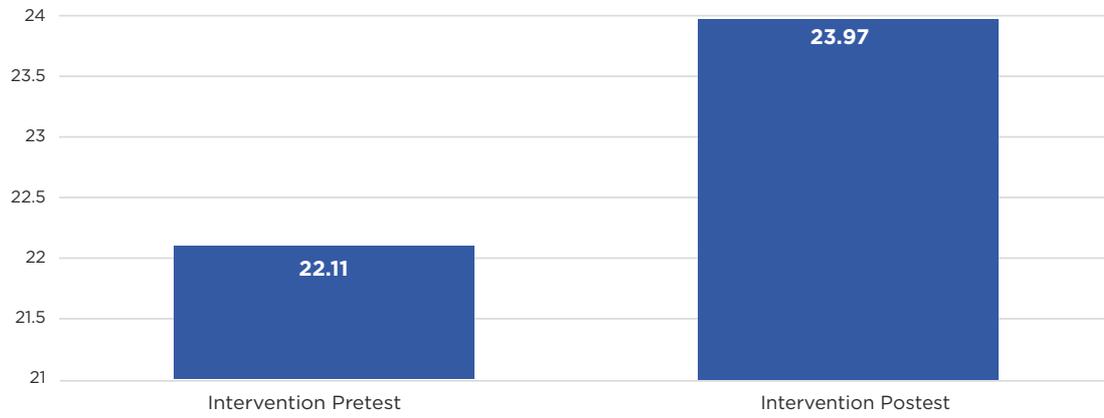
**FIGURE 15 -SCORING OF SKILLS TO SOLVE PROBLEMS**



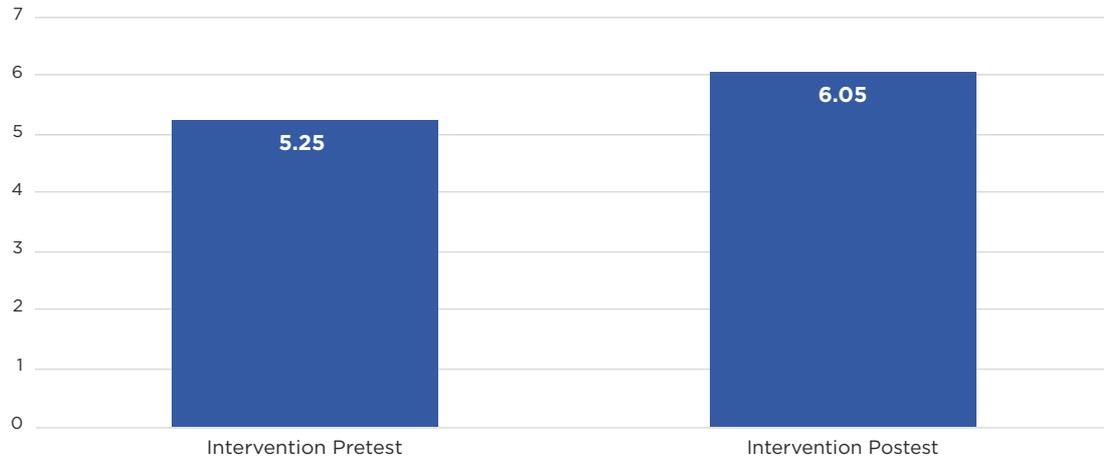
**FIGURE 16 -SCORING OF COLLABORATION**



**FIGURE 17 -SCORING OF CRITICAL THINKING**



**FIGURE 18 -SCORING OF COMMUNICATION SKILLS**



**Total students: 4,053**



## CONCLUSIONS

**In summary, this evaluation of the Mentorship Program highlights the following conclusions:**

- The inclusion of technology by UNETE into schools has been reflected in teacher's digital skills, the results show that teachers acquire a greater mastery of digital programs after getting mentorship, having a higher percentage in the advanced level. The most important results are found in programs such as text processor, file explorer, multimedia presentation and the use of chat and social networking.
- Besides digital skills, teachers also are benefited in their teaching practice. Both aspects are related since the increase in one of them involves the increase in the other because as teachers feel more capable with technology, they are able to take it to the classroom to guide students, face technical problems, and solve questions.  
  
Results show integration of technology in the classroom that has substantially increased after the intervention of the Mentorship Program.  
  
At the moment of associating technology with curricular content, the teacher provides opportunities for the students to develop digital skills of the 20th Century, also the class is more interactive and stimulant.
- Teachers recognize and notice the benefits of the Mentorship Program, which is reflected in the high levels of satisfaction and in the survey about the program. The satisfaction perceived is associated with the good work of the ETI during the school year, the operation of the Program, and the benefits provided to the teacher's development, on their teaching practice, on the student, and on the community. An aspect that can be highlighted is that most of the teachers answered that next year they would be part of the Mentorship Program again.
- The Mentorship Program has also had good results with students. Compared with themselves in time, students have progressed after getting the Model's support. Their skills to handle several digital programs were strengthened, as well as some cognitive and interpersonal abilities.
- The great cognitive and emotional benefit students get while interacting with technology is undeniable, besides the preparation they get in the current digital world.

# SPECIAL PROJECTS

## CASA DEL NIÑO INDÍGENA (CDI)

Fundación Patrimonio Indígena in collaboration with Fundación Televisa equipped two Media Labs integrating the UNETE Model in school shelters Cecilio Chi and Vicente Guerrero, located in Maxcanú and Tzucacab. The project integrated added values of the Mentorship Program for the promoters to strengthen their digital skills applied to productive projects and promote the use of technology in children and young interns.

The intervention of UNETE consisted in guiding and training promoters in learning with technology through practices, advisories in digital programs and educational sequences preparation that come from the productive workshops promoted by Fundación Patrimonio Indígena.

The Model looks to set the foundations of a culture in which the responsible of each house develops or finds new teaching or administrative strategies by using digital content and programs contained in the equipment.

Educative intervention was performed during school year 2016-2017 through the ETI figure and allowed a positive transformation of the way promoters, interns and house heads perceive technology.



**Main figures**

The next table gathers the quantitative information of the total beneficiaries of the project, interaction sessions in the Media Lab and training hours of the CDI promoters.

NAME OF THE SHELTER	WORK CENTER CODE	MUNICIPALITY	MENTORSHIP DAYS	TRAINING HOURS	SESSIONS IN THE MEDIA LAB	NUMBER OF STUDENTS REGISTERED	PROMOTERS	INTERNET SERVICE
Albergue Escolar Indígena Cecilio Chi	31TAI0874H	Maxcanu	182	517	168	93	2	Active
Albergue Escolar Indígena Vicente Guerrero	31TAI0862C	Tzucacab	191	161	52	38	2	Active

\*The difference between training hours and sessions in the Media Lab at the Tzucacab shelter was due to the rotation of house heads and promoters; likewise, the number of students caused a change in the results expected.



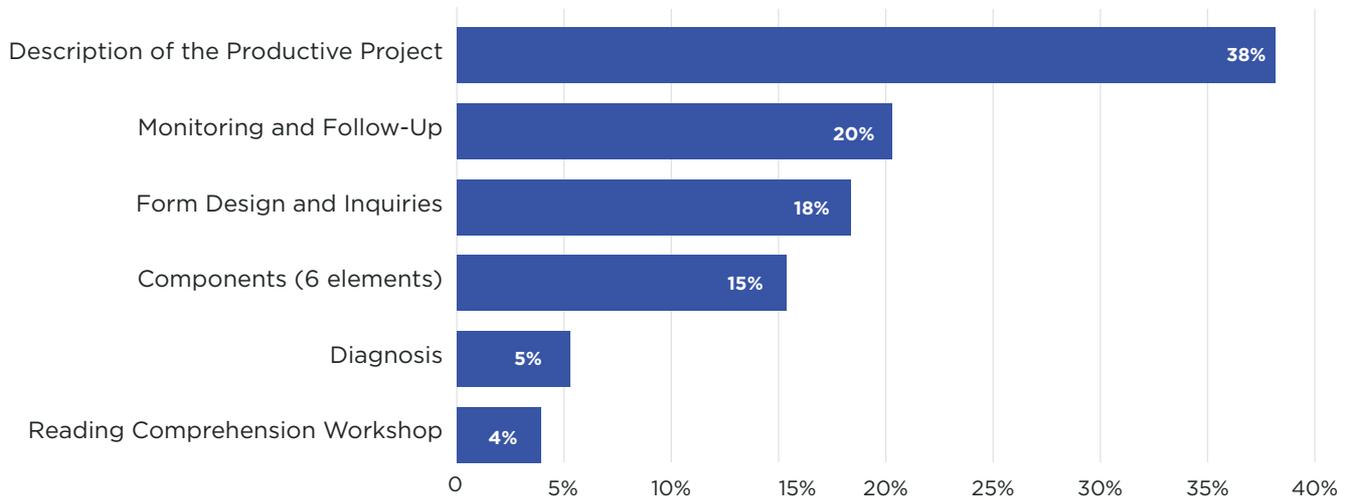
### Educational Intervention

The Mentorship Program was designed according to the following Development Plan.

CONTENT DISTRIBUTION					
PROCESS		ICT ACT.- MENTORSHIP	DIGITAL SKILL	EXPECTED PRODUCT	RESPONSIBLE
Diagnoses	Technical	Forms	Baseline	Report of shelters and its context	Instructor
	Socio-Educational				
	Digital Skills				
Description of the Productive Project	General Information	Text Processor	Data Management	Productive Project Card	Promoters
	Project Location				
	Flow Chart				
Forms Design and Inquiries	Instruments for Surveys	Research forms	Communication and Collaboration	Project Assessment Report	Promoters / Students
	Market Descriptive Analysis	Audio and Video Programs			
	Environmental Impact	Digital Presentations			
Components	Budget	Spreadsheet	Use of Technology	Administrative Formats	Promoters / Students
	Materials and Suppliers	Multimedia Presentations		Human Resources Formats	
	Material and Human Resources			Improvement Proposals Report	
	Quality Control	Calendario		Process Instructions and Manuals	
	Product Production Tutorials	Almacenamiento digital		Catalogs	
	Product Catalog	Fotografía y video		Advertising Material	
	Commercialization and Advertising	Chat			
	Sales Cycle	Procesador de textos			
Workshops	Reading Comprehension	Multimedia	Pedagogia con uso de las TIC	Learning Sessions	Instructor / Students
Monitoring and Follow-Up	Monthly Deliverables	Correo electrónico	Responsabilidad digital	Reports	Instructor / Promoters
		Procesador de textos			
		Formularios			
		Carpeta de evidencias			

This way, the ETIs worked with promoters on several practices linked to the productive projects under their charge. The training sessions and advisories were performed in the Media Lab and digital programs that derived in learning products were integrated.

**MENTORSHIP PROGRAM FOR SHELTERS**



**Total activities: 264**

Regarding the results of the Mentorship Program for Shelters, 38% of the activities were focused on the description of the Productive Project; this means that promoters created card indexes classifying each project’s processes, locate them in time and integrate the purposes that must be achieved at workshops with students. This activity allowed promoters to organize processes and scopes of their workshops with the support of the text processor.

Monitoring and follow-up activities represented 20% of the Program’s activities, this way promoters learned to use e-mail and to request reports from their students using this mean; likewise, they identified strategies to supervise homework and report results of progress both in productivity programs and digital forms.

Designing forms and inquiries is an activity that allowed promoters to prepare perception surveys and market principles, prepare process control instruments and make

decisions based on information. This strengthened communication and collaboration skills through processing digital tools such as audio, video and multimedia presentations.

The skill to use technology was developed through six components of project management: administrative formats, human resources, improvement proposals reports, instructions and manuals; catalogs and advertising material. For such purpose, office IT digital programs were mainly used.

The equipment and development project of the Mentorship Program transformed the practice of using technology in School Shelters, as showed in the evaluation and perception results among promoters, students and house heads. In order to achieve this, a new pedagogic intervention plan was designed, linked to the development of digital skills within productive projects contexts. Results allowed the identification of learning both in

direct and institutional beneficiaries.

**Reflections**

- Conceptions of promoters and house heads in indigenous school shelters towards the Media Lab are focused on their utility as a computing room. This perception was changed due the intervention of the Education Technology Instructor in order to move around a learning space on which digital skills are developed.
- The main challenge was that students and promoters could use the preloaded content for productive activities. Through the Mentorship Program the advantages of consulting preloaded content, digital libraries and programs which allow beneficiaries to take advantage of technology without having access to Internet were showed. Additionally, it supported family economy because no books, stationary

and computer services were purchased.

- Promoters and students integrated new vocabulary by incorporating terms of project management and digital language: image edition, text format, connection among content, file extension and digital folders, e-mail and peripheral devices, among others. Now promoters use their sense of cause to supervise the correct performance of the Media Lab; for example, to correctly turn computers on and off, browse safe sites and guide steps sequence to activate preloaded programs.
- The development of productive projects depends on several factors, among which there is the use of the Media Lab to generate learning. It is recommended that during the planning phase of the workshops a feasibility analysis is made based on the socio-cultural, infrastructure and rotation scopes of the personnel and the drop out of students in shelters. In every case it was necessary to clearly design the functions of the Education Technology Instructor to avoid associating the achievement of productive projects to the use of the Media Lab.
- It was identified that promoters and students were able to use digital programs in three general ways: 1. As support for the delivery of school tasks, 2. As a mean to develop digital



skills within productive projects contexts, and 3. As a tool for projects management and advertising material design.

- An additional challenge was to guide the beneficiaries to an accelerated learning pace, since promoters and students carry slow processes, postpone their activities and didn't have the culture of accountability. The

Mentorship Program proved that technology can optimize information delivery times and perform tasks with less steps.

- One institutional learning is to define the hierarchy line of promoters, house heads, education technology instructors and project leaders because receiving instructions from different people confuses



the actions of operators in shelters.

- As a result of the intervention it is possible to conclude that it is important to empower and strengthen digital skills of CDI promoters and house heads so they can strategically improve their administrative processes and the implementation of productive projects.

- Both CDI promoters and house heads felt supported by the ETIs of UNETE; however, not all of them were willing to commit due to their working conditions, which affected the dynamics of the shelter and the implementation of processes related to the Media Lab.
- Even though shelters are a great opportunity for many students

to move forward, they also represent a commitment and a change of paradigms related to order, education and values that many times aren't available at home, thus it affects the result of projects and the environment at the shelter.

- Shelter Cecilio Chi, in comparison with the one in Tzucacab, is more mature since it allows the implementation of projects in a more expeditious way, it has more years operating and its young beneficiaries already have a different vision of what it means to be in that place. Even though Tzucacab is a shelter that has all the necessary infrastructure, it's still young and the number of beneficiaries that could participate in workshops is small, therefore rotation is a factor that must be considered. Also, the zone is not very helpful to the environment of the place due to the high rate of drugs and alcohol use.
- The challenge of CDI and Patrimonio Indígena is a matter of time to slowly train participants and achieve the desired results. UNETE's work based its development in the empowerment of CDI promoters and house heads; we start from the legacy premise: We retire hoping our knowledge remains in the shelter over the years. We thank the trust of each one of the participants, these results will allow us to improve the implementation of future projects.



**FINANCIAL EMPOWERMENT**

UNETE, together with Sesame Workshop, designed a program to able preschool and primary level students to learn skills related to financial empowerment: save, establish goals, distinguish between desires and needs, and donate, among others.

Through guided activities, students learned financial empowerment skills with the content of Sesame, and teachers incorporated these activities into the use of technology to reinforce learning.

In this project, ETIs helped teachers incorporate different free-license tools (video, audio, and image edition, mind maps and drawings edition, among others) based on their students’ needs and characteristics.

4,889 activities were performed in total, which involved the use of technology and financial



EDUCATIONAL LEVEL	SCHOOLS	STUDENTS	TEACHERS	INSTRUCTORS
Preschool	52	8,373	298	15
Primary	28	1,711	53	6
<b>Totals</b>	<b>70</b>	<b>10,084</b>	<b>351</b>	<b>21</b>



**3,670**  
training  
hours



**1,298**  
parents participating  
in workshops



**11,750**  
benefited  
persons



**3,789**  
sessions in the  
Media Lab



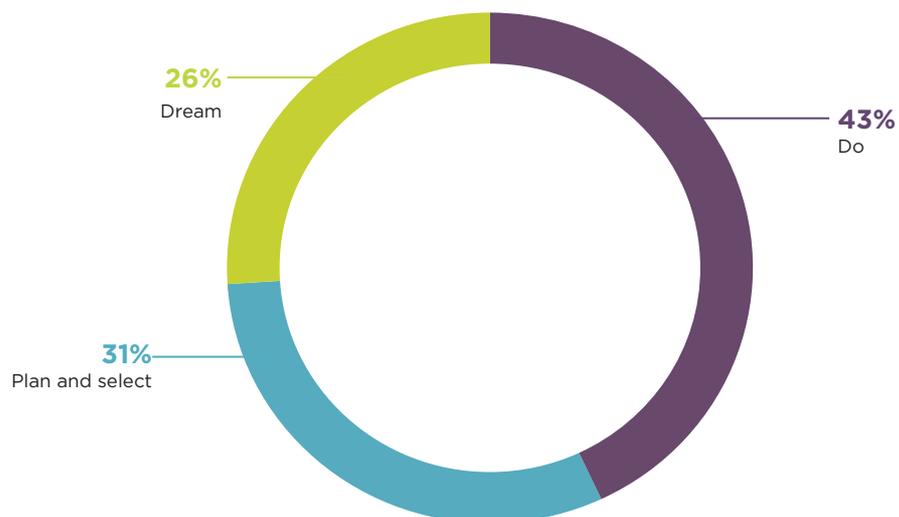
empowerment, all based in three main themes: dream, plan, and do (Chart 1).

The activities adhered to the SEPs plans and programs; therefore, abilities located in different educational fields were developed; especially those of personal and social development, as well as mathematical thinking skills (Chart 2).

Finally, a total of 4 events were carried out with participants of the school community so students, parents, and teachers could spend time with each other in their schools with Sesame characters and could enjoy a day with recreational activities and a live show.

Among the program's results, students were able to develop financial empowerment skills and teachers developed skills to incorporate technology into their teaching process by creating innovative strategies.

**CHART 1 | MAIN THEMES**



**Total activities: 4,889**



Students learned financial empowerment skills like saving, establishing goals, distinguishing between desires and needs, donating, among others.

CHART 2 | VOCATIONAL FIELD

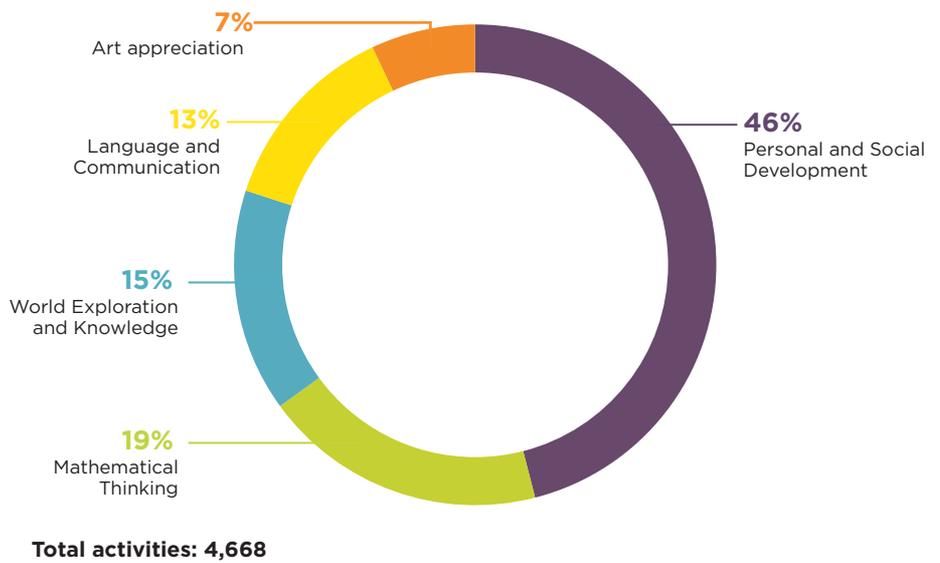
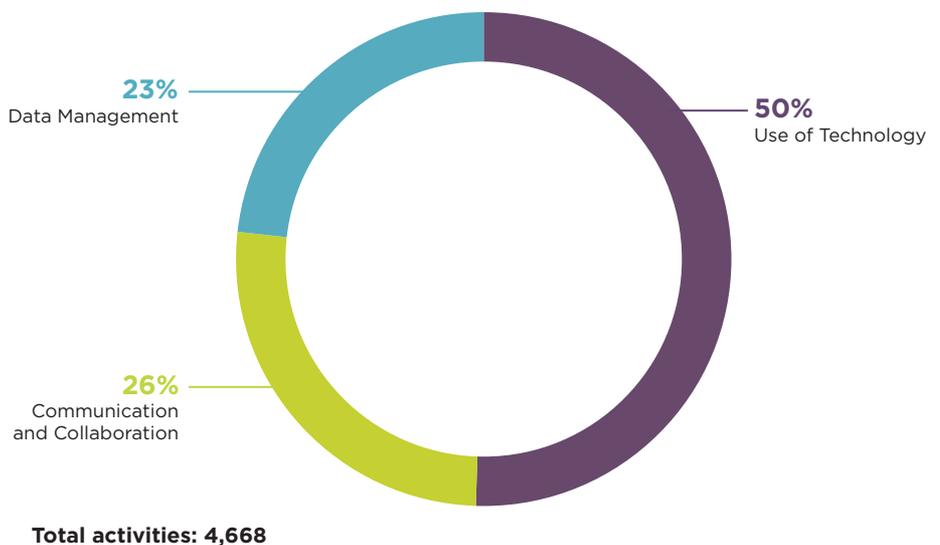


CHART 3 | DIGITAL SKILLS



## Main figures

The next table gathers the quantitative information of the total beneficiaries of the project, interaction sessions with the use of graphing calculator and training hours of educational technology training with teachers..



SCHOOL NAME	WORK CENTER CODE	DISTRICT	BENEFITED STUDENTS	MENTORED TEACHERS	MATHEMATICS LAB SESSIONS USING CALCULATORS	TRAINING HOURS
Cetis 50 Mariano Matamoros	09DCT0050G	Iztapalapa	2,190	12	207	267

Sessions in the Mathematics Lab consisted of practices were students explored didactic situations that teachers planned during training, it can be observed that most activities were focused on teaching training.

Applications incorporated into the FX-CP-400

Regarding the calculator, charts and treatment of data topics are easy to link, since there are display tools, a situation that is sometimes avoided in classrooms.

It is worth mentioning that not all the functions in the calculator menu were used, due to two reasons: One, the higher middle education plan and programs content and, two, teachers from areas other than mathematics or physics opposed to the use of the calculator in subjects other than exact sciences.

- **Main:** This function allows to perform arithmetic calculations (basic operations), it was also used for trigonometric calculations.

Also, in occasions the calculus of an integral or derivative from an equations system was

performed. Students showed comprehension and operative usability.

- **Charts and Tables:** This function allows the display of a chart through its analytical expression, and the obtaining of function values tables. During the lessons it was used to visualize the chart of the mathematical function which, in some cases, might be a model.

- **Conical:** It allowed obtaining the chart or a conical through its analytical expression. During the lessons it was used as support to chart, since a conical is hard to draw by hand. This aspect was well received by teachers, since it facilitated the comprehension of Analytical Geometry content.

- **Statistics:** It allowed the statistical calculus from central trend measures to regressions. During the lessons data were analyzed through a linear or quadratic regression, or through central trend measures.

- **Spreadsheet:** It allowed the

processing of several data sets. During the lessons it was used as another alternative for statistics.

- **e-Activity:** It allowed the scheme of a multi-steps activity. This was used practically to show teachers the potentialities of calculators; the scope of the project required to train teachers more in their usability, because the project requires a second phase to apply this function with more detail. However, demonstrative practices were performed with the teachers.

- **Periodic Table:** Shows the elements contained, as well as a brief description. This function was only used to show its use, because chemistry teachers consider the charting calculator is not useful for their learning sessions.

- **Draw Image:** This allows to model a function belonging to an image. It was used during the lessons to simulate what an engineer does.

- **Programs:** They allow to

build author programs in the calculator. This was worked with the students who programed certain formulas, based on restrictions and elements according to the programming logic.

- **Geometry:** It allows to perform geometric constructions. During the lessons it

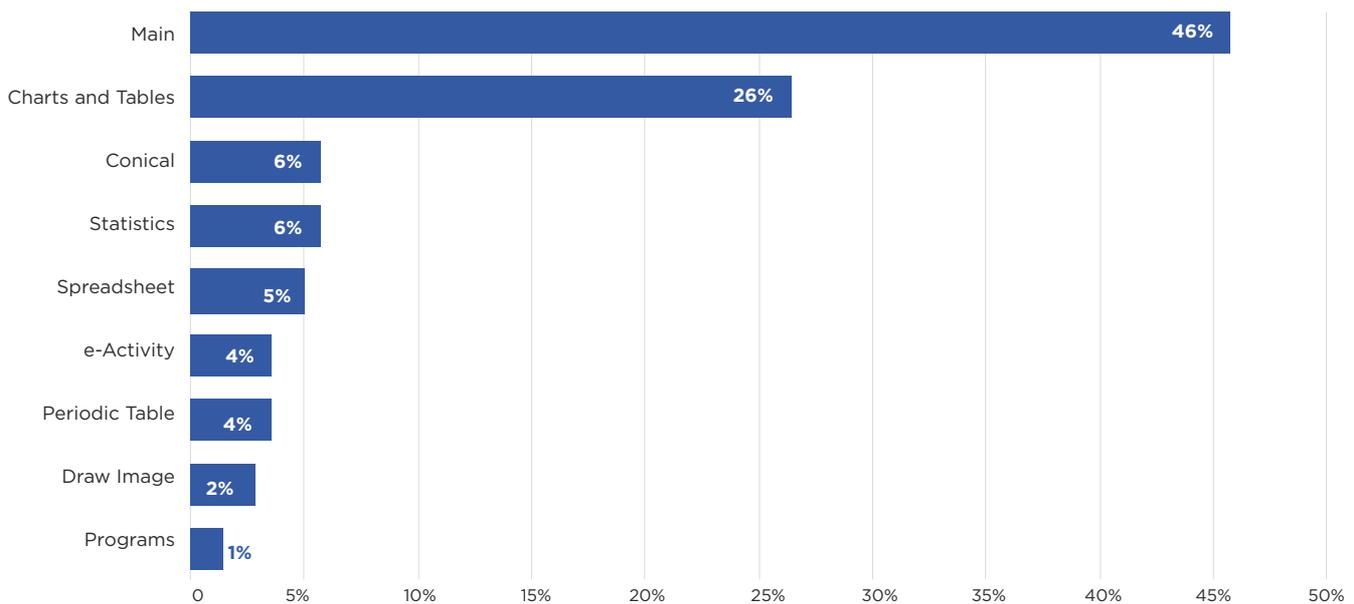
- was used to make lines and constructions considering the properties of geometric shapes.

Teachers have made progress with the knowledge of the functions of the calculator, e-activity, charts, tables, spreadsheets, statistics, etc. At an intermediate level, this implies they already know how to enter data, make filters, apply formulas, create

charts, etc. Therefore, to process information of their students and making more efficient their grading processes is performed faster.

On the other hand, students have started to prepare activities in which they show their skills in logical-mathematical skills and where they must solve problems related to the calculators' functions.

**USE AND TRAINING IN THE FX-CP-400 CALCULATOR'S FUNCTIONS FOR LEARNING**



**Total activities: 140**

**Expansions derived from the Mentorship Program**

- Some teachers recommended CASIO equip-ment to learn mathematics with peers from other schools; also, they acquired charting calculators of that same brand for personal use.

- ETI Julio Yerbes was a guest of CASIO México to give conferences in several national and international forums, his participation in the “Seventh Mathematics Teaching Con-gress” in Puebla, called “Simple Problems to Detonate Mathematical Reflection

from ICTs” and the thirty-first Educational Mathematics Latin America Meeting in Lima, Perú, with three works exhibited: 1. Use of Charts and Technology in High School, 2. Technological Labs to generate Mathematical Knowledge Communities, and 3. Mathematical Activities

Notebook using the Calculator.

**Participation of the ETI as a teacher in front of a group with 40 hours of weekly service for high school students in mathematics subjects.**

- Students that participated in the workshop taught in the Mentorship Program were chosen by the Centro de Investigación y Estudios Avanzados of the Instituto Politecnico Nacional to be the first part of the population of a doctoral study, focused on identifying reference systems that students build before variation and change.
- Design of a mathematical activities notebook using the calculator, which integrates practices designed by teachers and guided by the ETI. Activities are performed according to the content established in general and technological Mexican study programs. Thus, notebooks were designed in order to provide an instrument status that supports mathematical knowledge construction.

**Final reflections**

1. Teachers and students show a good handling of the calculator and use it regularly in their lessons. Having the ability to interact with a device that helps identify and learn new practices is an important motivation aspect, and for teachers it is a factor to look for fun content that complements activities in class.
2. Even though teachers are starting to use the charting



3. The calculator is a device with which activities can be easily generated according to calculator in class, now it is fundamental to show them how to apply them in the best way possible. Nowadays, progress has been tangible in lesson plans, on which teachers have introduced activities in which students solve problems with the calculators' functions. Students show their excitement and little by little teachers start to feel more confident, safe and empowered by technology.

mathematical content, which makes students practice and solve exercises in a fast and representative manner, feeling willing to explore.

4. Students develop inquiry skills and a critical sense about which contents are more appropriate for the topics that must be covered.
5. A notebook with 14 teaching practices was created, which resulted from the intervention in school days at the CETIs 50.

## GOOGLE-INTEL

UNETE and Google-Intel started an educational intervention pilot project in two High School schools in the State of Hidalgo, on which the Mentorship Program was developed through Chromebooks as a learning tool to strengthen Teachers' digital skills.

The characteristic of this devices is that they don't have a hard drive: all the applications are part of Google Suite and are linked directly to Internet. Training and interaction actions with digital programs were undertaken through the project. This objective was achieved through the incorporation of Chromebooks in 1st High School grade groups, providing

preloaded content available for the devices and connectivity service, besides the Mentorship Program.

The later consists in advising teachers in person to improve their practice through the use of ICTs in order to help developing meaningful knowledge in students, from technology use from an educational filter.

### Main figures

Derived from the first stage of the Mentorship Program up to the end, the first figures by benefited school are obtained.



SCHOOL NAME	WORK CENTER CODE	BENEFITED STUDENTS	MENTORED TEACHERS	SESSIONS USING CHROMEBOOK	TRAINING HOURS
Escuela Secundaria Técnica, No. 1	13DST0001L	563	16	415	486
Escuela Secundaria Técnica, No.62	13DST0062Z	810	19	285	245
<b>Total</b>		<b>1,373</b>	<b>35</b>	<b>700</b>	<b>731</b>

### Final reflections

1. An important factor was the access they had to online content. Devices needed connectivity to perform activities at their maximum and the objective of showing teachers how to be more efficient with these devices and tools was achieved.
2. The only way of getting over skepticism is showing the teacher many options and that not all of them depend on Internet. Having content in the CAP was very useful in moments when the Internet failed. One lesson is that, far from having Internet or not, the point is to have inquiry sources, this is something teachers have emphasized.
3. When students are too many, progress is a little more complicated, because they all want to participate in the activities and that has represented an important challenge which, on a long-term, is going to improve students' life quality.
4. Teachers' approach has been essential, especially showing them that steady progress can be made with the most basic tools if you know how to use these devices. The final reflection would be to know how to reach the teacher to get their attention and personally guide them.



**CISCO-INTEL**

The implementation of the intervention Model UNETE in alliance with Cisco-Intel, provides a series of elements for the integration of technology in teaching-learning processes: Proper remodeling of

infrastructure, preloaded educative content, connectivity, technical support, and a significant added-value, which is technology use for educational purposes with support in person throughout the school year.

In this project, the objective was to incorporate electronic tablets in 4th, 5th and 6th grades from two primary schools. The purpose consisted in knowing the scope, learning, and good practices around the use of this device in classrooms.

**Main figures**

The intervention period was from September, 2016 through June, 2017, from which the figures per benefited school are obtained.



SCHOOL NAME	WORK CENTER CODE	BENEFITED STUDENTS	MENTORED TEACHERS	SESSIONS USING CHROMEBOOK	TRAINING HOURS
Insurgentes	11DPR1411L	488	13	378	160
Venustiano Carranza	22DPR0814D	246	7	232	312
<b>Total</b>		<b>734</b>	<b>20</b>	<b>610</b>	<b>472</b>

The number of students per lesson at the Insurgentes primary school was much higher than the one at the Venustiano Carranza school, this demanded paying attention to a higher number of students. At the second school there were proportionally more sessions because groups were smaller,

therefore the instructor progressed faster. Participating schools have electronic tablets to be used by students from 4th and 5th grades, different from the desktop computer based equipment with preloaded content that UNETE generally takes to schools. This time we worked with electronic tablets, free-license

programs (image, audio, and video processing, mind maps, etc.) and office automation to perform school practices with technology.

The most important points regarding the use of tablets for didactic purposes inside the Media Lab are highlighted below.

FACTOR	DESCRIPTION
Interaction with Teachers and Students	<ul style="list-style-type: none"> <li>• Several sessions focused on tablets use are needed, since students showed fear of blocking or breaking them. It is important to show browsing between operative systems, otherwise the teacher spends many time showing the location of commands.</li> <li>• A challenge for teachers and students is to get away from storage devices like CD Rom, USB or input devices like keyboard or mouse.</li> <li>• Memory is not enough for educational activities, because teachers and students look up different information and download files in different formats for analysis. The best way of working with tablets is individually, even it requires teachers to be alert for the battery and have a connection close.</li> <li>• Portability is a positive factor, because students can research outside the Media Lab. Due to its personal nature, students tend to use it outside the classroom, and having an element to use it in different scenarios can promote its use.</li> </ul>
Homework Factors	<ul style="list-style-type: none"> <li>• Regarding the performance of activities, it is easier for teachers and students to work with Android tablets, since they already know this platform on their cell phones. It was easy sharing information between classmates using e-mail and apps.</li> <li>• 6th grade students had more difficulty to interact with Windows tablets, because most of them don't have computers at home.</li> </ul>
Restrictions	<ul style="list-style-type: none"> <li>• The main restriction was access to Internet to share information. Regarding the battery, Android tablets work longer than Windows, which students prefer.</li> </ul>

FACTOR	DESCRIPCIÓN
Restrictions	<ul style="list-style-type: none"> <li>Working with a document, spreadsheet, and multimedia presentation is more complicated, because the touch function slows down its editing. Meaning, when the virtual keyboard is opened, it hides almost all that's being written.</li> <li>There is a difficulty or inability to project from a tablet because of the equipment in schools, due to a lack of wires or compatible projectors. One example is that it is not possible to project a Google multimedia presentation from a tablet if the cast connected to the projector is Windows (incompatibility between different devices).</li> </ul>
Performance	<ul style="list-style-type: none"> <li>Once the students learn to work on their respective tablets, this is very useful for them and for teachers, because little by little they learn to create documents, multimedia presentations, spreadsheets, editing videos, browse the Internet, install programs, etc. (even with the difficulties mentioned).</li> <li>Students learned basic programming concepts (language, system, algorithm, and command) and developed basic algorithms for the "Karel Robot" platform.</li> </ul>

**Final reflectionst**

1. Teachers and students show a good handling of the tablet and use it regularly in their lessons. Having an Internet connection is an important motivation factor, and it facilitates the search of fun content to complement class activities for teachers.
2. There was a video conference between the students in both schools, which raised the motivation level of students and teachers, because they understood there are different types of dynamics at the moment of using ICTs.
3. Even though teachers are barely

beginning to use free license software (the use of office automation has been important in the first half of the program), now it will be vital to show them how to apply it in the best way possible. Nowadays, progress has been tangible in lesson plans, on which teachers have introduced office automation and free license programs. Students show their excitement and little by little teachers start to feel more confident, safe and empowered by technology.

4. A tablet is a device with which content is hardly generated with office automation tools (due to the touch function of

the keyboard), but that are beneficial for the following tasks: information inquiry (video, audio, images, etc.), creation of activities related to drawing, and image and video processing. The simpler and intuitive the tool is, students have a greater willing to explore it.

5. The students developed inquiry skills. Easy Internet access enabled them to find information in a fast and efficient manner, developing a critical sense of which are the most appropriate contents for the topics that must be covered.

**WORKSHOPS**

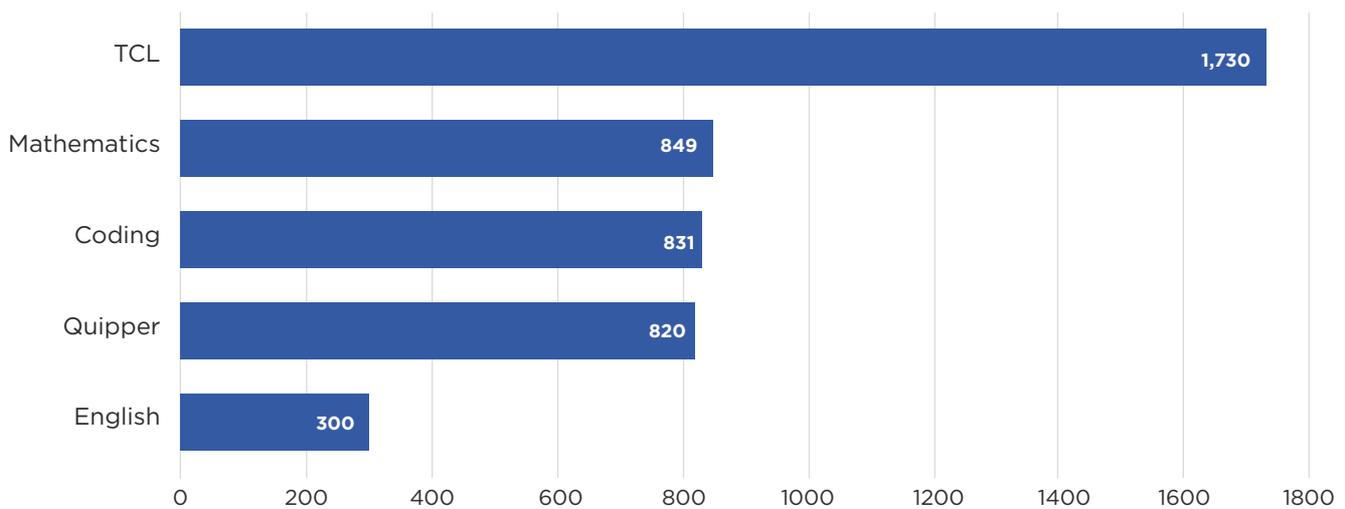
In the framework of the Mentorship Program, UNETE has designed workshops aimed for students where teachers, in collaboration with the Education Technology Instructor (ETI), explore academic content in the Media Lab. This activity intends that students

participate in a positive learning experience through technology use. The purpose of the workshops is to strengthen digital skills from reading comprehension, mathematics, programming principles, and English content to support regular content. For their part, participants interact in the workshops off-line or in educational platforms if the

connectivity conditions allow it.

During school year 2016-2017, 14,702 students participated. It is worth mentioning that workshops are taught in out of school hours or during the hours authorized by the Office of the School Director and attendance is by voluntary enrollment or school interest.

**NUMBER OF STUDENTS ENROLLED IN WORKSHOPS**



No. students enrolled in workshops: 4,530

Preschool students (10,192) participated in the workshop “Dream, Save, and Achieve” which purpose is to introduce children to financial education. This is thanks to the support of Sesame Street.

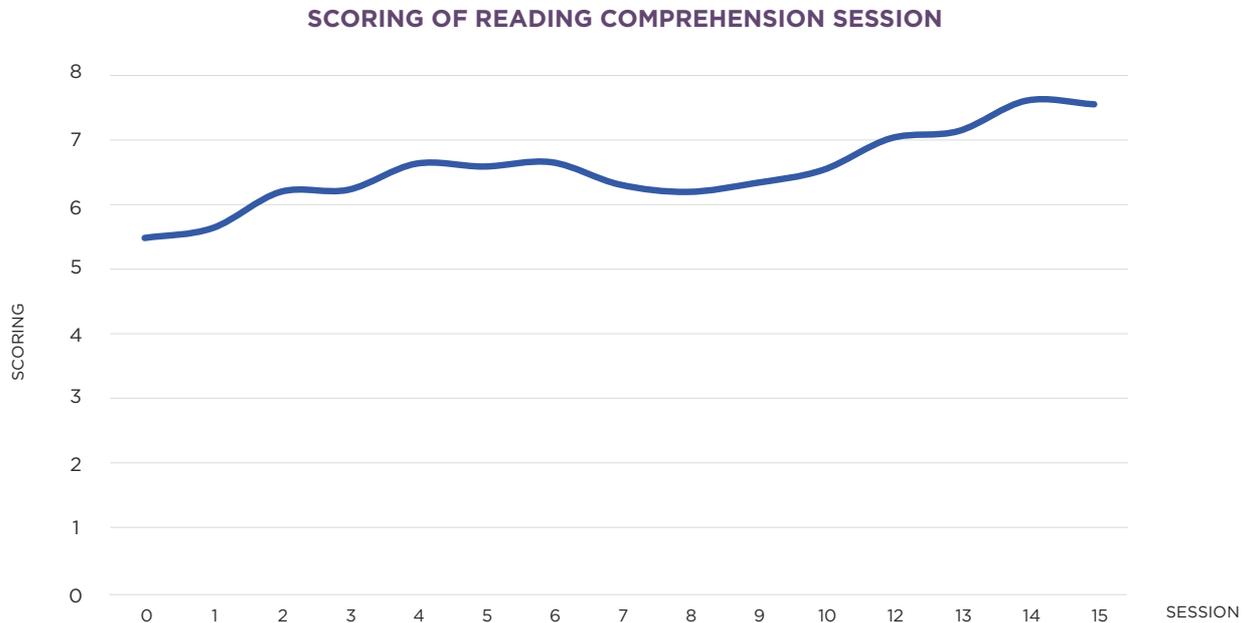
**Reading Comprehension Workshop (TCL):**

1,730 benefited students

The Reading Comprehension Workshop is an activity that strengthens the development of digital skills in students based on reading and writing. Of the 199 benefited schools, 1,730 students

participated in 19 sessions, where they worked with texts and developed oral and written communication. The chart shows that during the first session students obtained an average score of 5.4 in texts comprehension, without using technology as a teaching-learning technology (on a scale from 0 to 10 points).

Later, the ETI intervened with sessions which reinforced reading-writing skills. After teaching strategies using digital tools, their reading skills were favored obtaining an average score of 7.7. The positive impact results obtained motivate teachers to resume the strategies implemented during the Reading Comprehension Workshop.



**Sofía XT:**

849 benefited students

In order to foster the development of abilities that make it easier for students to formulate and solve problems in daily and academic situations, the Mathematics Workshop was developed using the Sofia XT platform in 27 schools.

This workshop reinforces:

- Learning of basic mathematics concepts.
- Use of logical reasoning to formulate and prove conjectures.
- Acting with imagination and creativity.

**Schools: 27**

**Exercises solved: 229,574**

**Average exercises solved per student: 270**

**Quipper:**

820 benefited students

Quipper School is an educational platform online that involves

students with their learning and supports teachers with groups' administration. This year it was used in 1 primary school, 14 High School schools, and 2 high schools. The main tasks of teachers were the creation, distribution and grading of homework.

**Schools: 17**

**Students: 820**

**Average Score: 69.5**

**Activities Created: 3,577**

**Groups Created: 795**

**Teachers Registered: 423**

**Coding:**

831 benefited students

Student's creativity was promoted in the technology field in 17 schools, the Coding Workshop helped early primary school students to form an opinion on programming principles content to solve complex problems, acquire a technical language, and program playing with their own

stories; this is achieved using Scratch, which is a project of Grupo Lifelong Kindergarten of MIT Media Lab.

**English:**

300 participating students

In order for students to acquire knowledge and develop abilities in a foreign language, the Duolingo Workshop was developed, specifically in English language teaching. Students worked interactively with the ETI and their workshop classmates using computers, tablets, and cell phones (if they had them). Students developed speech, reading, listening, and writing skills on each session.

This way learning becomes fun and effective.

**Schools: 12**

**Activities: 2,507**

**Average Sessions: 31.7**

**Average Score: 336**

## SUCCESS STORIES

# THE COOKIE MONSTER MAZE

Preschool “Miguel Hidalgo y Costilla” • Work Center Code 15DPR0709J • Tlalnepantla, State of Mexico

Through the Mentorship Program, teachers showed enthusiasm to perform several workshops to develop digital skills and learning content of financial education, among them “The Cookie Monster Maze”.

Teachers identified a clear connection with class planning and content of the Preschool Education Program, as a result, they implemented activities in the schoolyard and designed a maze for the students. Children were excited to perform activities outside the Media Lab and change traditional teaching.

One day before students were asked to bring a toy or object special for them. The teacher took all the objects and put them randomly along the maze. When children walked through it, they were surprised there were so many special objects and the teacher said that part of the program was learning to share their favorite toys.

Even they struggled, they agreed to share and at the end all of them



### Children were excited to change traditional teaching.

told the reason those toys were their favorite. Knowing each child story made us realize that, even if the toy was small or big, new or old, its value was on the family meaning.

The teacher in charge of the classroom said that from that

moment he would review the program activities and integrate those from Sesame into his class plans. This activity was recorded with Movie Maker to edit it and show it in the next Technical Board.

# TRANSMITTING THE DESIRE TO LEARN

Teacher Fabiola Peña García • Adolfo Ruíz Cortines Primary • Work Center Code 15EPR0233N •  
Tlalnepantla, State of Mexico

Teacher Fabiola was born in the State of Hidalgo. Her youth and dynamism made her encourage the rest of the teachers to use the Media Lab and participate in state contests.

At the beginning of the Mentorship Program, several teachers started participating in the project, one of them was teacher Fabiola, who always showed excitement to learn

**She created a blog to innovate her classes in order to share strategies and experiences implemented by her students.**

new digital programs and use the Media Lab with their 6th grade students.

She argued that at the beginning of the Mentorship Program her knowledge was deficient and even null regarding digital skills. At the beginning of her mentorship and supported by the ETI, Fabiola started to identify positive changes

on her learning, so she created a blog to innovate her classes in order to share experiences, knowledge, and strategies her students had implemented, which has been useful to improve their teaching-learning strategies.

When the rest of the teachers realized that the tool used by teacher Fabiola was didactic and innovative, they felt the need to join

the Mentorship Program, because they identified that 6th grade students were very motivated, saying that said class was different to the rest.

The teacher decided to support the ETI training her fellow teachers by encouraging them with her experience; as the training went by, the teachers' progress was notable,



and they started implementing digital tools in their classes and the Technical Board presentations.

When they noticed that the Mentorship Program caused great impact, they thanked teacher Fabiola and the ETI for motivating them with facts to participate in the project.

# CHEMISTRY BEHIND THE SCREEN

**Teacher María Luisa Ríos Sánchez • Escuela Secundaria No. 41 Prof. José T. Puente Vázquez •  
Work Center Code 19EES0048G**

During the last two-month period of the mentorship, Chemistry Teacher, María Luisa, started working with her students on the preloaded content of the UNETE server, they started with topics such as the molecular composition of atoms, as well as some chemical reactions. After this approach to server resources, students performed works on a topic using multimedia presentations and their expositions were very interesting.

Besides putting into practice their creativity, she awakened many doubts and interest on the subject, so teacher María Luisa searched and implemented a virtual lab in the Media Lab, which was installed in every computer and through which students can learn in a fun way and perform experiments without having to move to the school lab.

Despite the virtual lab has a higher number of substances, materials, and tools, and although suggestions can be obtained for each topic, another advantage of this tool is that when the experiment fails, the students are



**The teacher implemented a virtual lab in the Media Lab through which students can learn in a fun way.**

in no risk of being harmed and can analyze the consequences of each combination.

Due to these aspects, students show excitement and even ask for permission to perform new experiments they thought about at home, creating hypothesis of what could happen.

The teacher is glad that now her students can see and touch chemical reactions directly from the lab, playing with options, and exploring the environment of the tool, which encourages them to work in the computers again, because many of them considered the subject boring, and with this interactive method learning is real and fun.

# CREATIVITY FOR LEARNING

Teacher Josueth Vázquez Román • Bachillerato Cetus 50 Mariano Matamoros • Work Center Code 09DCT0050G

One of the great challenges in Higher Middle Education is learning Mathematics. In that sense, after implementing the CASIO Mathematics Lab at the CETIS 50, the perception that students had of the subject changed and learning is more creative.

Through the development of skills using graphing calculator ClassPad 400, Teacher Josueth Vázquez caught the attention of their students and made mathematics a more comprehensible topic.

One example of that is the design of a practice notebook with over 40 exercises linked to the analysis of real situations of science application, which was part of the scopes of the Mentorship Program project.

With the use of the graphing calculator, classes were performed inside and outside the classroom, students visualized several mathematical model charts, as well as complex constructions of several variables calculation.



**Implementing the CASIO Mathematics Lab transformed the perception that students had of the subject and learning was more creative.**

Teacher Josueth considers tool for math lessons and a great technology as a very important support for students learning.



# TECHNOLOGY TO IMPROVE EDUCATION

**Teacher Eder Iván Francisco**  
**Otero Students**  
**Primary School “Cristóbal Colón”, Hidalgo**

**E**der Iván, a 6th grade teacher at Primary School “Cristóbal Colón” located on the State of Hidalgo, succeeded in making students showing apathy for classes and school violence to address their energy towards vocational processes thanks to technology use.

One of the main purposes of the UNETE Model is to provide information access opportunities through digital programs; for example, we observed that in Primary School Cristóbal Colón, located in a rural zone of the Municipality of Tepehuacán, technology is not used only for academic purposes, but also teachers use it as a mean of inclusion for students considered problematic.

We have the particular case of the Otero brothers, who showed low academic levels and several bad behavior reports, violence and, in general, apathy for the class dynamics. Teacher Eder, supported by the

UNETE mentor, started teaching learning sessions in the Media Lab, especially for the History subject since videos, texts, and digital programs facilitated the explanation of the historical events.

This way he noticed that during the sessions in the Media Lab, lessons were taught with no need of reprimanding the Otero brothers, even they paid attention to the instructions and the delivery of products generated in class.

Since then, teacher Eder proposed the development of a reinforcement workshop for students with academic delay, on which 10 students participated, including the Otero brothers. During these sessions, free license digital programs like Freemind and Audacity were used; the first one to create mind maps and the second one for audio edition. These tools were used to design interviews, event synopsis, and timelines, as well as dramatizations of historical dates.

Thanks to the equipment and the training work, the school community works in a school inclusion environment where students transform their problematic attitude into one focused on learning.

# DISTINGUISHED TEACHERS

## TEACHER: LEONEL INFANTE YE

**Indigenous Primary Education Center, Bicentenario • Campeche • Municipality of Calakmul • Work Center Code 04DPB0089L**

Born in the City of Hopelchen, Campeche. He says he had to go through difficult times to enter the Escuela Normal, from changing his address to pay for his own studies through extra shifts at work. He talks with nostalgia about the difficulties that made him become a teacher, profession he always wanted to exercise.

For Leonel, preparation is the key to many doors and a better teaching performance; in fact, former students come to him to thank him for his lessons and advice, which has been a great motivation. Now his purpose is not only centered in providing knowledge, but also in that his students develop skills to handle digital tools, bringing them closer to technology.

He mentions this new challenge is due to the need of interacting with the equipment they received from UNETE and ensures that the presence of the Education Technology Instructor has been a great support, without him they would have not lost the fear to use the Media Lab.

Teacher Leonel recognizes that training from UNETE made teaching easier and he mentions that after a new advisory, the only thing that



goes through his mind is to put it into practice with his students. He has identified that they have fun, which is very satisfactory because it is the result of everything he has learned and he wants to keep preparing himself.

He says that with the support of the Director and the ETI a schedule was designed to enter the Media Lab, once inside they work with the students according to a plan established by the teacher and the instructor, which gives them a better understanding of the topic, since according to the plan a video is downloaded from the network and projected, so they can understand better and in a visual manner.

Then they are asked to perform an activity according to the subject covered in class, they continue with a summary of the Word document or they prepare a mind map in Freemind, which makes the class more dynamic, keeps the students interested and paying more attention. Teachers are using this method with very good results.

One of the challenges faced is the reluctance of some parents, who think using computers is useless for their children and forbid them to enter the Media Lab. Sometimes students show fear of entering because their parents could find out and scold them. To solve this problem, they were called to show

them that computers are a tool that facilitates the development of their children, and that as time goes by they will acquire skills; some of them have already changed their minds, but there are others left.

One strategy proposed by the teacher was to invite parents to teach a class in the Media Lab with the help of the teachers and the ETI, planning specific topics according to the corresponding unit. With this activity, parents discovered that using computers is beneficial for their children.

**HIS PURPOSE IS NOT ONLY CENTERED IN PROVIDING KNOWLEDGE, BUT ALSO IN THAT HIS STUDENTS DEVELOP SKILLS TO HANDLE DIGITAL TOOLS, BRINGING THEM CLOSER TO TECHNOLOGY.**

“The impact on the students has been positive, they have always shown interest on computers and, once the program was at the school, they were very happy and excited; now with the workshops being

implemented they have shown more willing to learn, because they are studying new subjects, programs they didn't know, which favor their formation”.

## TEACHER: **ILIANA SARA MARTÍNEZ RONCES**

**Secundaria Oficial No. 0917 Justo Sierra • State of Mexico • Municipality of San Felipe del Progreso • Work Center Code 15EES1363F**

She was born in Atlacomulco de Fabela, State of Mexico. She completed her Primary Education in that city and her Higher Middle Education at the Escuela Preparatoria Oficial Anexa a la Normal de Atlacomulco EPOANA. That inspired her curiosity to become a teacher, because of the influence of her teachers and the urge to share knowledge. Then she studied a Bachelor's Degree in High School Education with a Major in Mathematics at the Escuela Normal of San Felipe del Progreso.

She was an outstanding student with good grades, hardworking but also able to face any challenge; she has several academic awards and has always been willing to prove women can move forward and be successful.

She is convinced that her work promotes and strengthens physical, intellectual, affective, social and moral development of the students.

Therefore, she cultivates and promotes the development of basic cultural competences of communication, critical thinking, problems solving, and participation, as well as the development and consolidation of basic civic and cultural values.

Teacher Iliana teaches at the Escuela Secundaria Oficial No. 0917 “Justo Sierra”, located at the Barrio de Boreje, San Antonio la Ciénega, in the Municipality of San Felipe del Progreso, State of Mexico. It is a Mazahua community where the population produces craftwork,

textiles, and works the land.

This Mazahua town has kept its cultural expressions through verbal tradition, music and dance, the way they dress, their vision of the world, and their ancestral religious practices, which are passed from one generation to the next.

The socio-economic level of the inhabitants of the community is mostly medium-low, and the highest studies level is High School, which implies an important challenge for teachers, because their task is to motivate students to improve themselves.

Teacher Iliana notices the lack of ambition of her students, because their social context surrounds them, that's why the only short-term goal of

boys is to complete their High School education to start working the land or as construction workers; and girls as maids in Mexico City.

Thanks to the talks and the work in the classroom, day after day her students are changing this perspective and some of them have decided to continue studying, therefore Iliana goes to the school with more energy and after school she helps the delayed students with extra activities to prepare them academically for their higher middle level exam.

The teacher expresses her gratitude to UNETE and says the students are closer every day to that desired future, improving education quality and equity through the introduction of technology, and adds that the training she receives from the Mentorship Program has allowed her to improve her knowledge and skills in the use of ICTs to share with her students.

Her enthusiasm to support them is such that once the school had the computer equipment she was the first teacher who organized activities in the Media Lab, associating technology with Mathematics, now her students have sessions with games and fun activities. With the start-up of the Mathematics Workshop she identified that they like to share among them, and designed activities that involve these type of knowledge, always using the Media Lab.



**SHE IS CONVINCED THAT HER WORK PROMOTES AND STRENGTHENS PHYSICAL, INTELLECTUAL, AFFECTIVE, SOCIAL AND MORAL DEVELOPMENT OF THE STUDENTS.**

## EVALUATION FORUM

The Second Evaluation Forum “A Better Education for a Better Future”, took place in Tlalnepantla, State of Mexico, with an attendance of 86 Education Technology Instructors, who for four days exchanged their experiences, the scopes of the Mentorship Program and the opportunity areas to improve the attention to the benefited schools with the UNETE Model.

In order to rescue the experience of the Education Technology Instructors dialog activities were performed in workshops, which topics were: Good Practices, Main Problems, Change Agenda, Distinguished Teachers and Final Comments; the later focused on the recommendations of the ETIs regarding the operation of the Mentorship Program.

This forum recognized the participation of six Education Technology Instructors as speakers, who presented the 96 members of the MP. The presentations focused on the main challenges faced during their stay in the schools, they presented the scopes obtained and shared their experiences during the UNETE process.

During the first day of activities the following topic was explained: “Good Practices”, which concluded that, in order to achieve acceptance, it is important that the Education Technology Instructor knows the



content of the Program, has clear objectives, and service attitude before the educational, directive and teaching authorities. A fundamental strategy, they reaffirmed, is permanent communication between the instructor and the participants of the Program.

The topic “Main Problems” was debated, on which the instructors agreed that they don’t spend enough time in the schools, because a greater intervention space is required to consolidate the knowledge the teachers acquire.

To finish the activities of the first day, the topic covered was “Change Agenda”, where the ETIs gave their opinion about the topics they would like to modify; for them time is important, they want to cover more topics and keep advising teachers. Another aspect mentioned was to recognize those who with their

results stand out from the rest of the teachers. During the second day of activities, the session focused on announcing the best teacher of each school center. The presence of the Mentorship Program was emphasized, and through a written document, the ETIs mentioned the qualities and abilities acquired by the teachers and that, thanks to their work and effort, they have achieved to put into practice their technological knowledge, which has had an impact in their school community.

During the closure of this days, the final comments were gathered, among which the learning obtained by the ETIs was emphasized, they agreed that during one school year teachers gain knowledge to use the Media Lab; however, not all of them are ready to work independently with their students.

# UNETE HELP DESK

The UNETE help desk is a service operated by a group of persons focused on quality service for teachers and instructors to solve several questions and problems related to the Media Lab and technology use in the teaching-learning processes.

The support and assistance services include:

- Advisory for hardware maintenance.
- Assistance for software change and update.
- Pedagogic assistance.
- Support in local connectivity and Internet problems solving.
- Assistance with the application of

**Service is available Monday through Friday, from 9:00 to 6:00 hours by telephone, Whatsapp, Online Chat, and e-mail.**



01 800 087 86383



044 55 2728 0772



soporte@unete.org

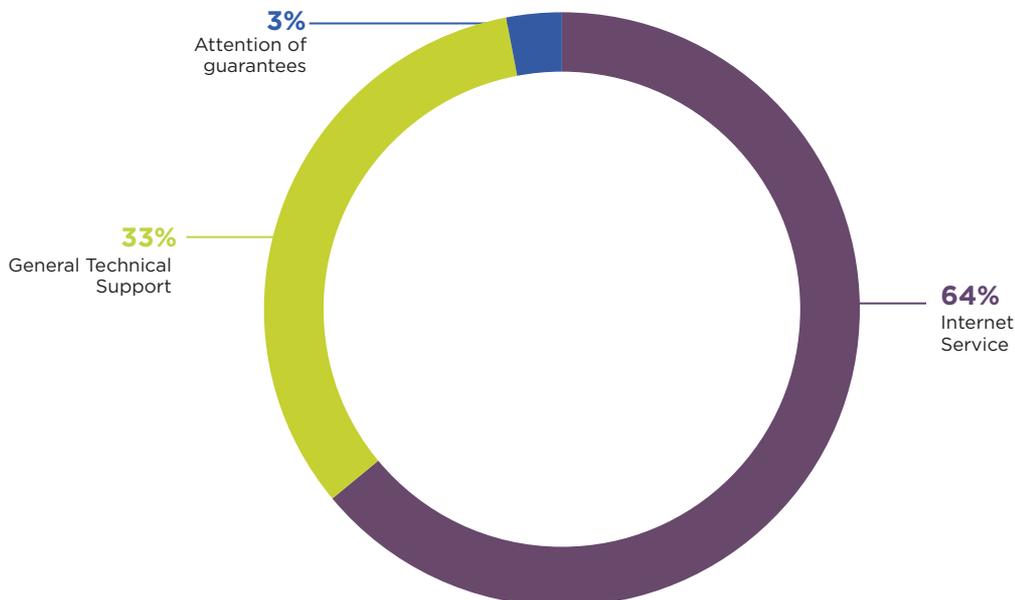


media lab equipment guarantee.

- Guidance to the public in general

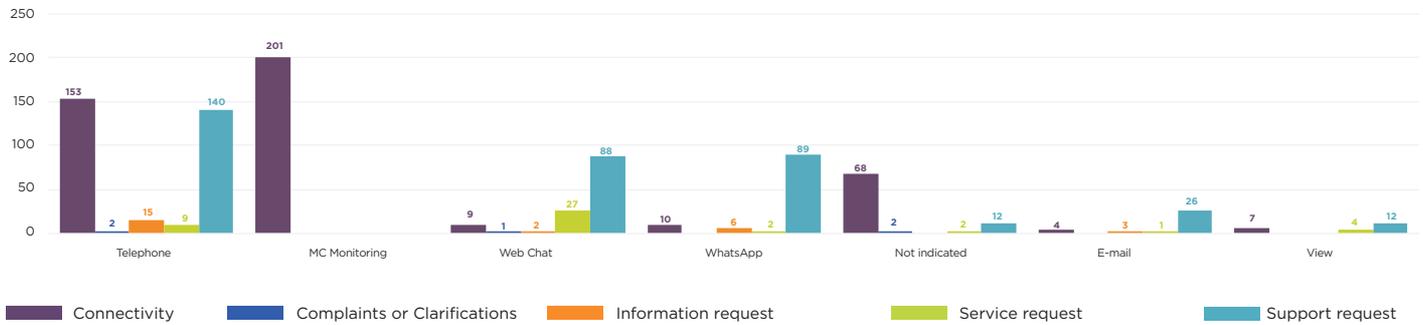
about several subjects related to UNETE.

**CASES PER THEME HANDLED BY THE HELP DESK**

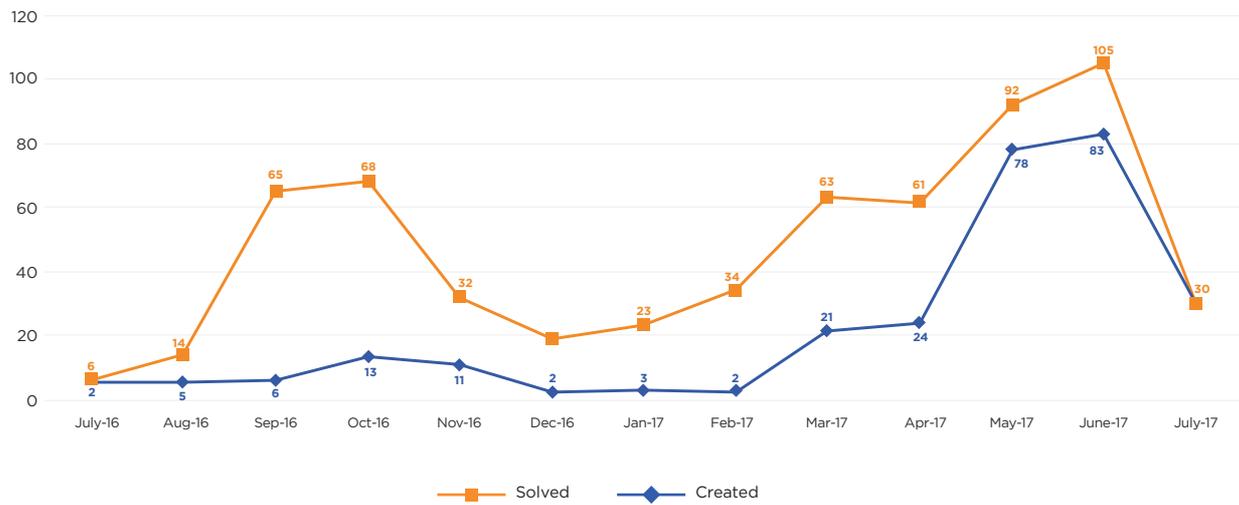


**Total cases handled: 895**

### CASES PER ORIGIN



### DEMAND TREND



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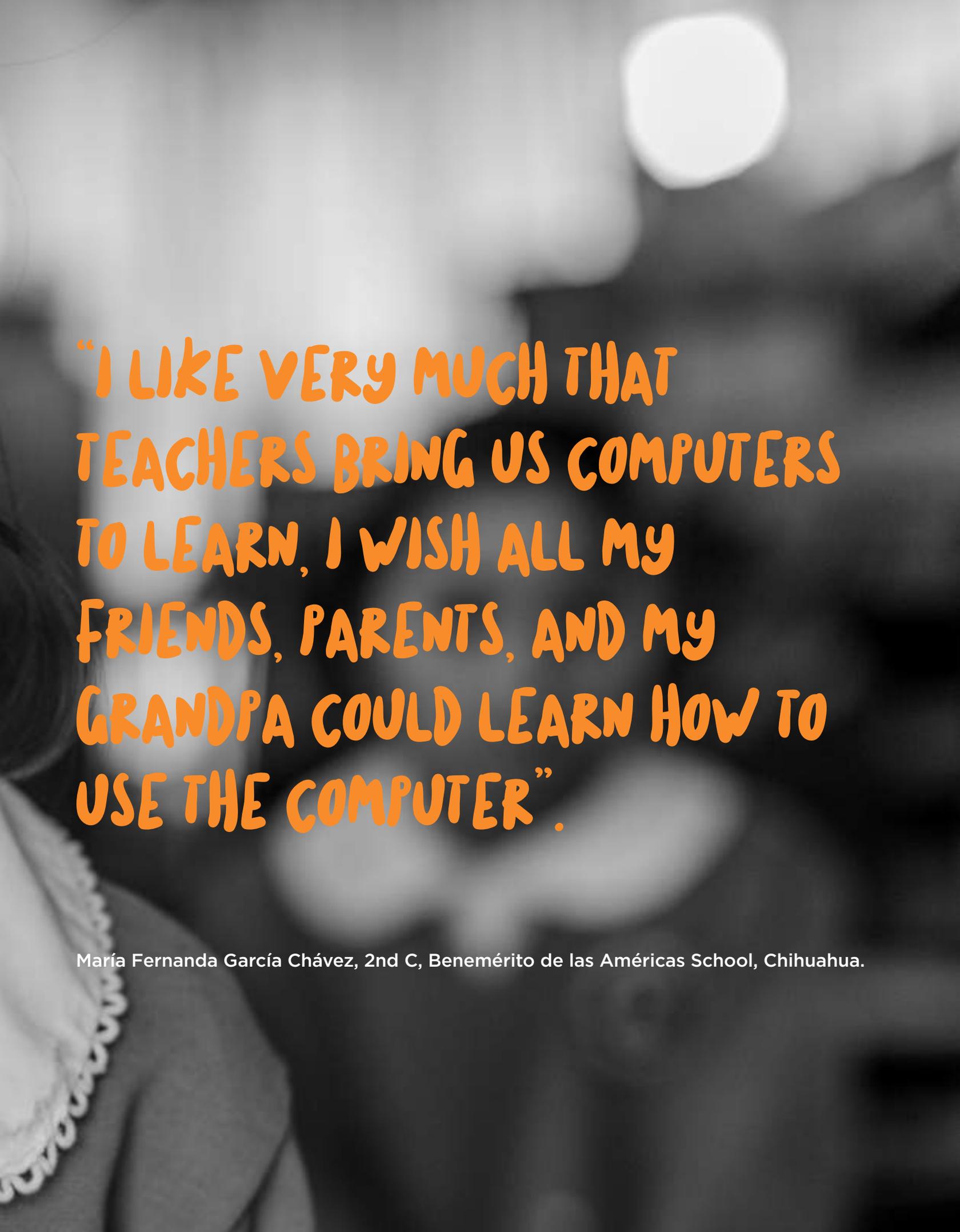
Measure the result of our intervention in different projects is essential for the implementation of the model, therefore, every year we evaluate the level of impact generated by UNETE during the school year.

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IMPACT

ACT





**“I LIKE VERY MUCH THAT  
TEACHERS BRING US COMPUTERS  
TO LEARN, I WISH ALL MY  
FRIENDS, PARENTS, AND MY  
GRANDPA COULD LEARN HOW TO  
USE THE COMPUTER”.**

María Fernanda García Chávez, 2nd C, Benemérito de las Américas School, Chihuahua.

# UNETE MODEL

UNETE has the mission to improve education quality and equity in Mexico. In order to achieve that, we focus our efforts on appropriate technology use as a mean for teachers to explore new learning opportunities.

On this matter the UNETE Model is based on two components that work harmoniously:

1. Technological Infrastructure linked to the 20th Century learning.
2. School Strengthening Program based on the Educational Mentorship principle.

The equipment of the school centers is a value necessary for the balance of educational opportunities. Even though access to Internet optimizes the functioning of several devices, in UNETE we promote technology that integrates preloaded and easily installed content.

The integration of added-values into the School Strengthening Program allows teachers to explore digital content and look up information in the UNETE Community, keep the good functioning of the Media Lab with the support of the help desk and give continuity to the vocational journey to strengthen the teaching practice. On the other hand, and with the guidance of the Education Technology Instructor, teachers receive training both in groups and individually; reading comprehension and sciences workshops for students



The UNETE Model focuses its efforts on education actors and not on objectives, this way we have an impact on the development of digital skills

are promoted, and the project scopes are informed to the school community.

The UNETE model focuses its efforts on educational actors and not on objects; this way we have an impact on the development of digital skills so that, without pretending to follow the fast rhythm of technological production, teachers can apply

selection criteria and integrate these skills appropriately into the teaching-learning processes.

With the union between equipment and continuous training, UNETE leads the path so that students can benefit from the positive experience their teachers show towards technology. A Model that follows the teacher, not the other way around.



# TEACHER DIGITAL SKILLS 2016-2017

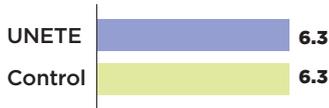
Evaluation prepared by  
**VALORA**

Participation of teachers and students from elementary and secondary levels within the school year 2016-2017 through a representative exhibition from 78 schools and a control group of 61 campuses in 24 states of the Mexican Republic show results of technological inclusion in a lesson.

## Average of tasks teachers are able to perform

### FILE EXPLORER

#### PRETEST

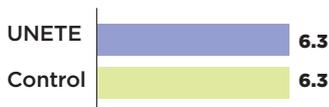


#### POSTEST



### USE OF E-MAIL

#### PRETEST

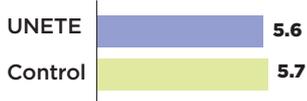


#### POSTEST



### EVIDENCE PLATFORM

#### PRETEST



#### POSTEST



### TEXT PROCESSOR

#### PRETEST

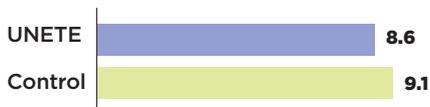


#### POSTEST



### MULTIMEDIA PRESENTATION

#### PRETEST

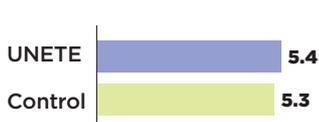


#### POSTEST



### SPREADSHEET

#### PRETEST



#### POSTEST

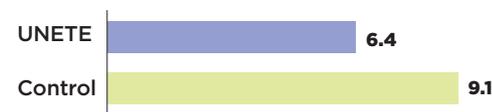


# DIGITAL SKILLS OF STUDENTS FROM ELEMENTARY AND SECONDARY LEVELS

Average of right answers from the test

## PRIMARY SCHOOL STUDENTS

PRETEST

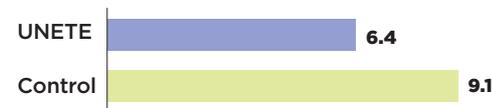


POSTEST



## HIGH SCHOOL STUDENTS

PRETEST



POSTEST



After receiving the mentorship program, teachers acquired a higher expertise on digital programs and students showed a better performance on digital skills exams.

The impact study of the UNETE Model has found important education benefits either for teachers or students. Technology inclusion fostered by UNETE to schools has been reflected on the teaching planning by achieving better results on the class plan evaluation. Results show teachers acquire a higher expertise on

digital programs after receiving the model mentorship. This is reflected in high satisfaction with the program and with the advisory provided by the instructor.

The UNETE Model also makes a positive impact on students since results show that students from schools supported by UNETE have

a better performance on digital skills exams than those students not being supported by UNETE. It can be concluded that the teaching registration showed a higher expertise on digital programs after receiving the mentorship program and students showed a better performance on digital skills exams.

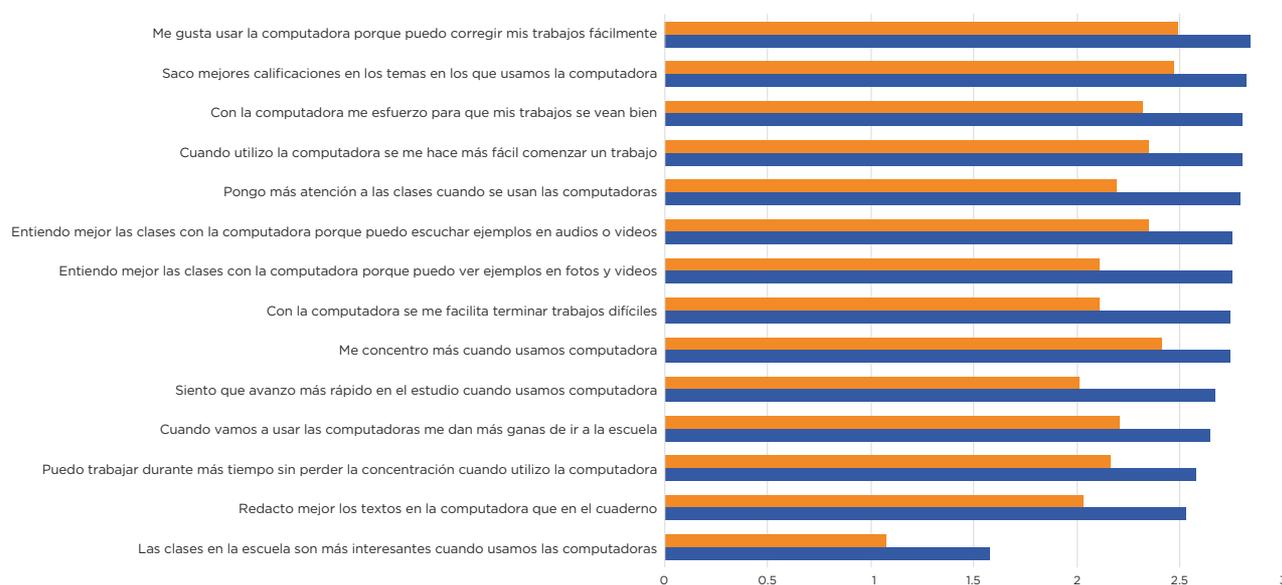
# EVALUATION OF DIGITAL SKILLS ASSESSMENT AND DIDACTIC COMPETENCES SCHOOL YEAR 2015-2016

Evaluation prepared by  
**VALORA**

Through the self-report questionnaire, several skills were measured. Results are favorable for UNETE under similar conditions of cultural capital and are included in this study.

SKILL	DESCRIPTION
Motivation to learn	Availability, understanding, concentration and performance facilitated by the use of technology.
Communication skills	Capability to clearly express ideas and thoughts in verbal and written communication with a diversity of media and for a diversity of audiences.
Cooperation skills	Capability to effectively work with different groups and interact with peers through a socially acceptable environment where it is possible to negotiate and solve conflicts.
Skills to solve problems	Capability to look for solving problems, making decisions and setting learning strategies (metacognition).
Critical thinking skills	Capacidad de procesar y reelaborar la información a fin de lograr una base de sustentación de las propias creencias; mostrar y buscar claridad y precisión, mantener la mente abierta y adoptar posturas sustentadas. Se relaciona con el pensamiento creativo en cuanto que requiere generar ideas alternativas, soluciones nuevas y originales. También se incluye la perseverancia en las tareas difíciles, así como el esfuerzo por superar límites y obstáculos al conocimiento.

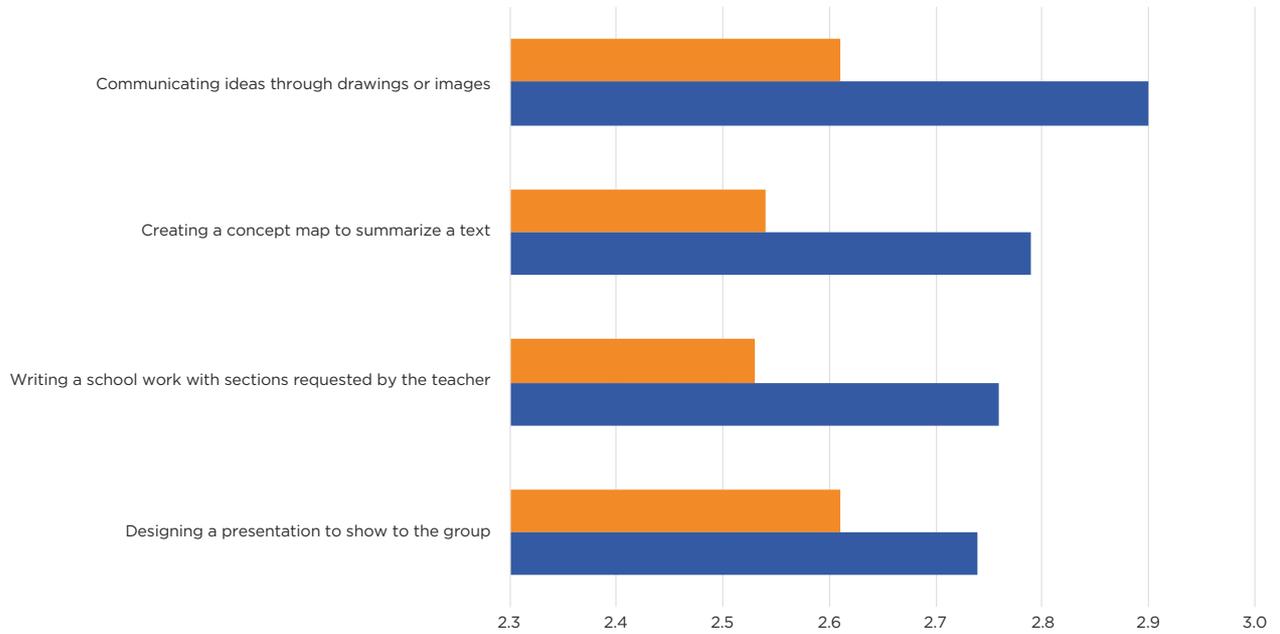
## MOTIVATION TO LEARN



0 - Don't know  
1 - Almost never  
2 - Sometimes  
3 - Almost always

CONTROL UNETE

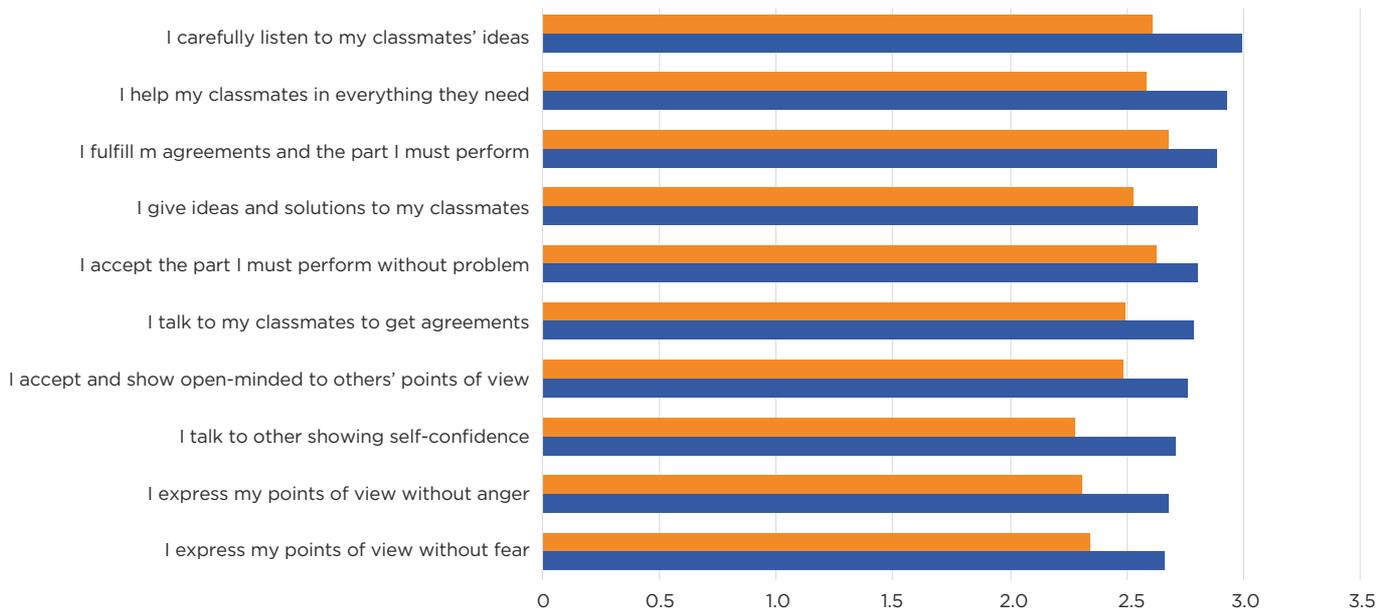
### COMMUNICATION SKILLS



1- I don't know how to do it  
 2 - I can do it but I need help  
 3 - I can do it by myself

CONTROL UNETE

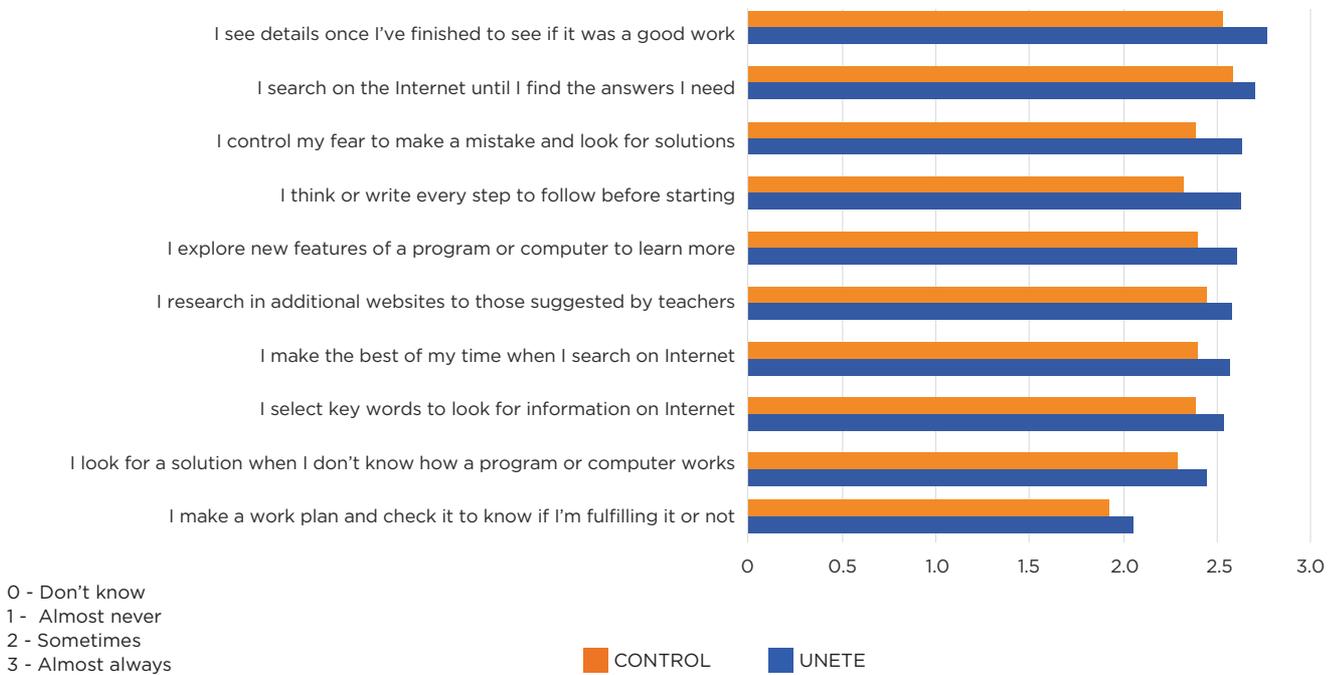
### COLLABORATION SKILLS



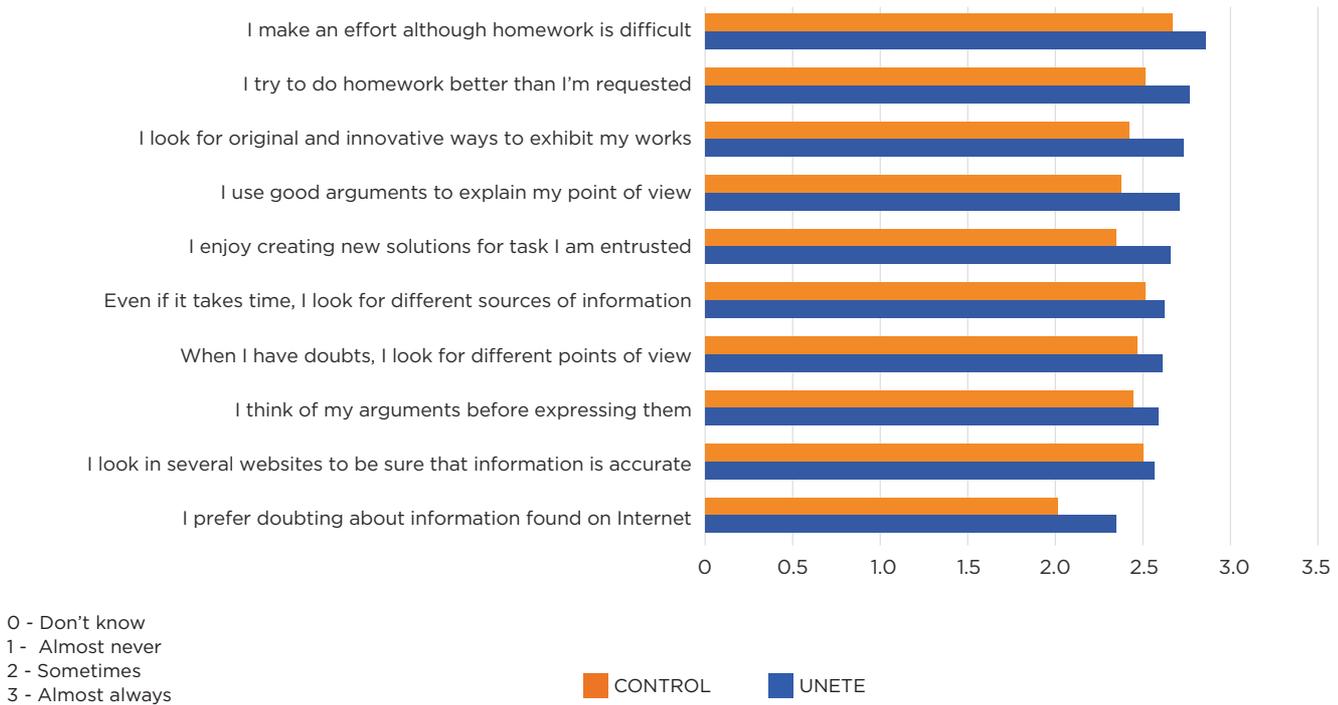
0 - Don't know  
 1 - Almost never  
 2 - Sometimes  
 3 - Almost always

CONTROL UNETE

### SKILLS TO SOLVE PROBLEMS



### CRITICAL THINKING SKILLS



# EXPERIENCES AND OPINIONS

A qualitative study performed during school year 2015 - 2016 by the Pedagogy School of Universidad Panamericana. Some preliminary narratives from teachers benefited by UNETE are as follows (Participants' information is not disclosed based on this study privacy policies):

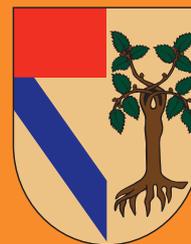
"UNETE has meant a window to the external world, where I have learnt to be more efficient, active and upgraded. ICTs incorporation in my teaching practice has meant to break a paradigm and get a new vision where students are the most benefited individuals because the teaching-learning process is more practical, appealing, dynamic and less tedious or boring, thus students show more interested in cooperate."

"UNETE community represents an excellent opportunity as a teacher due to its valuable tools and options provided such as vocational journey, learning communities, videos and everything we are able to find in the platform."

"My initial challenge was to accept that I'm not an ICT native so I had to take a computer introductory course, thanks to the UNETE program I am able to always be upgraded through courses, diploma courses and applications or novelties they issue."

"My success experience was to create a video clip by using the Movie Maker application I learnt to use in a course with UNETE. The activities of doing some research, collecting pictures and information to create a video clip with my students was satisfactory and innovative. It was as transforming a portion of a parcel into a story full of meaning."

"The experience of being a UNETE teacher is very rich: Knowing, sharing and working on new modalities. The use of ICTs as a working tool is definitely favorable since, among other capabilities, I am able to quickly get information that can be appealing for students because it motivates them to interact with it."

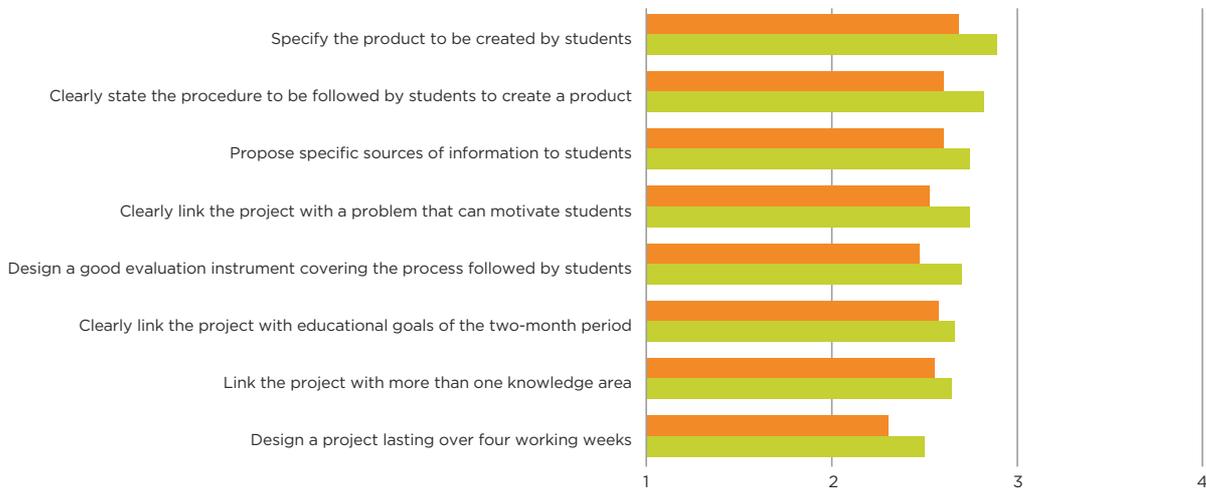


UNIVERSIDAD  
PANAMERICANA

# DIDACTIC COMPETENCES FROM TEACHERS RELATED TO ICTS MANAGEMENT

## SKILLS FROM ELEMENTARY TEACHERS TO DESIGN PROJECTS USING ICTS

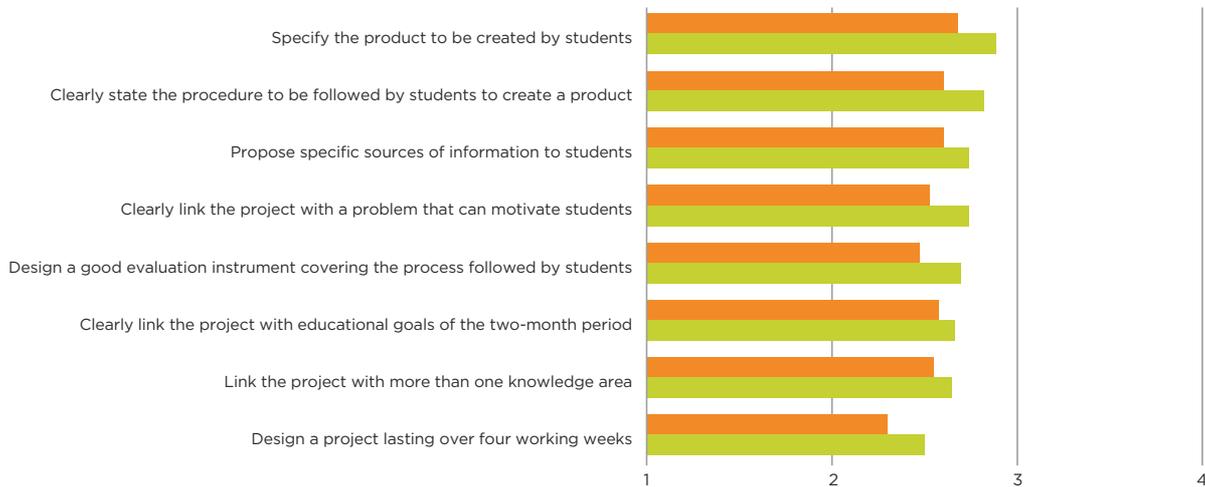
Through the self-report questionnaire, it can be noted that the UNETE group shows higher skills to design education projects using ICTs than the control group. The scale is from 1 to 4, where it must:



1 - I don't know how to do it  
2 - I can do it but I need help  
3 - I can do it by myself  
4 - I can teach others how to do it

CONTROL UNETE

## SKILLS OF HIGH SCHOOL TEACHER TO DESIGN PROJECTS USING ICTS



1 - I don't know how to do it  
2 - I can do it but I need help  
3 - I can do it by myself  
4 - I can teach others how to do it

CONTROL UNETE



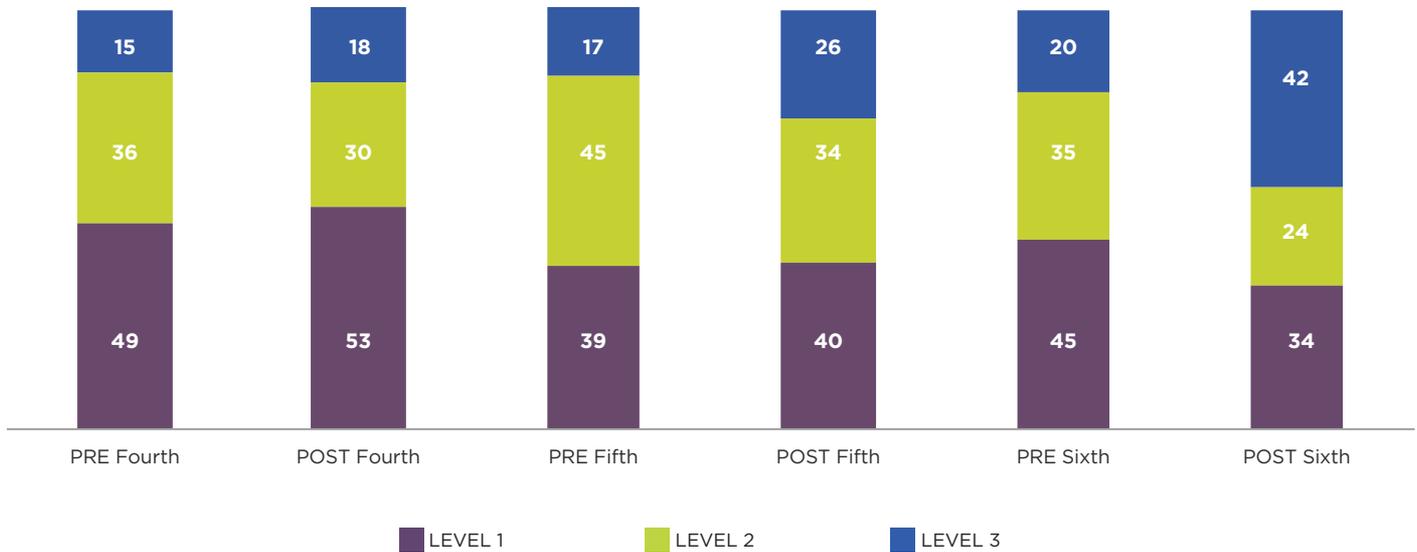
# WORKSHOPS DURING THE SCHOOL YEAR 2015-2016



After curricular lessons, students from 4th, 5th and 6th elementary grades were invited to take part in English, reading comprehension, mathematics and “coding” workshops. The impact of courses assessed in conjunction with third-party organizations is as follows:

## ENGLISH WORKSHOP

Utilizando diferentes programas y contenidos



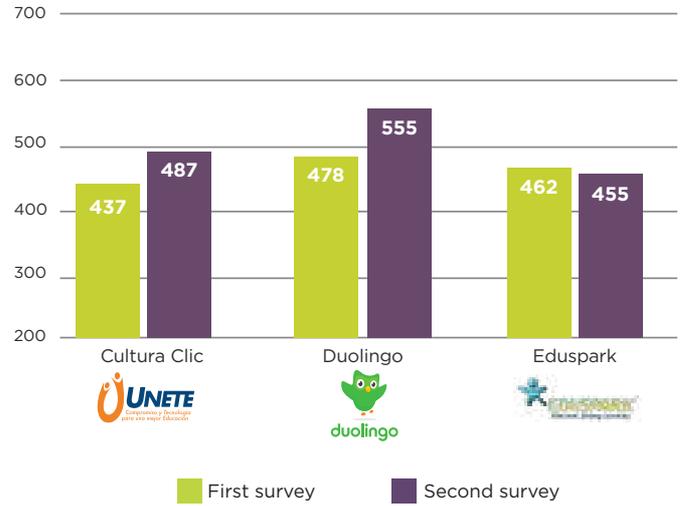
Level	Description
Level 1	<ul style="list-style-type: none"> <li>In one message, students are able to understand instructions</li> <li>They identify months of the year and are able to put them in order</li> </ul>
Level 2	<ul style="list-style-type: none"> <li>Understand right expressions to ask for help</li> <li>Understand expressions indicating daily activities and the order these happen</li> </ul>
Level 3	<ul style="list-style-type: none"> <li>Complete phrases and sentences from a variety of words and identifies the right form to make an invitation through questions.</li> </ul>

Grade	Evaluated students	
	First survey	Second survey
4º	116	80
5º	149	136
6º	172	159
<b>Total</b>	<b>437</b>	<b>377</b>

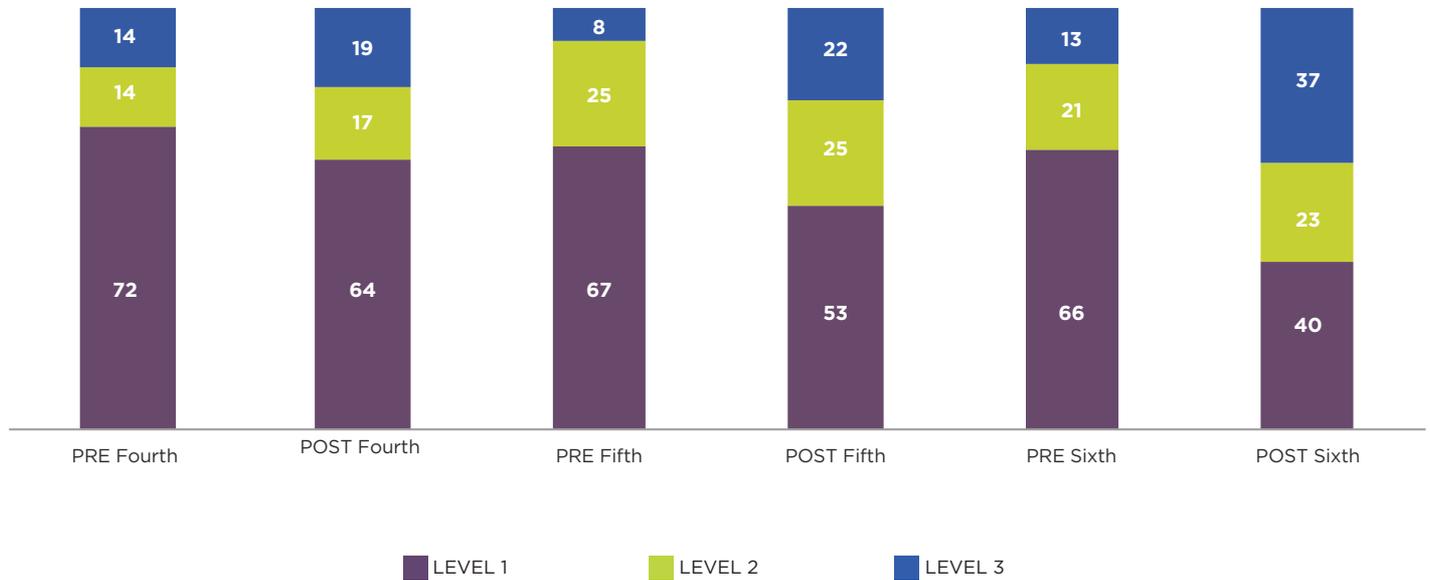
## RESULTS OF THE ENGLISH WORKSHOP PER PLATFORM

When every program is individually analyzed, results are as follows:

Level	Score	Description
Level 1	200-449	<ul style="list-style-type: none"> <li>In one message, students are able to understand instructions</li> <li>They identify months of the year and are able to put them in order</li> </ul>
Level 2	450-549	<ul style="list-style-type: none"> <li>Understand right expressions to ask for help</li> <li>Understand expressions indicating daily activities and the order these happen</li> </ul>
Level 3	>550	<ul style="list-style-type: none"> <li>Complete phrases and sentences from a variety of words and identifies the right form to make an invitation through questions.</li> </ul>



## READING COMPREHENSION WORKSHOP USING ICTS



Level	Description
Level 1	<ul style="list-style-type: none"> <li>Understand main attributes of a text: Author, main character, character's attributes, plot.</li> <li>Main ideas of a text: Topic</li> <li>State a cause-and-effect relationship within the plot.</li> </ul>
Level 2	<ul style="list-style-type: none"> <li>Summarize information without losing the core meaning of the text.</li> <li>Understand main attributes of a text.</li> <li>Identify text characteristics.</li> <li>Use different consultation sources.</li> <li>Understand main attributes of a text: Purpose.</li> <li>Identify main ideas of a text.</li> </ul>
Level 3	<ul style="list-style-type: none"> <li>Find the meaning of unknown words by the context these are used.</li> <li>Infer information from a text to recover non-expressed information.</li> <li>Interpret information found in charts and tables.</li> <li>Identify and use specific information of a text to solve specific problems.</li> </ul>

Grade	Evaluated students	
	First survey	Second survey
4º	123	286
5º	112	324
6º	68	266
<b>Total</b>	<b>303</b>	<b>876</b>

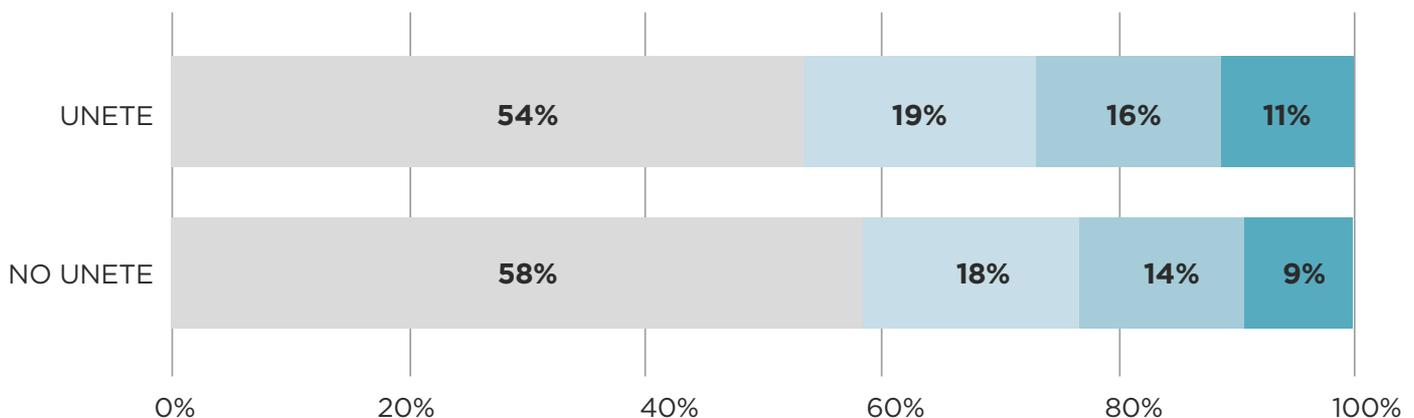
# NATIONAL PLAN FOR TEACHING ASSESSMENT 2015



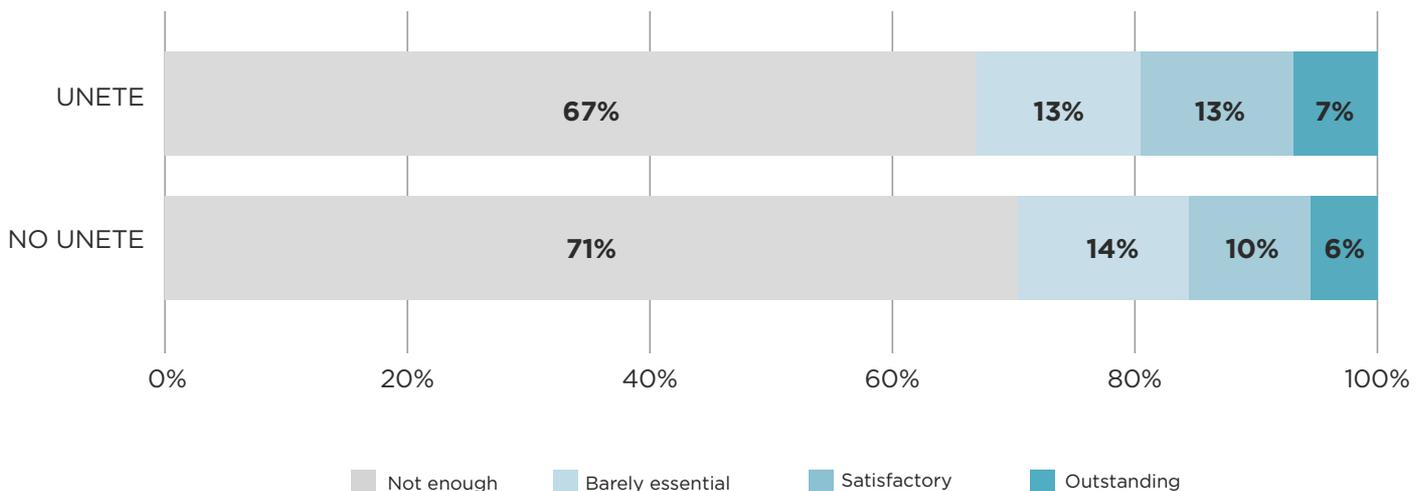
The test PLANEA 2015 was carried out in 3,191 schools and was compared to the remaining school population submitted to this assessment.

The difference in mathematics among overall public elementary schools supported by UNETE and those Not supported by UNETE is as follows:

Level	Descripción
Level 1	Students at this level show an outstanding achievement of the curriculum main learnings.
Level 2	Students at this level show a satisfactory achievement of the curriculum main learnings.
Level 3	Students at this level show a barely indispensable achievement of the curriculum main learnings.
Level 4	Students at this level show get scores representing a barely insufficient achievement of the curriculum main learnings. This reflects essential missing skills that might complicate the future learning.



In case of indigenous schools, there is also a difference when are supported by UNETE.



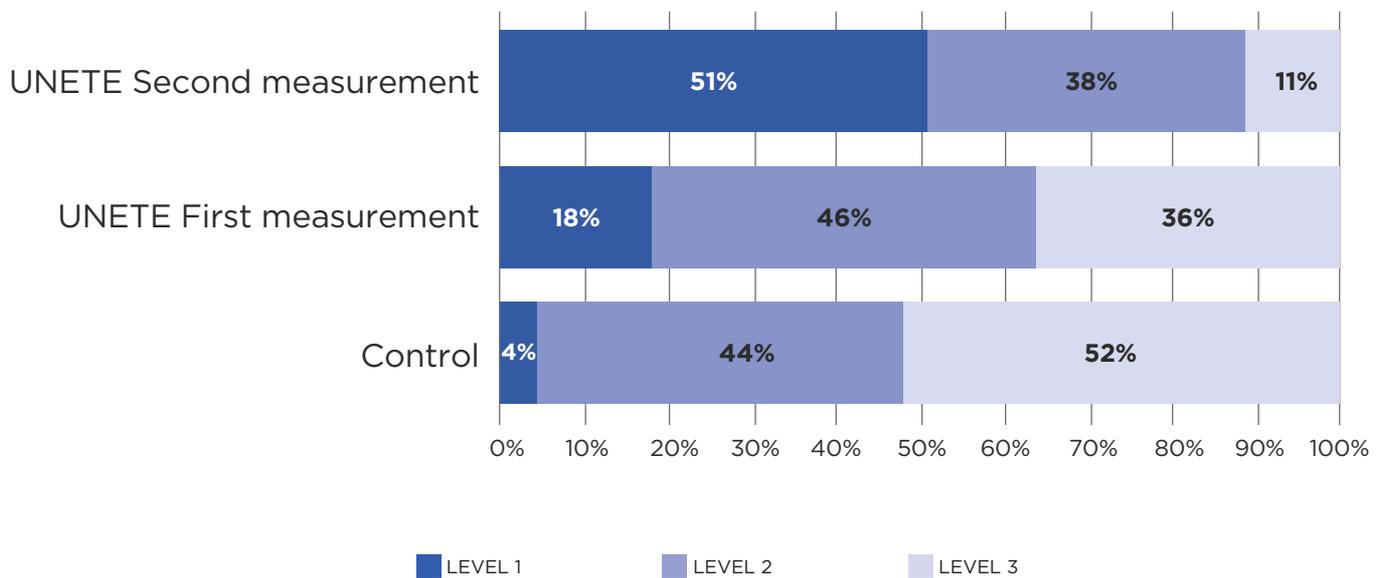
# ASSESSMENT OF THE UNETE MODEL 2014-2015



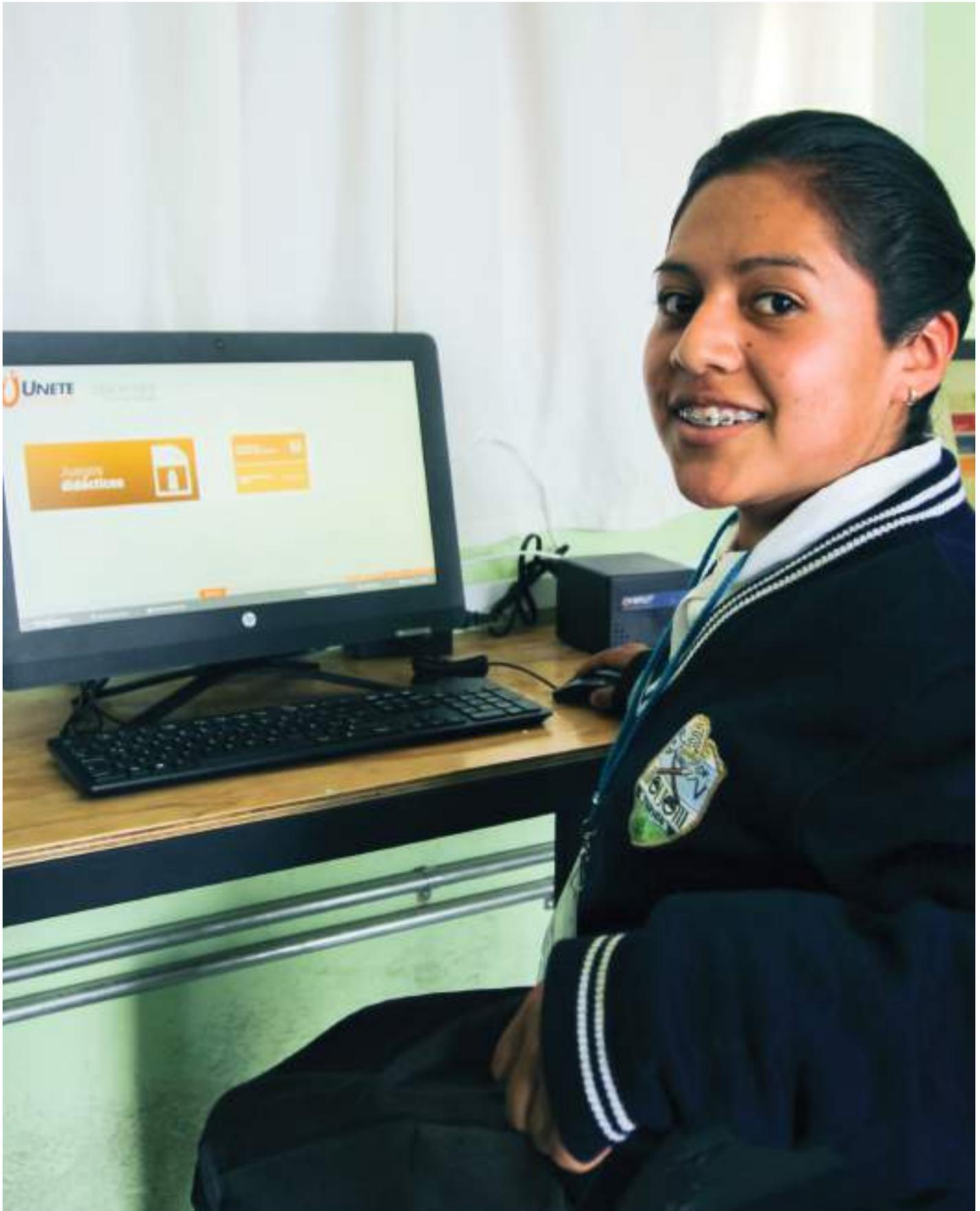
Through Servicios Integrales de Evaluación y Medición Educativa, S.C. (SIEME), a monitoring to the follow up of the operation and impact of the UNETE model was carried out at schools benefited with the mentorship program during the school year 2014-2015

Primary Schools		
97 UNETE Primary Schools	35 Control Primary Schools	
4,699 students	492 students	
	17 students NON-UNETE control	18 schools UNETE control
	182 alumnos Escuelas Control NO UNETE	310 students UNETE control schools

## LEVEL OF COMPETENCES BASED ON THE 6TH GRADE STUDY PLAN



Level	Description
Level 1	This level refers to the use of digital tools, specifically to the use of "spreadsheets." Although students are able to understand the overall information from spreadsheets, they show an essential ability to create complex calculations.
Level 2	Students show a higher development of digital skills. They also show a combination of knowledge and skills while solving daily life situations where students must determine how to solve every situation.
Level 3	Students show a more developed digital skill and knowledge of the related information. They solve their homework faster and more accurately. A better understanding of statistical concepts allows them to have a better performance and get right answers. They also show qualities useful for their consecutive development.

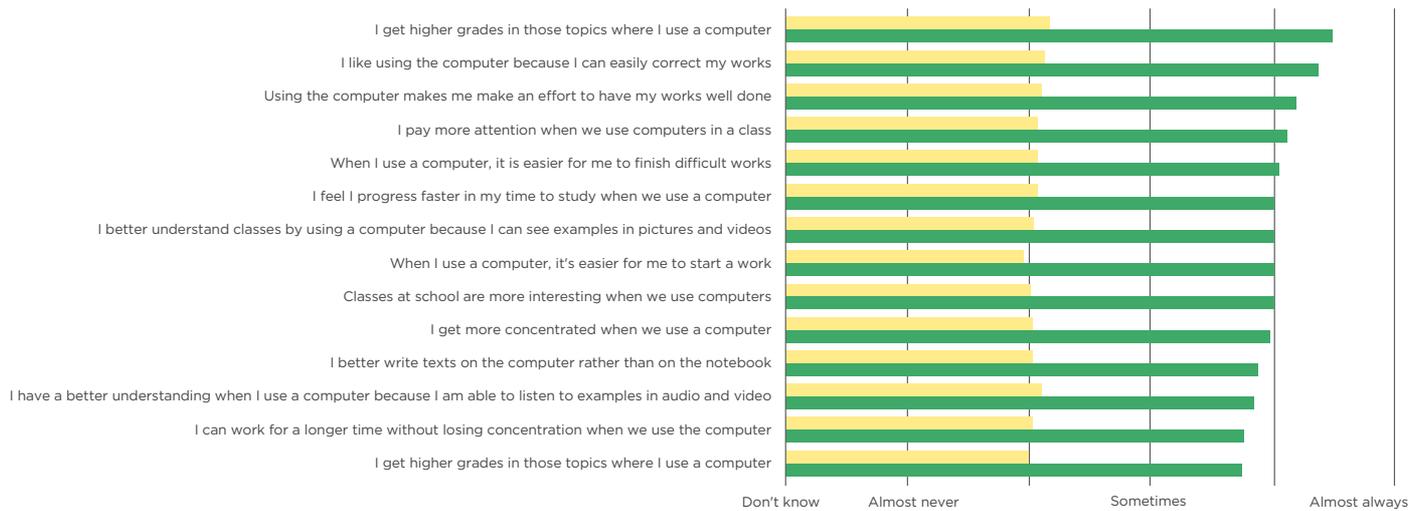


# DEVELOPMENT OF DIGITAL SKILLS IN INDIGENOUS COMMUNITIES

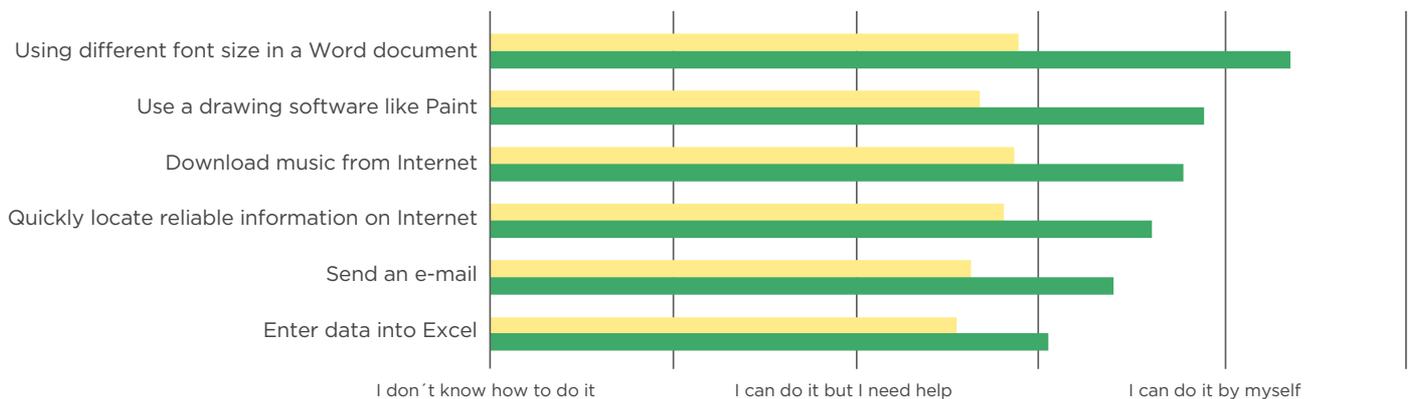
Evaluation prepared by  
**VALORA**

Results of the digital inclusion project in elementary schools of indigenous municipalities from states of Chiapas, Campeche, Quintana Roo and Yucatan in 2014 with a representative exhibition of 131 schools and a control group of 50 schools.

## MOTIVATION



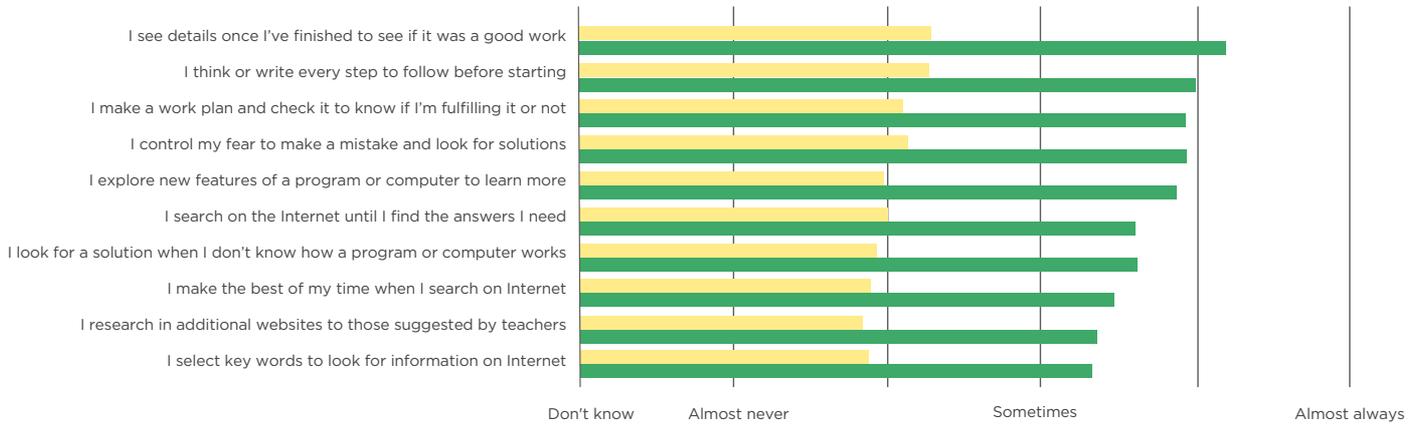
## DIGITAL SKILLS



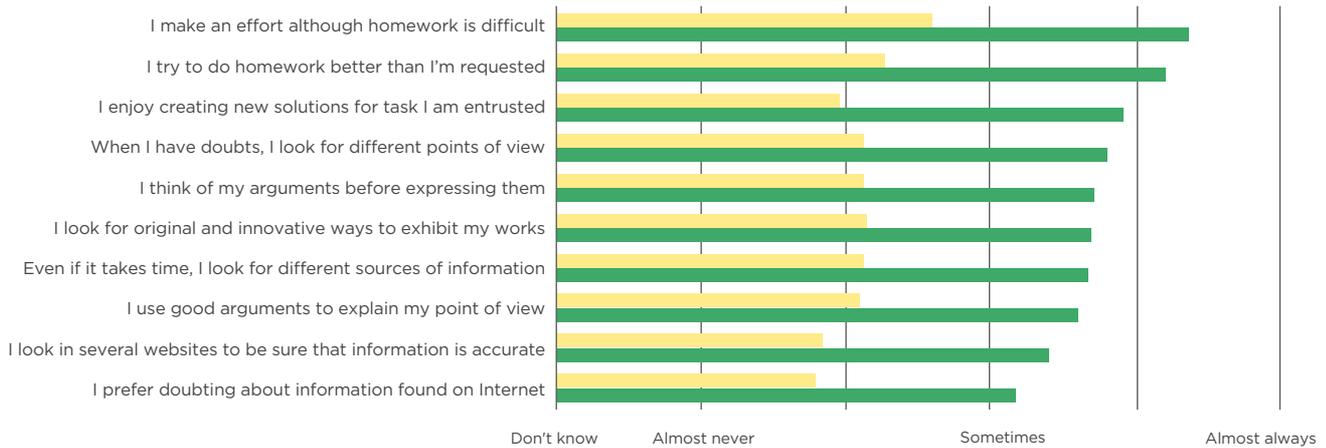
■ Schools NOT SUPPORTED by UNETE

■ Schools SUPPORTED by UNETE

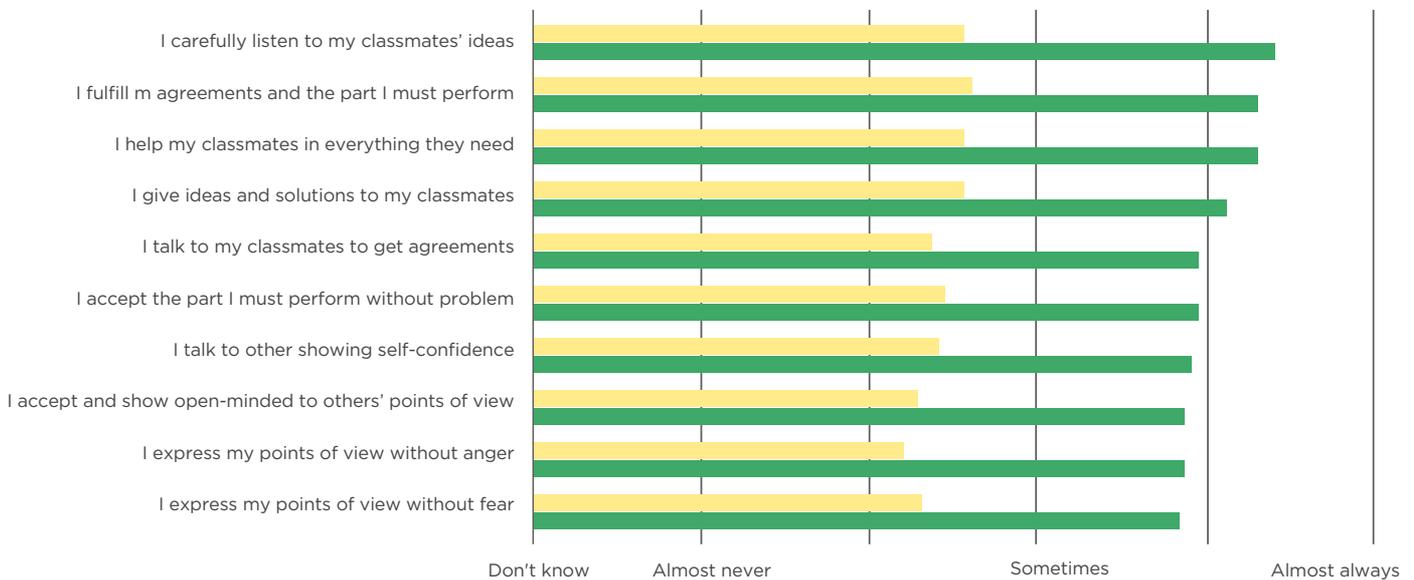
### SOLVING PROBLEMS



### CRITICAL THINKING



### COLLABORATION SKILLS AND INTERPERSONAL RELATIONSHIPS



■ Schools NOT SUPPORTED by UNETE

■ Schools SUPPORTED by UNETE

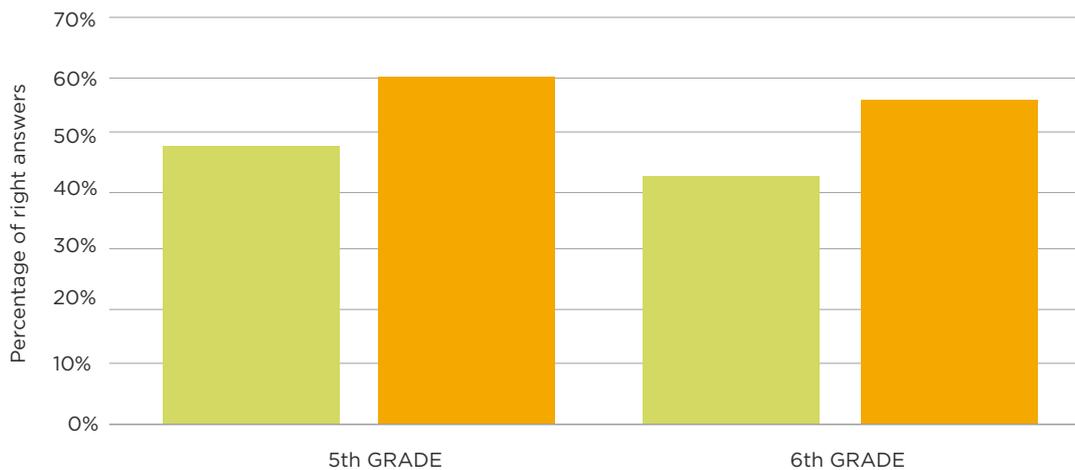
# EVALUATION OF THE ACADEMIC PERFORMANCE WITH MOBILE TECHNOLOGY IN SCHOOL YEAR 2013-2014

Evaluation prepared by

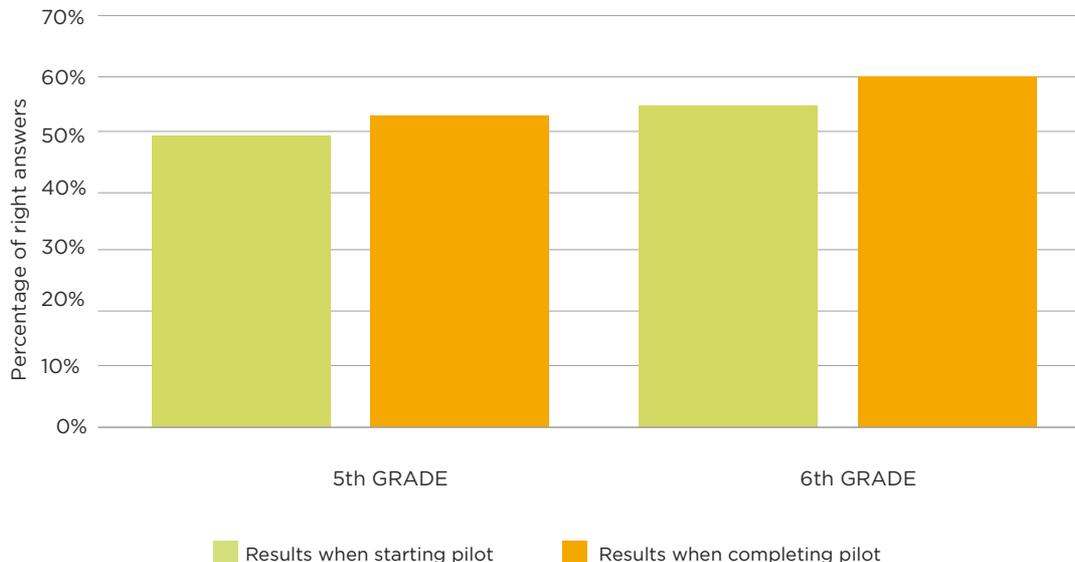
**CONSULTORA EN TIC,  
ALICIA BAÑUELOS**

UNETE, supported by CISCO and INTEL, carried out a pilot program of digital inclusion with mobile technology in two schools of the state of Hidalgo. The purpose of this pilot program was to assess different intervention models and find the best practices to favor academic results through the use of technology. Results can be noted in the following graphs.

## MATHEMATICS EVALUATION



## SCIENCE EVALUATION

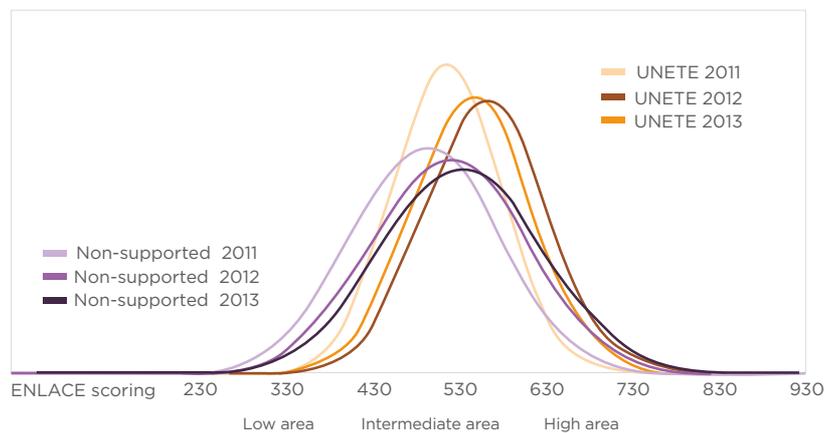


# NATIONAL EVALUATION OF THE ACADEMIC ACHIEVEMENT IN SCHOOL CENTERS 2011, 2012 AND 2013

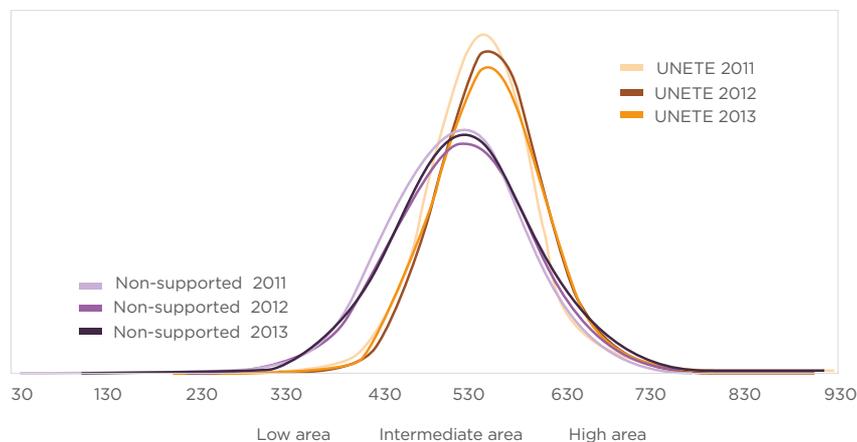


Evaluation prepared by

## DISTRIBUTION OF MATHEMATICS SCORING FROM PRIMARY SCHOOLS AT ENLACE TEST 2011, 2012, 2013



## DISTRIBUTION OF SPANISH SCORING FROM PRIMARY SCHOOLS AT ENLACE TEST 2011, 2012, 2013



**Higher impact in Primary School than in High School**



**Higher impact in Mathematics than in Spanish**



**Higher impact in Rural schools than in Urban**

INSTITUTION  
DEVELOPMENT

# ADDITIONAL DEVELOPMENT

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At UNETE we have worked to develop fundraising strategies aiming to continue influencing education. During 2017 we lived one of the best years in this matter. This has been possible thanks to Corporate Social Responsibility (CSR) strategies, projects with state governments, individual donors, and international foundations.

The following is a summary of the strategies implemented, which have allowed us to give access to a quality education to 123,651 children and youth.

---





WE ARE ALL  
TOGETHER  
TRANSFORMING  
LIVES. THANKS  
TO ALL OUR  
DONORS FOR  
THEIR VALUABLE  
SUPPORT!

## BUSINESS DONORS

At UNETE, we have worked to develop Corporate Social Responsibility (CSR) strategies that could impact these organizations and

their partners by forging stronger bonds among a business community and a school community where both are developed. Our belief is that

developing CSR actions is essential for any current business model.

### ALTERNATIVES WHERE COMPANIES CAN GET INVOLVED AT UNETE:

#### UNETE SOCIO

It offers companies the opportunity to get their in-house clients involved in a community service while fostering their adherence as partners. A UNETE partner is an

engages person engaged person with a big heart who monthly contributes with a small amount of money charged to his or her credit or debit card. Thanks to all

UNETE partners, it is possible to make thousands of children access a better education and succeed in developing digital skills of the 21st Century.

#### A FOR CAUSE BUSINESS

This strategy offers companies the possibility to forge a bond among one or several goods and services with UNETE. The company chooses

a good or service to sell and carries out a campaign promoting that good or service. One part of profits is provided to UNETE to continue

equipping Media Labs and teacher training programs.

#### FRIEND COMPANY

It gives the opportunity to state a strategic alliance where the company becomes a lifetime partner of UNETE by providing thousands

of children the access to a quality education. We have 4 strategies to become a friend company:

- Supporting company

- Engaged company
- Transforming company
- UNETE Sponsor

#### TIME TO HELP

This alternative gives the opportunity to implement corporate volunteering actions in conjunction with the company. When it comes

to make a change in society, all of us should have Time to Help. UNETE has different alternatives to take part in activities that contribute

to consolidate a social responsibility culture and simultaneously help improving education quality in Mexico.

#### ALLIED COMPANY

This is the highest category within UNETE Corporate Alliance Strategies. An Allied Company is physically present in every

school and every child supported by us. These companies make a direct impact on UNETE mission enforcement. A yearly donation

can make your company become an UNETE ally and this will support more than 2.6 million children every school year.

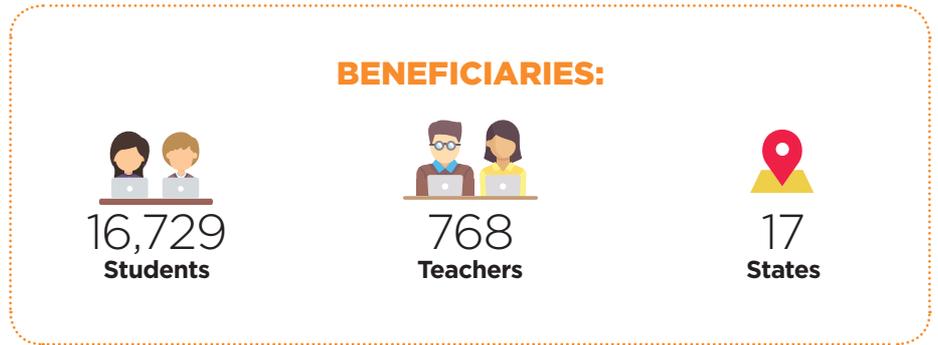
# ACCIONES EMPRESARIALES DESTACADAS



## COPPEL

Coppel is one of the donors most engaged to strengthen education in our country. From 2014 to date, thanks to its “Back to School with Coppel” campaign, 20 schools of basic education, located in 17 states of the Republic, have been benefited.

This support involves the installation of a Media Lab equipped with appropriate technological tools based on the context and the remodeling of the physical space that could be appealing, comfortable and funny for students.



At the state of Sinaloa, schools supported by Coppel were completely remodeled; works performed at the campus involved remodeling the football court, containment, Media Classroom, fixing restrooms and a whole program of education strengthening in which local organizations take part.

Coppel’s commitment to support the most outstanding students and teachers is aligned to its working story based on robust principles: simplicity, confidence, and proximity to its clients. **Thank you, Coppel, for the vision with which every project has been started and for believing education is the way to transform lives!**





**CUANTRIX**

CUANTRIX is an IZZI initiative from Fundación Televisa and AMITI aiming to reinforce children creativity, logic and critical thinking through computing and programing language learning in order to enhance their performance at school and lead a way of job opportunities in the future.

In 2017 we started with the deployment of Cuantrix program in 6 states of the Mexican Republic.

Cuantrix looks for the teacher's autonomy to integrate new content for the classroom by applying different working strategies such as tailored advisory, group training and monitoring of the advancements in the program delivery.

**ALCANCE DEL PROYECTO**

STATE	SCHOOLS	TEACHERS DEPLOYING CUANTRIX	BOYS AND GIRLS LEARNING PROGRAMMING	CUANTRIX FACILITATORS IN FIELD
Campeche	63	138	3,640	3
Estado de México	12	23	655	1
Puebla	13	113	4,870	1
San Luis Potosí	50	84	3,453	4
Sonora	40	85	2,502	2
Zacatecas	52	107	4,086	3
<b>TOTAL</b>	<b>230</b>	<b>552</b>	<b>19,206</b>	<b>14</b>

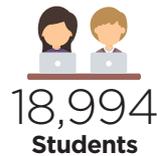




### HIDALGO ENTREPRENEURS

The alliance between CMIC, CCEH, Ministry of Finance and UNETE for about 12 years has been transformed in a better education for children and youth from Hidalgo, whose collaborative work has allowed an important presence at state level. UNETE has focused on rewarding good actions of principals, teachers, parents and students; for this reason, UNETE launched its campaign called

### BENEFICIARIES:



“Renew your classroom Hidalgo” during 2017. It consisted on motivating schools equipped by this program to use their equipment appropriately, even if it was obsolete; then, they should design a project to ask for

their equipment update. That is how the support to renew 20 Media Labs was performed. The same year we continued supporting new schools with Media Labs and the on-site Mentorship Program.

### RENEW YOUR CLASSROOM:

Beneficiaries:



### EQUIPMENT 2017:

Beneficiaries:



**The project performed at the state has been very fruitful; the following years we will continue creating strategies improving education for Hidalgo children and youth. Besides, we will start working with youth aiming to enrich their digital skills oriented to work.**



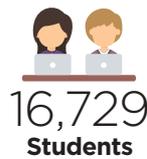
**ACCIONA**

Being an alternative to clean energy and looking after the future of La Ventosa inhabitants in Oaxaca state is what has consolidated Acciona Energía as one of the most engaged companies in the country.

The decision to support education for children and young students from the Istmo through UNETE model reflects the human quality of this company's associates. During 2017, Acciona Energía stood out for helping schools and families affected by an earthquake last September 2017.



**BENEFICIARIES:**



**FECHAC**

**FECHAC**

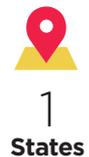
Joining efforts and turning them into specific support based on education, health and professional development areas for organizations is the work that has differentiated the Fundación del Empresariado Chihuahuense.

Aiming to promote human and social development, FECHAC has supported Media Lab equipment in communities at critical needs. This time we were supported by FECHAC CUAUHTEMOC and LA NORTEÑITA;

thanks to their contribution we continued the mentorship program in 6 schools of this municipalities, which have a Media Lab and teachers that have stood up for overcome problems or small setbacks occurred by

working collectively to achieve their goal and get trained the best way possible. Team work and participation from other local organizations help to deliver a strategic model involving education, meals and recreation.

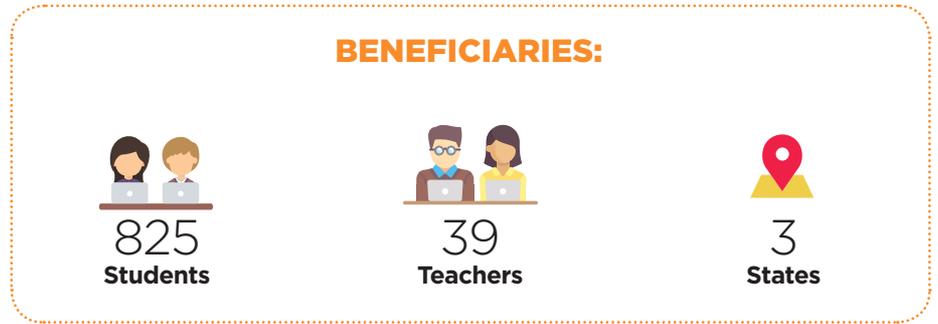
**BENEFICIARIES:**





**EXITUS CAPITAL**

“The Financial Institution that helps you to make your projects come true”. This company’s work, together with its associates, has changed the life of boys, girls, youth, teachers and parents from the Mazahua community in the State of Mexico. The work performed during the last 5 years has been transformed into football tournaments, contests for students, volunteering days and activities



to promote coexistence among associates, students and families. Proximity and familiarity among schools and Exitus Capital associates was a demonstration of how great is their human quality. The support we

have received as an institution from this company to our UNETE partner’s program confirm their success strategy and this lead us to sum to this company. Thank you!



**2040 CUATRO CIENEGAS PLAN**

Plan Cuatro Ciénegas 2040 is a non-profit citizen corporation that works to transform the community focusing on new generations.

On November, 2017 we started a collaborative project looking for developing digital skills in teachers and students of Cuatro Ciénegas municipality in Coahuila. To achieve this, we equipped all elementary schools (total 6) from the district, which has allowed us to provide more than 1,000 boys and girls with quality education.



## OTHER DONORS

UNETE is happy with their donors and we feel proud of the fact that in 2017 these companies have picked us to be part of their social responsibility strategy. We have worked in conjunction with them from the follow-up and equipment renewal for schools from 2001, strategies for schools affected by contingency, business projects

at indigenous children homes supported by CDI and Patrimonio Indígena; math projects for High School, volunteering activities and mainly development of digital skills in the most needed municipalities.

These donors supported us to implement 14 Media Labs with the whole UNETE model and the

on-site Mentorship Program in other 7 different schools. By supporting 21 basic education schools, we succeeded in having presence in 12 states of the Mexican Republic, this benefits more than 6,650 students and more than 200 teachers. Thank you all of you!



## IN-KIND DONATIONS

There are a lot of supportive actions that undoubtedly have made a difference in UNETE performance. We want to tell those companies helping us to reduce costs thank you for your in-kind contributions. Every saving or monetary efficiency is reinvested in the UNETE MODEL in order to take it to more schools and continue promoting the digital skills development. Thank you!



**It is also important to us to acknowledge the work performed by allied companies that have helped us in the field to solve problems and follow up already installed Media Labs, and meet teachers' needs.**



## GOVERNMENT



GOBIERNO DEL  
ESTADO DE CHIAPAS

### CHIAPAS

The commitment of the Chiapas state government to improve education and giving access to technological tools is demonstrated by the project to equip 100 Media Labs and train their teachers and principals.

Thanks to the State Government contribution, we succeeded in reaching extremely remote schools; we worked from Tila municipality, located at Nuevo Limar district at the north of the state, to the south in Puerto Madero, Tapachula. From East to West, we are present from Tonalá to Marques de Comillas.



We appreciate all management and resources provided by the state Ministry of Education and Eng. Jorge Pimentel to carry out Saturday sessions of PBL (Project-based Learning) methodology and case study by using tools such as Freemind, Audacity, Moviemaker, Jclíc and HotPotatoes. These tools were used to train over 200 teachers in strategies allowing them to improve their teaching practice and access better job opportunities. Particularly, we thank the contribution from Biologist Julia Carabias Lillo since schools located

**BENEFICIARIES:**

 <b>24,590</b> <b>Students</b>	 <b>1,022</b> <b>Teachers</b>	 <b>43</b> <b>Municipalities</b>
---	--	---

at Marques de Comillas and Ocosingo represent an important part of the project to preserve the Lacandon jungle. By equipping these campuses and thanks to UNETE and the reserve biologists'

follow up, we work in conjunction with the population to preserve the jungle and promote ecotourism. The work performed in this region will undoubtedly strengthen education of Chiapas inhabitants.



CAMPECHE

### CAMPECHE

An outstanding state from 2017 was Campeche. The work in conjunction with the Ministry of Public Education allowed us to deploy 3 main projects:

- Kolibri - Google.org Introductory workshop for the
- Chromebooks management at a

### PROJECT SCOPE

PROJECT	SCHOOLS	STUDENTS	TEACHERS
KOLIBRI	10	3,860	141
Taller introductorio para el manejo de Chromebooks	24	No aplica	565
CUANTRIX	63	3,640	138

High School Level in the state of Campeche.

- Cuantrix - Computing and programming thinking.



### GOVERNMENT OF THE STATE OF PUEBLA

In 2017, the government of the state of Puebla, headed by José Antonio Gali Fayad, was remarkable for their actions initiated to comply with the commitment 4:

*“All public preschools of the state should have computing equipment”.* With this commitment, the Governor expressed his responsibility with Puebla childhood to offer them education equity opportunities allowing them to access technological tools that contribute to their academic education.

This big project is unique in their class at domestic level since it represents them major investment and maybe the only view of public politics so that from the early childhood, children can access



### First government that took computers to all Preschools.

the rational and educational use of technology by offering an unprecedented equity in Preschool Education schools.

At Puebla, through the Ministry of Public Education of such district, the Media Lab Equipment Program was deployed, which was enforced after signing a Partnership Agreement

among José Antonio Gali Fayad, Constitutional Governor; Patricia Vázquez del Mercado, Ministry of Public Education; Roberto Shapiro Shein, Chairman of the UNETE Board of Trustees, and witnesses are: Arturo Castillo Bretón, Member of the UNETE Board of Trustees and Moroni Pineda Robles, Director of UNETE Regional Programs and

responsible for the Program. In order to enter into this agreement signature, we also witnessed the leadership and support from Mario Riestra, Ministry of Puebla Town Hall, who fostered the first wide program for this type of preschool facilities in Puebla capital; headed at that time by the current Governor Gali.

The program posed the equipment of 3,208 Preschool facilities with Media Labs, which would be equipped by two different models: The Puebla model performed by the Ministry of Public Education and UNETE model performed by Unión de Empresarios para la Tecnología en la Educación (UNETE). As part of the agreement, UNETE committed to expand and help implementing this model in every school to benefit either schools directly equipped by UNETE and those installed by the state.

This public-private alliance enforcement with the non-profit

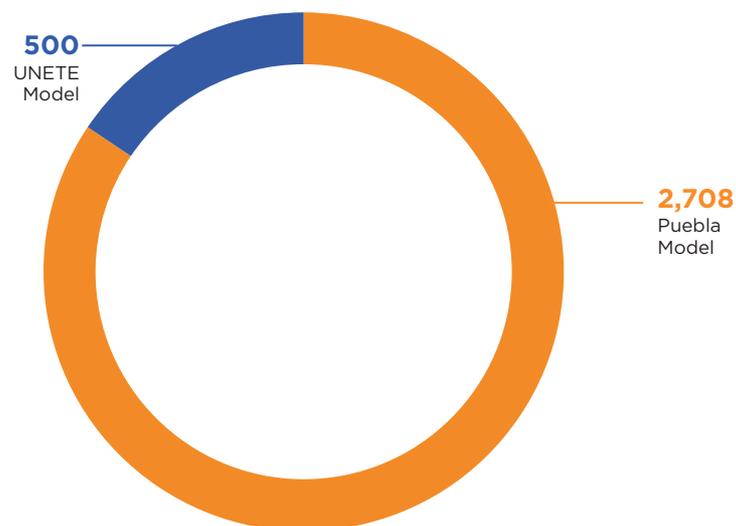


corporation is unique and first in its class in Mexico since it combines the company's 19 years of experience working on education with the politic will and commitment from Governor Gali to make this program a successful model.

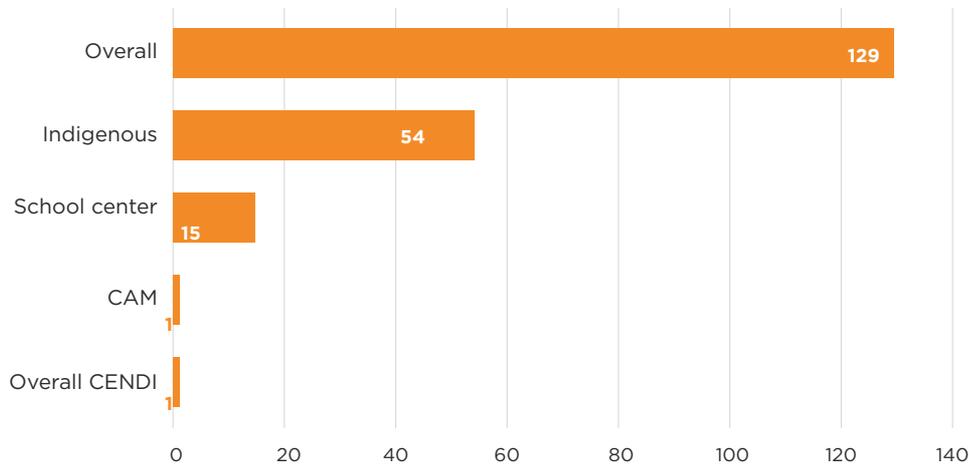
Including all benefits of the UNETE model and horizontally integrate contents in computing equipment is the core aspect of the Program.

After signing this agreement, UNETE, besides equipping 500 Media Labs with computing equipment preloaded with Eduspark, UNETE committed to work with the Ministry of Public Education to develop and implement the necessary actions to expand and intensify the use and leveraging of Media Labs, but also to support the Ministry on the deployment of its Media Lab model through the following:

**PRESCHOOLS TO BE EQUIPPED PER MODEL**



**EQUIPPING 200 PRESCHOOLS**



\*CAM- Center of Multiple Attention

- Classroom validation
- Classroom equipment
- Teacher training and mentorship
- Website creation to host educational content
- Enabling the Help Desk
- Contents
- Website and UNETE community access

With this first stage, it was possible to impact more than:

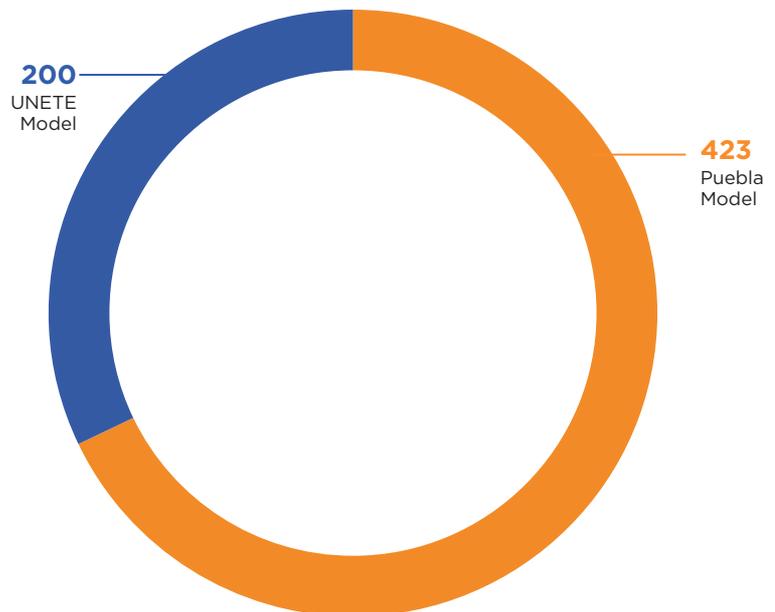


**FIRST RESULTS OF THE PROJECT IN PUEBLA**

On a first stage during 2017, UNETE equipped 200 preschools with Media Labs: 54 were of indigenous modality, 1 overall CENDI preschool, 129 overall preschools and 15 school centers, which represented 6% from the total project.

During 2017, the government of Puebla through the Ministry of Public Education succeeded in equipping 423 preschools from different educational modalities, which results in total 623 preschools and equals 19% of the whole Equipment Program.

**PRESCHOOLS EQUIPPED IN 2017**



**Total preschools: 623**



Nothing of the above mentioned could have been possible without the coordinated participation of the different education and government authorities that, in conjunction with UNETE, we worked and continue working to reach all state preschools. For this reason, UNETE is grateful for the confidence Governor José

Antonio Gali Fayad and the state Ministry of Public Education have entrusted UNETE for the Media Lab Equipment Program deployment in the state of Puebla.

We highly acknowledge all education and government authorities that have jointly

performed to achieve the goal to equip 3,208 preschools. Thanks to their work and commitment, today Puebla is a reference of impetus to improve education quality in the country by investing in education technology with which hundreds of children, teachers and parents from Puebla are benefited.



### MUNICIPAL GOVERNMENT OF SAN ANDRÉS CHOLULA

In 2014 a Partnership Agreement was signed between the Municipal Government of San Andrés Cholula, represented by the Municipal President Leoncio Paisano Arias, and UNETE, headed by Roberto Shapiro, who was accompanied by Arturo Castillo and Moroni Pineda,



spokesperson of the Board of Trustees and Director of Regional Programs, respectively. At the execution of the

agreement, both parties agreed with jointly working to equip 82 Media Labs at the Municipality schools.

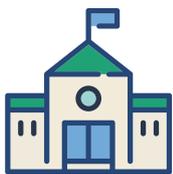
To equip these classrooms, 3 equipment models were considered:

SMALL CLASSROOM (UP TO 100 STUDENTS)	MEDIUM CLASSROOM (FROM 101 TO 500 STUDENTS)	BIG CLASSROOM (OVER 500 STUDENTS)
10 computers	15 computers	20 computers
<ul style="list-style-type: none"> <li>Regulators</li> <li>Local network</li> <li>24-port switch</li> <li>Scanner</li> <li>Router</li> <li>Internet rental for 3 years</li> <li>Delivery and infrastructure installation</li> <li>Windows Professional</li> </ul>	<p>Servicios:</p> <ul style="list-style-type: none"> <li>Mentorship (on-site and remote)</li> <li>Training for teachers (educational journey)</li> <li>UNETE community</li> <li>Administrative and operative expenses</li> <li>Evaluation</li> <li>Acknowledgement</li> </ul>	

The model was divided into five stages:



### RESULTADOS DEL 2017, ETAPA 4



**16**  
Equipped schools

- 1 Overall High Schools
- 9 Overall Preschools
- 4 Overall Primary Schools
- 1 Technical High School
- 1 Overall High School



**3,185**  
Benefited students



**113**  
Benefited and trained teachers



**210**  
Installed equipment



**1**  
Satellite small classroom



**6**  
Earth small classrooms



**1**  
Earth big classroom



**8**  
Earth medium classrooms



**3**  
Rural classrooms



**13**  
Urban classrooms

Thanks to this project, Leoncio Paisano Arias has positioned San Andrés Cholula as the first municipality of the entire state of Puebla and the country to deploy a Media Lab Equipment Program including schools at all education levels.

Incidence in education quality and equity shown by a municipality is possible, the proof is this citizen effort headed by the Municipal President, Leoncio Paisano and UNETE.

“Modernity with identity” is the slogan that has accompanied the San Andrés government for 5 years and the best proof of this is undoubtedly the Media Lab Equipment Program. Today thousands of children and hundreds of teachers have moved on to the right direction of their education by turning this so



important municipality of the state of Puebla into a national reference waiting to be emulated.

There have been multiple achievements that have substantially impacted learning of this municipality students and

families of the state, thus UNETE is grateful to the municipal president and his working staff for trusting this effort to provide children, young students and teachers with technological tools by motivating and contributing to their development.



GOBIERNO DEL  
ESTADO DE MÉXICO

### PROJECT OF SCHOOL TECHNOLOGY AND STRENGTHENING IN THE STATE OF MEXICO

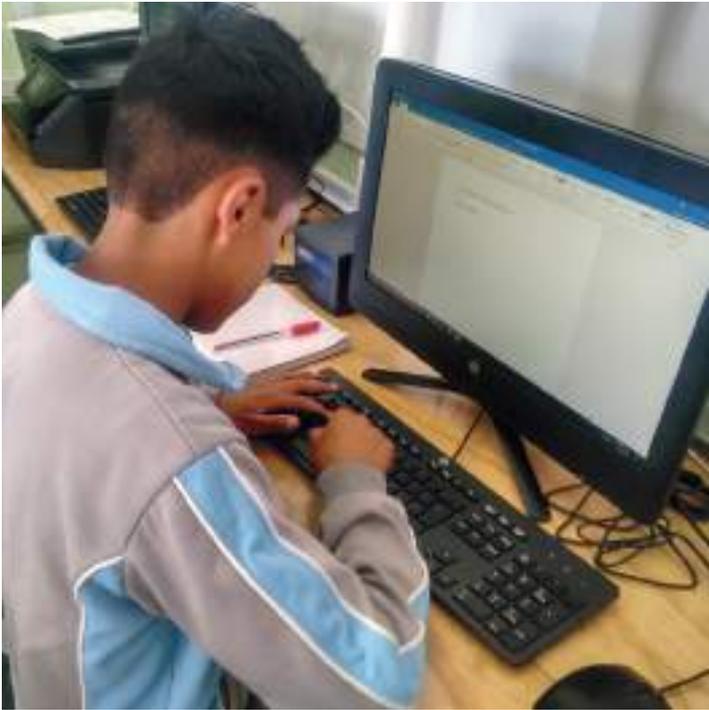
UNETE benefited more than 50,000 students with computing equipment loaded with education contents and incorporating Education Technology Instructors to schools in order to train teachers on incorporating different tools to the teaching-learning processes.

We thank Ex-governor Eruviel Ávila Villegas, as well as all authorities and actors from the Ministry of Public

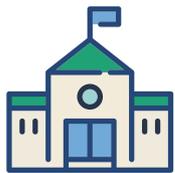


Education for their confidence in order to continue improving

education quality in the state of Mexico.



### PROYECTO ESTADO DE MÉXICO EN NÚMEROS



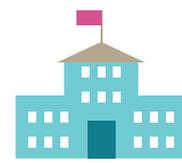
200  
Equipped  
schools



2,150  
Installed  
equipment



110  
Primary  
schools



90  
High schools



80  
SEIEM



120  
DGBE



1,296  
Trained supervisors,  
principals and  
teachers



3,570  
Benefited  
teachers



57,340  
Benefited  
students

\*SEIEM Educational Services integrated to the State of Mexico  
\*DGBE General Direction of High School

### **PBL (Project-based Learning)**

Before equipping Media Labs, there was a call to supervisors, principals and teachers of the State of Mexico benefited schools to be trained on the PBL methodology (project-based learning).

Training on “Project-based Learning (PBL) with OneNote as a management tool involved developing a lesson plan for fifth grade. Any subject block applying this methodology. The purpose of this training was supporting this PBL methodology deployment in activities developed within lesson plans and programs during the intervention of Educational Technology Instructors.

We provide on-site training for 8 hours (Saturday) to 1,296 education actors in 15 simultaneous sites during 6 consecutive Saturdays and distance follow-up (online).

### **Content Access Point training**

Aiming to provide teachers with direct support and timely follow-up during the project, different training sessions were provided to the Ministry of Public Education personnel of the State of Mexico to demonstrate functionality and benefits delivered by this device. Different sub-system staff were called to show contents and methodology of the UNETE model.

### **Evaluation**

As part of the Mentorship Program evaluation, a ‘Digital Skill Diagnosis for Teachers’ was applied. The questionnaire was applied in two phases: at the beginning of the program (pretest) and at the



end of the school year (posttest). Comparison of both phases allowed us to value teacher progress during the months of intervention and to identify the education impact of the Mentorship Program.

The Digital Skill Diagnosis for Teachers assesses two big aspects: the technical profile and the pedagogical profile. The first one refers to those digital skills a teacher shows while the second regards



how skills are used in pedagogical activities in a classroom.

Digital skills that constitute the technical profile are as follows: use of file explorer, email, web browser,

use of platforms to integrate evidence portfolio, text processor, spreadsheet programs, multimedia presentation, creation of learning objects, audio edition, video edition, image processing and software for

mind mapping creation. Scoring of every profile have been classified into three categories: basic, intermediate and advanced level. Each level is described in Tables 1 and 2.

**TABLE 1. LEVELS OF TECHNICAL PROFILE DIGITAL SKILLS**

<b>Advanced level</b>	Teachers know most functions of digital programs and they are able to perform configuration homework and to enable advanced options. Teachers are supported on digital tools to achieve goals, begin sophisticated projects and create data products.
<b>Intermediate level</b>	Teachers get familiar with several functions of digital programs. They are able to perform edition and format homework on their digital projects.
<b>Basic level</b>	Teachers only know a limited number of basic functions from digital programs. They are able to create very simple products with digital tools.

**TABLA 2. NIVELES DE INTEGRACIÓN PEDAGÓGICA DE LAS TIC DEL PERFIL PEDAGÓGICO**

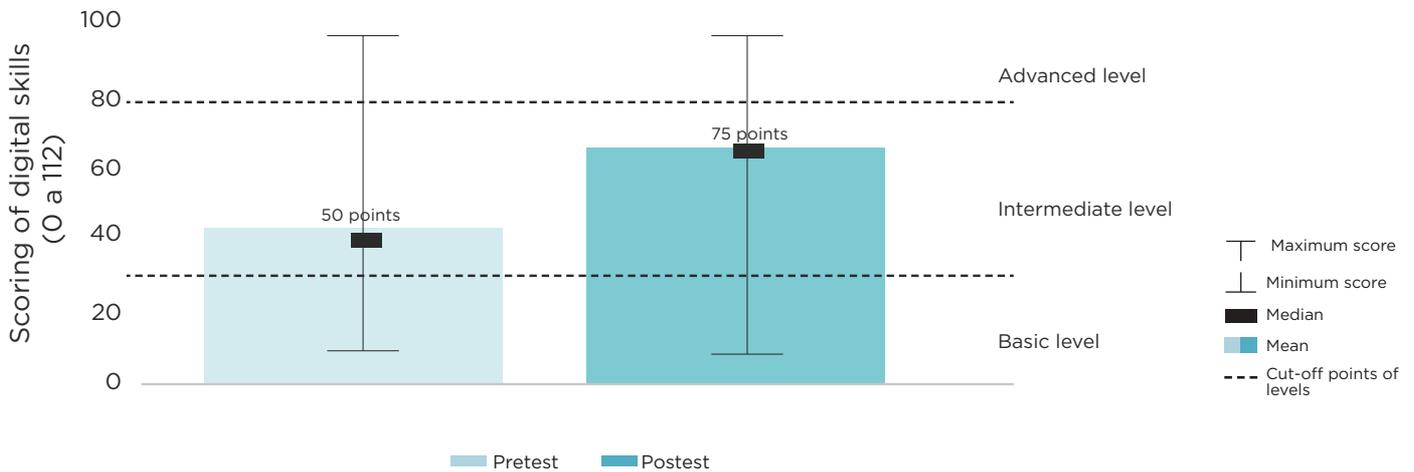
<b>Advanced level</b>	The use of digital tools in teaching practice is continuous. Teachers rely on digital tools in a systematic way to carry out their teaching practice. They considerably strengthen their students' digital abilities, create technological projects and foster digital collective work.
<b>Intermediate level</b>	The use of digital tools in teaching practice is occasional. Teachers create digital products as attendance lists and planning, create digital presentations for their class and strengthen some of their students' digital skills.
<b>Basic level</b>	The use of digital tools in teaching practice is not very common. The link stated by teachers between the use of digital tools and activities developed by students in the classroom is limited and barely systematic.

Regarding the technical profile, teachers receive an average of 50 points in perceived digital skills at the first phase of the evaluation while for the second evaluation phase the average scoring substantially increases up

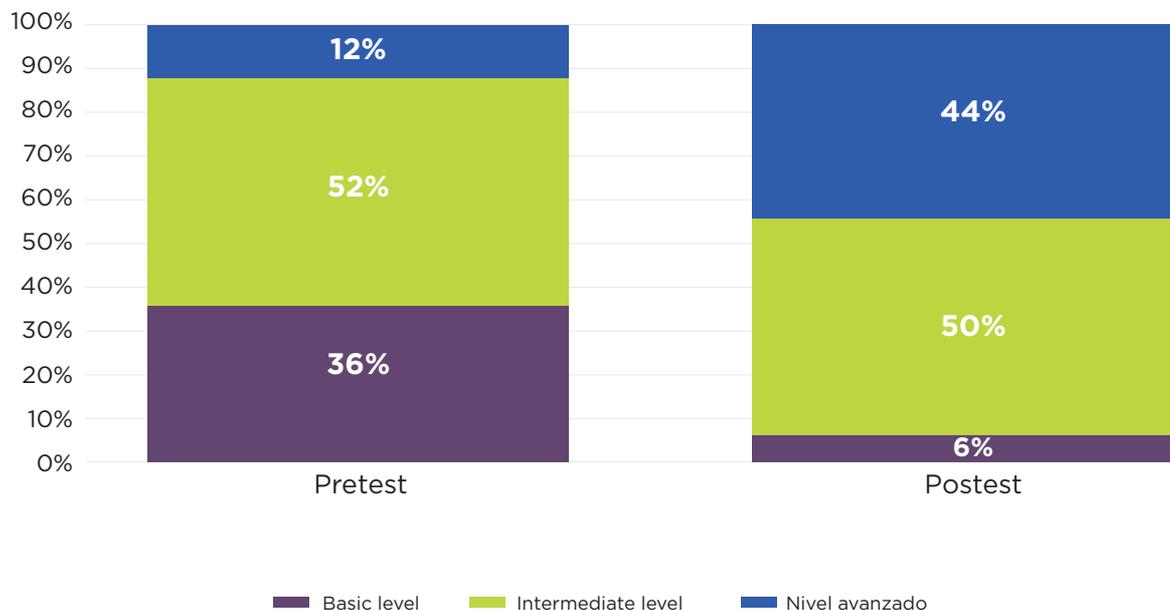
to 75 points (see Figure 1). Teacher ratio based on the digital skill level positively changed: for the second phase of evaluation, the amount of teachers located at the basic level decreased while the proportion of advanced-level teachers increased

from 12% to 44% (see Figure 2). This result was undoubtedly positive and resulted from the Mentorship Program because as teachers receive continuous training from instructors, they acquire digital knowledge.

**FIGURE 1 | AVERAGE SCORING OF THE PERCEIVED DIGITAL SKILLS**



**FIGURE 2 | LEVEL OF DIGITAL SKILLS PERCEIVED BY PROMOTERS**

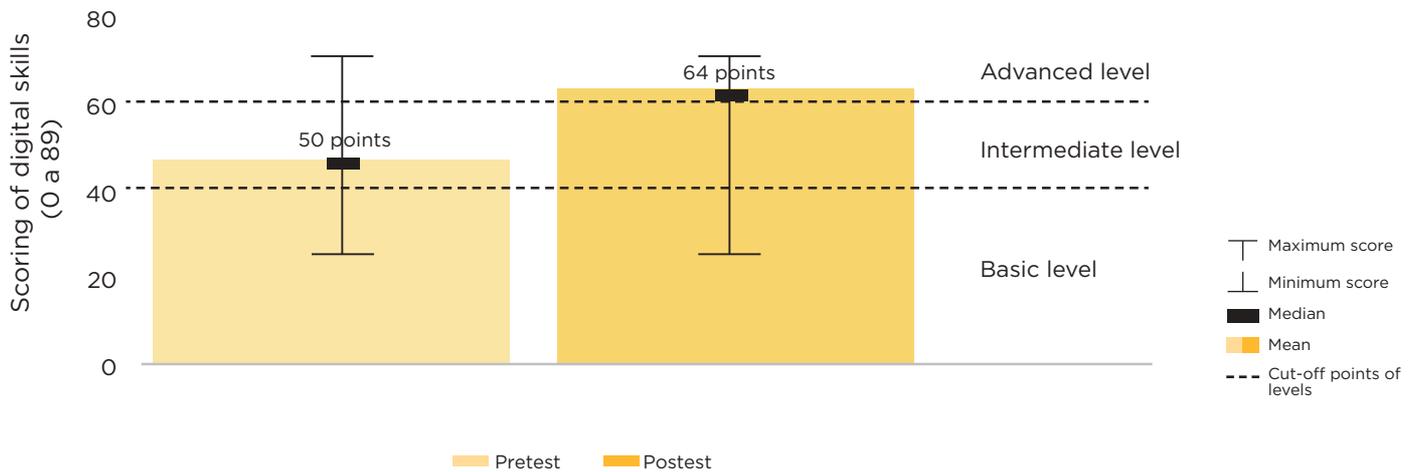


Regarding the pedagogical profile, results are also favorable, teachers succeed in getting higher scoring in the second evaluation phase. In fact, distance is so evident that teachers get an average, score at advanced level (Figure 3). This

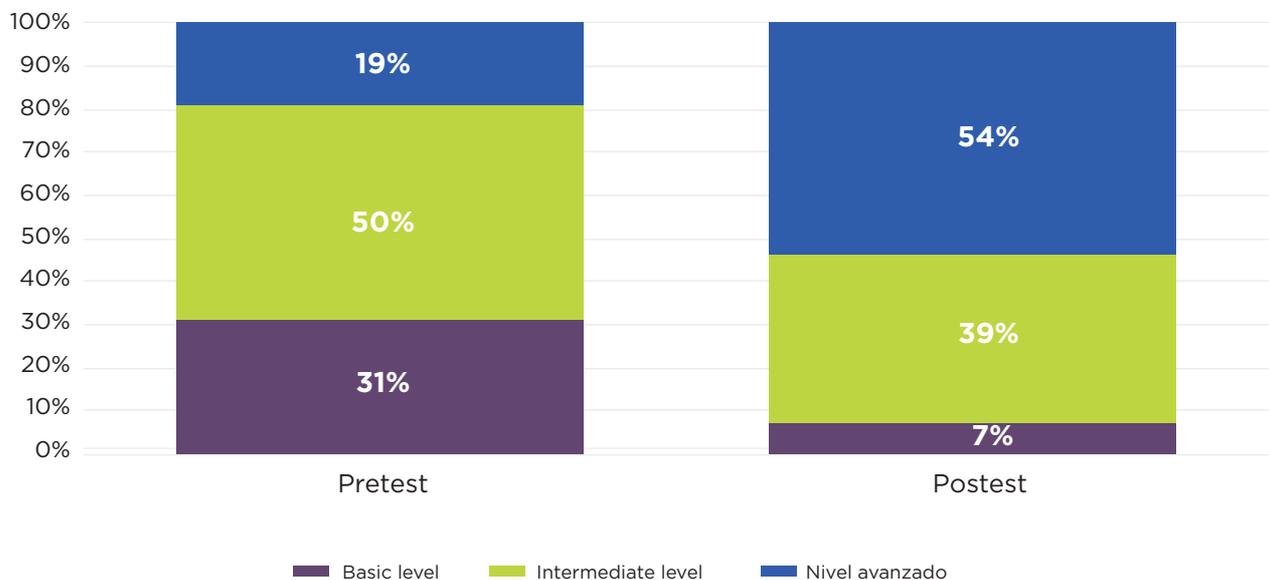
aspect is shown in Figure 4, where the advanced level increases in an outstanding manner from 19% to 54%. The Mentorship Program also substantially influences not only on the technical aspect of digital knowledge but also on the way to

incorporate them into lessons. As teachers acquire a more robust knowledge on the digital field, technology plays a main role at the classroom, making knowledge transmission possible, as well as digital skills for students.

**FIGURE 3 | AVERAGE SCORING OF THE PERCEIVED PEDAGOGICAL INTEGRATION OF TECHNOLOGY**



**FIGURE 4 | LEVEL OF THE PEDAGOGICAL INTEGRATION OF TECHNOLOGY PERCEIVED BY PROMOTERS**



A more specific analysis reflected that information technologies used by most teachers are text processor, file explorer, multimedia presentation program and spreadsheet.

This is not a casual result since these programs are very useful for teacher's activities such as class lists, grades, plans and didactic presentations while the file explorer is necessary to store and organize the aforementioned products on the computer. As previously mentioned,

on the second evaluation we noted that the frequency of use increased in all information technologies (see Figure 5).

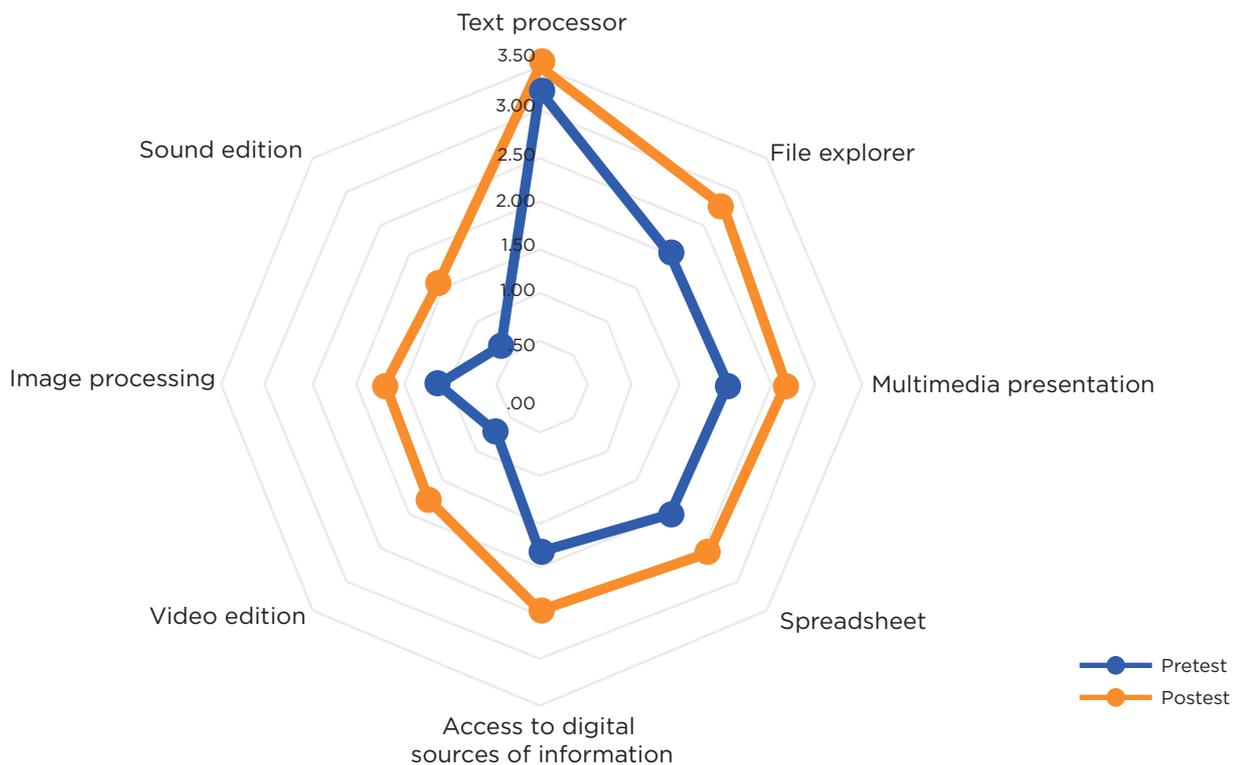
Figure 6 reflects results of the perceived ownership of online communication tools resulting in the highest scoring in posttest.

The use of email represents the highest scoring with an average in accordance with intermediate level. Chat and social networking are in second and third place,

respectively. This result is consistent with the global trend since society sectors are increasingly integrating these technologies to working life. Figure 7 reflects the level of perceived ownership of some digital programs; results are also favorable in posttest.

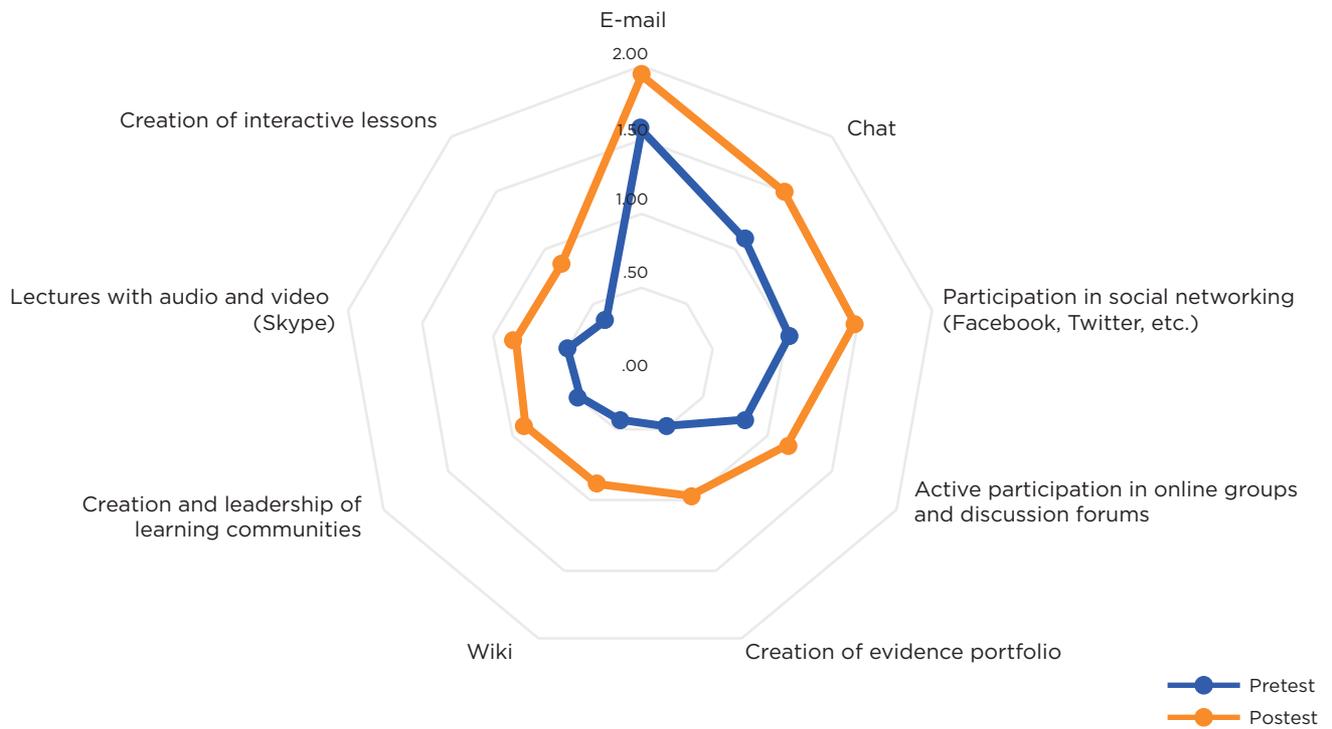
The outstanding features are text processor, multimedia presentation program, and file explorer to create digital portfolios. Teachers achieve an advanced level on the first two programs (see Figure 7).

**FIGURE 5 | FREQUENCY OF USE OF INFORMATION TECHNOLOGIES**

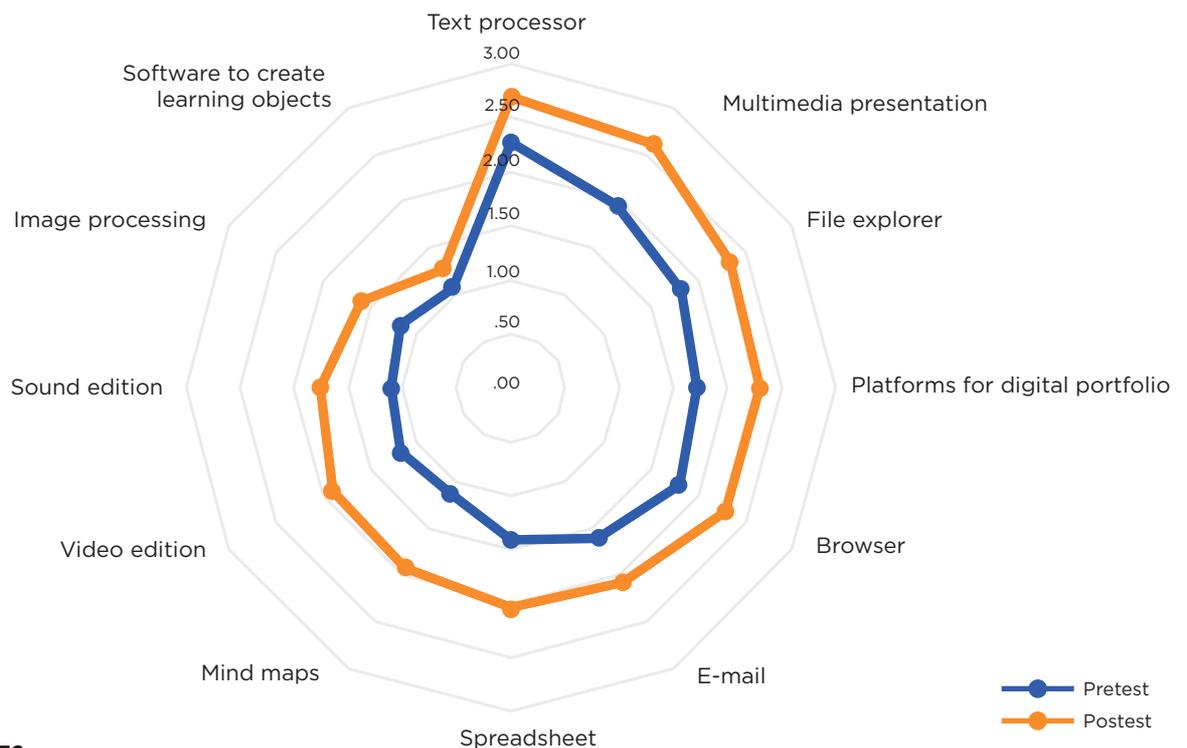


**Total teachers: 1,776**

**FIGURE 6 - LEVEL OF OWNERSHIP OF ONLINE COMMUNICATION TOOLS**



**FIGURE 7 - LEVEL OF OWNERSHIP OF ONLINE COMMUNICATION TOOLS**



**Total teachers: 1,776**

### Testimonials

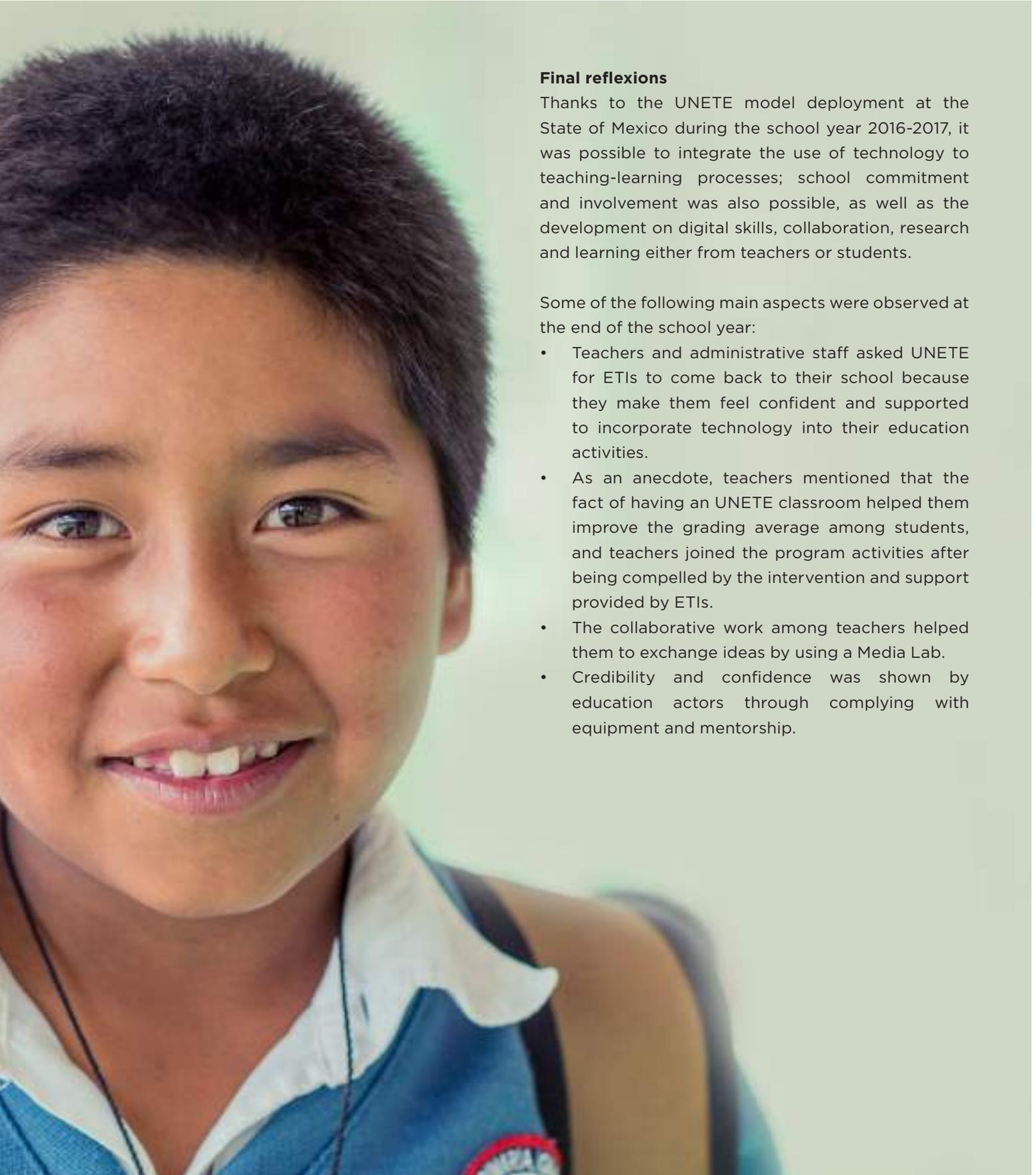
**“The major contribution was to take equipment to students since they had never had the opportunity to use a computer and knew very little about it. This also supported teachers since their working method and research methodology became easier for them to prepare their lessons.”**

Ana María Bernal Santos  
Escuela Sec. Oficial 523 “Rodolfo Neri Vela” • CCT 15EES0756M

**“I am grateful to UNETE for this opportunity that was not only a job opportunity but also an opportunity to experience a better personal and professional performance in my carrier. It was interesting and pleasant working at the same level as teachers, giving the best of me and getting good results from the project. It was and it is a pleasure belonging to UNETE and support education.”**

Cornelio Lazcano Leyva  
M. Rafael Ramírez School • CCT 15DPR0604P





### Final reflexions

Thanks to the UNETE model deployment at the State of Mexico during the school year 2016-2017, it was possible to integrate the use of technology to teaching-learning processes; school commitment and involvement was also possible, as well as the development on digital skills, collaboration, research and learning either from teachers or students.

Some of the following main aspects were observed at the end of the school year:

- Teachers and administrative staff asked UNETE for ETIs to come back to their school because they make them feel confident and supported to incorporate technology into their education activities.
- As an anecdote, teachers mentioned that the fact of having an UNETE classroom helped them improve the grading average among students, and teachers joined the program activities after being compelled by the intervention and support provided by ETIs.
- The collaborative work among teachers helped them to exchange ideas by using a Media Lab.
- Credibility and confidence was shown by education actors through complying with equipment and mentorship.

# UNETE ALLIES

Since UNETE's foundation, collaborative work has been promoted among different actors, either public or private, to make the highest impact possible on Mexico's

education. To achieve this, from the beginning we have always relied on the commitment and confidence from our Model Allies, companies, people, institutions and bodies

that have supported UNETE's work for 17 years resulting in the digital skill development of teachers and students.



Talking about continuity and strategic projects are characteristics describing Fundación Televisa work, a company that has always been worried about taking quality programs to the most needed through the "Gol por México" campaign, and supporting health, living, environment and education initiatives. During 2017 and thanks to the team work with Noticieros Televisa, the commitment reflected by parents from 10 schools in states of Campeche, Durango, Guanajuato, Jalisco, San Luis Potosí, Sonora,

Veracruz and Yucatán was rewarded. Schools were also supported by the "Goles por la Educación" program and GNP, and volunteering activities were performed too.

We are very proud of receiving Fundación Televisa support and being part of projects like Cuantrix, Goles por la Educación and Educación. The impact on thousands and thousands of children and young people's lives reflects their commitment in the country.

### GOALS FOR EDUCATION:

Beneficiaries:



283,234  
Students



11,443  
Teachers



103  
Municipalities

### STRATEGIC ALLIANCES:

Beneficiaries:



861,240  
Students

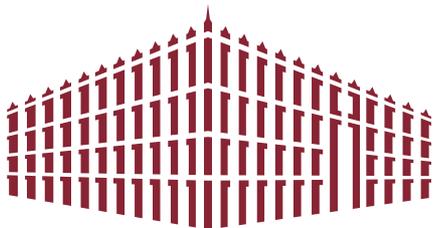


34,488  
Teachers



549  
Municipalities





**Nacional Monte de Piedad®**

“Ayudar a quien más lo necesita” (“Helping the most needed”) is the baseline of every social investment support provided by Nacional Monte de Piedad, which has been an ally for UNETE model since 2003. Thanks to their support, we have been able to deliver more than 35,000 computing equipment and accessories, provide Internet access and deliver the school strengthening program including teacher training.

Their invaluable contribution has not only benefited schools, teachers and students but they have also offered the support needed to strengthen and professionally develop our organization through initiatives such as the “Theory of change”, a certificate from

“Filantropía” and other initiatives that have created an innovative environment focused on the impact on the whole UNETE staff resulting in strengthening our intervention model. We have won a series of rewards and acknowledgments, being the National Quality Award the most outstanding.

Social investment performed by Nacional Monte de Piedad for our institution is undoubtedly a robust evidence of their belief in offering a better education to thousands of boys and girls of the country.

For all this, on behalf of more than 2,6 million boys and girls benefited every school year with digital skills, we want to **THANK YOU!**



**SEP**

Thinking on an education project in Mexico without the Ministry of Public Education (SEP) support would be impossible, thus we have been supported by State Distance Education Coordinations from the beginning. This relationship allowed UNETE to access schools, equipping them and empowering teachers so that they could be able to incorporate technology to their class plans.

**Thanks** to every state department of education related to UNETE

for the support provided in every equipment, technical and supervision visit! Support provided by your administrative and technical staff, and every principal allows us to fulfill our mission.

Thanks again to the Ministry of Public Education for trusting UNETE’s work and allowing us to continue adding in order to offer a quality education.



A great ally since 1999 that has been involved through donating computing equipment licenses installed at schools. They have also supported the operation of UNETE’s office. Their donation always allows us to be more efficient and innovative

on the use of resources. This year we started to work with Microsoft Azure to migrate our systems to the cloud:

**Thank you Microsoft for being a great technology ally!**

# INTERNATIONAL DONORS



## GOOGLE.ORG

In 2017 we started with one of the most important projects supported by the private sector in alliance with Google.org

We started with the deployment of the education platform Kolibri in 81 schools located at 16 states of the Mexican Republic. The project will conclude on December 2018 and is supported by the mentorship of 39 Educational Technology Instructors (ETIs).

## What is Kolibri?

Kolibri is an educational platform designed with tools for mentors, which is focused on low-resource

communities. Their goal is to overcome infrastructure barriers that block an equitable access to education and technology. To increase availability of relevant learning materials complying with local school programs, and promote innovative pedagogy and self-paced learning.

## Working axis with Kolibri

1. Content exploration and use from different channels in Kolibri Studio.
2. Use of the tool "Exams with Kolibri"
3. Creation of "Content channels" performed by teachers.

## Beneficios

1. It awakens the interest of teachers and students.
2. It is supported by content to give a lesson.
3. A teacher consults the interest topic related to his/her lesson plan.
4. It allows to assess group activities in real time.
5. It is an interactive platform children enjoy due to its ludic activities with which they are able to experience a playful environment.
6. Videos and texts can be downloaded to a memory device.
7. They can work without using Internet since it has a CAP.

## PROCESS OF THE PROJECT



1. Selecting schools



2. Equipment



3. Hiring instructors



4. Creating agreements with authorities

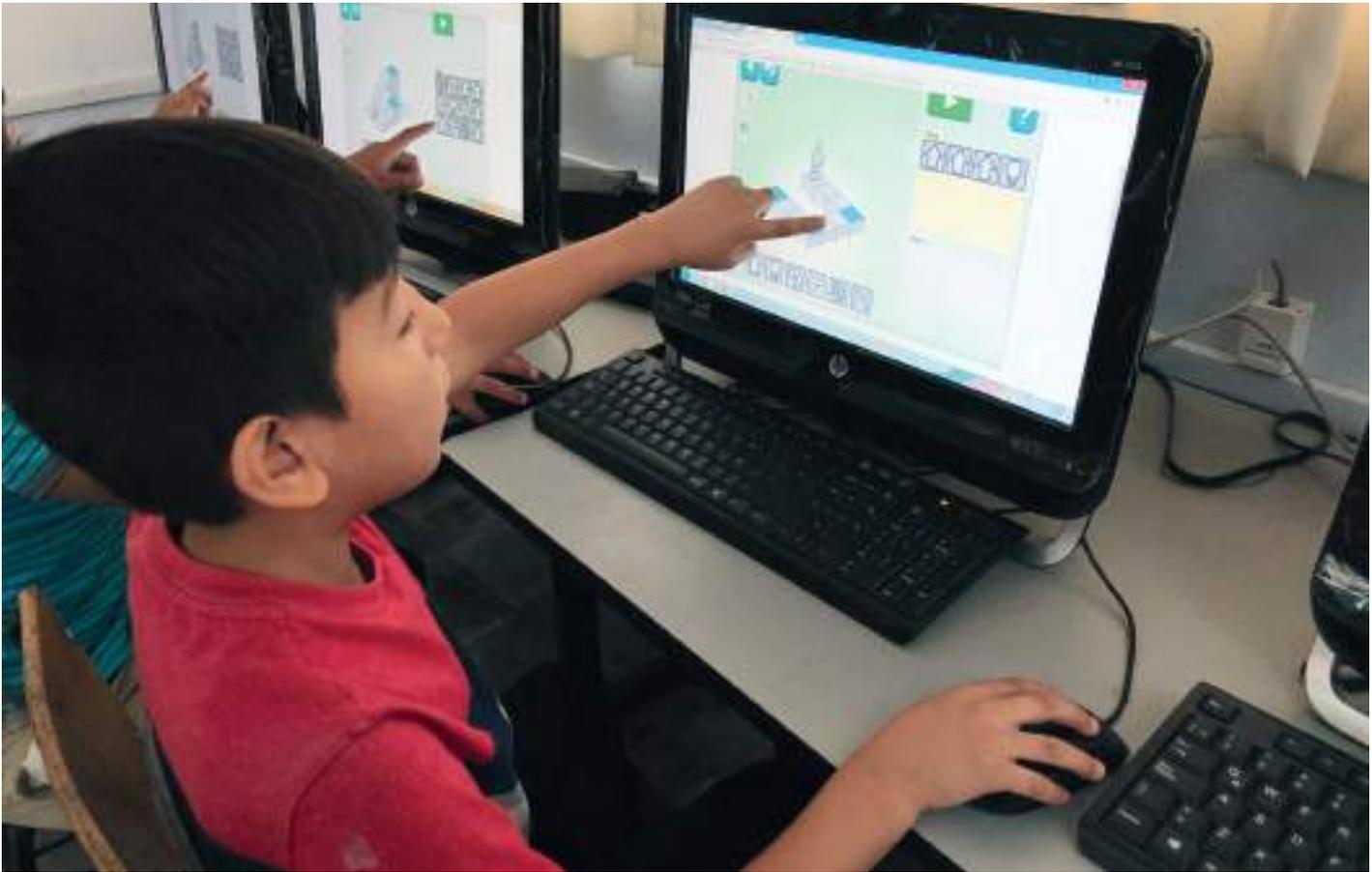


5. Mentorships



5. Final evaluation

**On-site Mentorship started on September 2017, where teachers were empowered to include technology into their teaching practice. Teachers received individual and collective training, which let them know how to use digital tools and be supported by an ETI to clarify doubts.**



## EQUIPMENT

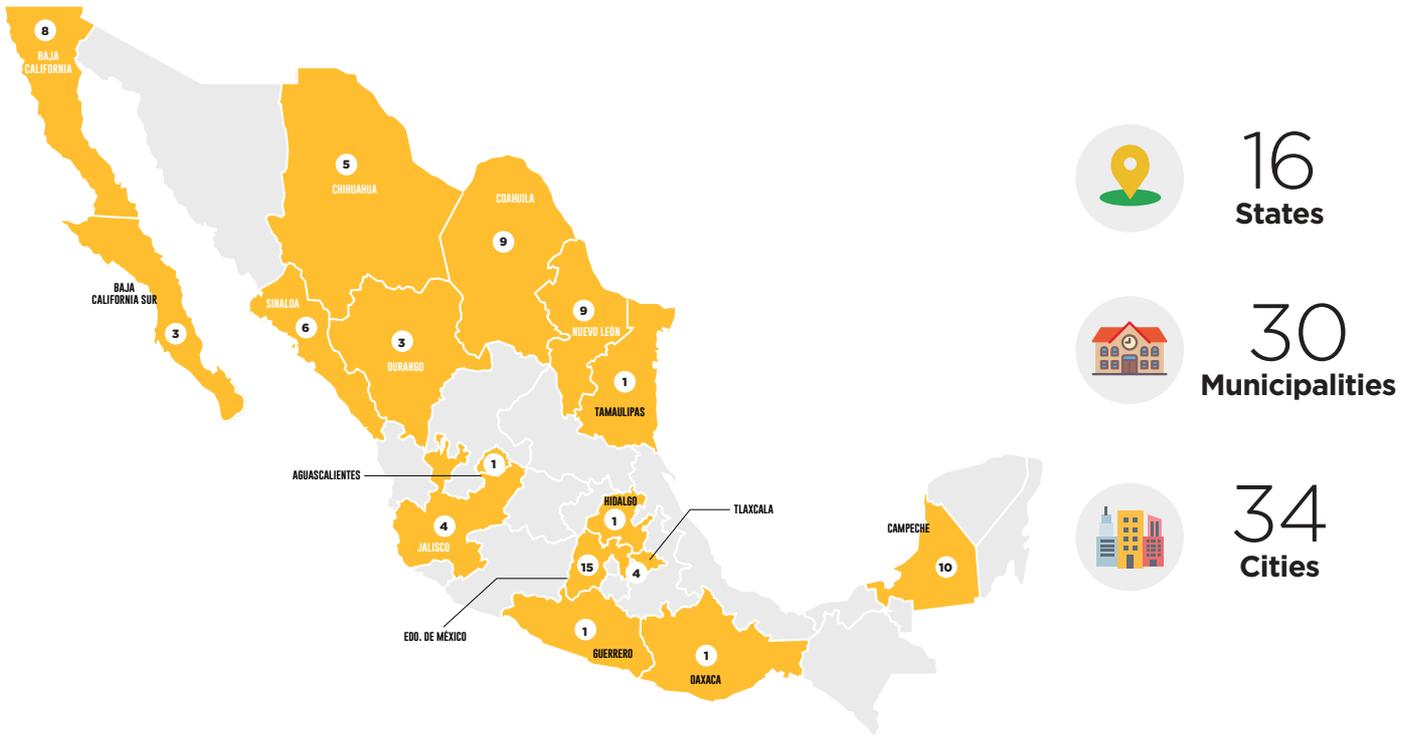
Equipment involves four different models: Chromebooks, Tablets, Tablets @prende and PCs. Twenty devices were delivered to schools equipped with PCs and 50 devices were delivered to schools working with the other two models.

Every school has a Content Access Point (CAP), which collects UNETE community and Kolibri platform contents. A projector and a mobile cart are provided if mobile devices need to be stored and power charged.

**TYPE OF DEVICE AND NUMBER OF SCHOOL PER STATE**

No.	State	Chromebooks	PC	Duplicated PCs	Tablets	Total schools
1	Aguascalientes			20		1
2	Baja California	100	60		150	8
3	Baja California Sur			25		3
4	Nuevo León	200			150	9
5	Estado de México	300		120	150	15
6	Coahuila	150	60	40		9
7	Guerrero			20		1
8	Hidalgo			20		1
9	Sinaloa	50	80	15		6
10	Chihuahua	150	40			5
11	Jalisco	100	20		50	4
12	Tlaxcala	150		20		4
13	Campeche	150		60		10
14	Durango	150				3
15	Oaxaca			20		1
16	Tamaulipas			15		1
<b>Total</b>		<b>1500</b>	<b>260</b>	<b>375</b>	<b>500</b>	<b>81</b>

**SCOPE OF THE PROJECT**

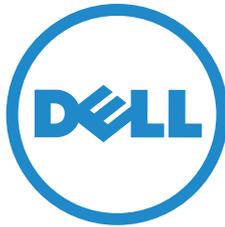


**DUPLICATION**

The project with Kolibri and Google.org produced so much interest in other donors from the Mexican Republic that the Totolac town hall took part in one school and the Ministry of Education in Campeche is involved in 3 campuses from the program. Private sector companies such as Samsung Electronics México joined the project by donating 300 tablets to equip 6 schools in three states: Baja California Norte, Jalisco and the State of Mexico.

The Cuatrociéngas 2040 Plan in Coahuila got involved by equipping three schools of that entity.





**DELL**

Dell's vision is to trigger the human potential by accessing the right tools and skills. In 2017 a project was launched, where teachers and principals from 8 schools took ownership of pedagogical tools and strategies in order to promote 21st Century skill development in thousands of boys and girls.

Eight Elementary Schools were equipped at the following municipalities of the State of Mexico:

	HUIXQUILUCAN	NAUCALPAN	SAN FELIPE DEL PROGRESO	ACAMBAY	TOTAL
Estudiantes	868	1,122	166	322	<b>2,488</b>
Profesores	26	42	9	12	<b>89</b>
Total	894	1,164	175	344	<b>2,577</b>

Acambay, San Felipe del Progreso, Naucalpan and Huixquilucan. Three out of eight schools are located in the Mazahua indigenous region while the other four belong to the Metropolitan area.

Involvement of Dell collaborators in the "Héroes por la Educación" ("Heroes for Education") campaign from the Volunteering Program 2017 was focused on activities such as painting classrooms and common areas, overall cleaning of the campus

and preventive maintenance of the computing equipment. These activities were carried out at the following schools:

- Julián Villagrán Elementary School
- Ramón López Velarde
- Elementary School Gustavo Díaz Ordaz Elementary School

**Thanks to all "Heroes for Education" for your enthusiasm and involvement.**





**W.K. KELLOGG FOUNDATION**

For the commitment to improve conditions of communities located at the Highlands of Chiapas, Kellogg Foundation supported the initiative of strategic alliances among 14 civil society organizations supporting the Highlands: this new strategy resulted in organizing the “Festival de Educación para la vida y la diversidad”. (“Education for life and diversity Fest”).



In 2018, UNETE will be taking part in this strategy to provide teachers with Google Expedition and Cuantrix

workshops through virtual-reality experiences and ludic programming. This strategy purpose is to take

collective actions and create a higher impact on the most needed communities.



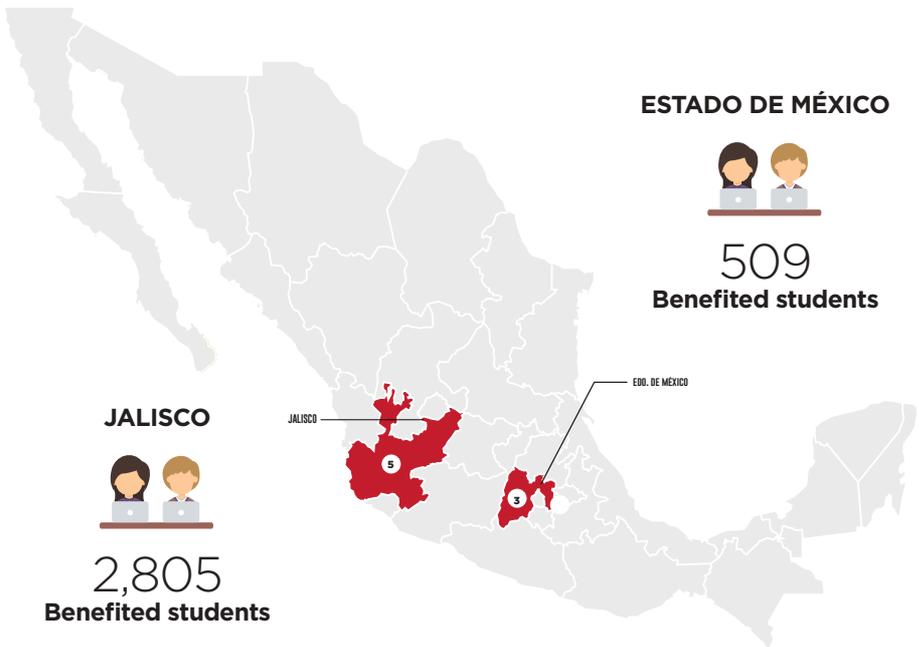
**MONEYGRAM**

This year, it was very pleasant for UNETE to be supported by Moneygram Foundation, a global innovative service provider, through Media Lab equipment and teacher training based on the Mentorship program.

The contribution to equip 8 schools is part of Money Gram commitment with Mexico and its people. We are certain that this new team-work relationship will support national education for thousands of children and young people to continue developing their digital skills.

**SCOPE OF PROJECT**

SCHOOL NAME	STATE	ENTITIES	BENEFITED STUDENTS	BENEFITED TEACHERS
Manuel López Cotilla	Jalisco	Tonalá	625	23
José Pérez Contreras			774	15
Elem. Enrique Díaz de León			947	31
Elem. Distribuidores Nissan No.73		Magdalena	176	6
Elem. Urbana 1278 Ma. Del Rosario Plascencia García		Puerto Vallarta	283	8
Cristóbal Colon	Estado de México	San Felipe del Progreso	295	9
Primaria Despertar Campesino			102	6
Sec. Ofic. No. 917 Justo Sierra			112	9
<b>Total</b>			<b>3,314</b>	<b>117</b>





### AULA BOX BETT

In order to assist learning continuity of students from schools damaged by earthquakes that took place in Mexico last September 7th and 19th, 2017, UNETE reviewed among several response choices and decided to postpone the AULABOX initiative.

This initiative consists on adapting high-durability shipping containers and turning them into Media Labs. Thanks to BETT Latin America & Container Spaces funding, the first AULABOX will be installed in a school from the state of Chiapas during 2018. An AULABOX shall include equipment, Internet, digital educational contents, teacher training and workshops provided to children and adolescents.



## INDIVIDUAL DONORS

In 2017 we have started with UNETE partners' raising in different places of Mexico City, Cuernavaca and Guadalajara, which resulted in adding people engaged with Mexico's education to our cause.

On the first quarter of 2017 we were supported by Fundación Gigante and FIBRA UNO group, which allowed us to mount a stand at their malls and inform their customers about UNETE's work. in favor of education. These are the malls where we were located: Gran Terraza Lomas Verdes, Patio Santa Fe, Patio Universidad and Patio Gran Patria (Guadalajara).

# Socios

UNETE

Thanks Fundación Gigante and Fibra UNO for their valuable contribution for Mexico's education.



On the second quarter of 2017 and up to the end of the year we carried out the “La Educación Transforma Vidas” (“Education Transforms Lives”) campaign. To achieve this, we counted on the valuable support

from Grupo Sordo Madaleno, whose contribution aiming to give thousands of boys and girls access to a better education was through providing us with a space in their malls in order to raise

UNETE partners. We were located at: Antara, Angelópolis, Antea and Plaza Universidad. **We are grateful to Sordo Madaleno for their contribution to make Mexican boys and girls access a better future.**



**Thanks Sordo Madaleno Group for their valuable support in favor of Mexico’s education.**



### EFFICACY IN HANDLING DONATIONS

**95.47 cents of every peso used by UNETE is provided to beneficiaries** and only 4.53 cents are allocated to the necessary administrative expenses to perform the operative support required by the organization.



Per every peso  
donated to UNETE

## 25.63 pesos

are produced to benefit  
Mexican society in 5 years.

Source: Filantropía



# TRANSPARENCY

We are a reliable and transparent organization working with quality standards.



Medalla José Vasconcelos, máximo galardón entregado por la SEP

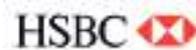


We promote the compliance with the Global Compact Principles of the United Nations, especially regarding the eradication of child labor by offering them equitable opportunities and a better education.



Competency standard EC0121 Elaboration of learning projects by integrating the use of ICTs

## WE THANK TO ALL COMPANIES AND ORGANIZATIONS THAT HELP US IMPROVE EDUCATION IN MEXICO



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We are an organization responsible for handling donations, where 95.47 cents of each peso used for UNETE is delivered to beneficiaries and only 4.53 cents are allocated to administrative expenses.

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FINA

ANCE

““ I LIKE TO USE MATHEMATIC  
GAMES VERY MUCH!””

Priscila Quintero Meza, 5° C



ESCUELA DE NIÑOS MARTIRES DE CAYANEP  
SAN PEDRO DEL ROSAL  
ATLA COMULCO MEX.



**Rebeca Aguilar Álvarez de Sáenz**

Treasurer

2

2017 was an unprecedented year for UNETE since we received the highest fund-raising in the last years. This is equivalent to 463 classrooms, which with it will be possible to benefit 46,300 more students and 4,630 more teachers.

Likewise, we performed a historical operative deployment for the organization through the Mentorship Program. Only in 2017, 349 collaborators have worked across the country.

We achieved our process systematic procedure through digital platforms to control operations. We also deployed modules for individual donation management and follow up, which allows us to raise, collect and ensure loyalty from UNETE partners. A project module was created to manage projects by stages, integrate documentary management and control applied resources aiming to optimize the organization's operations and resources.

We were audited by the Mexican Social Security Institute (IMSS) and we successfully complied with any remark.

We are currently certified by the Mexican Center for Philanthropy (CEMEFI) with the top level of institutionality and transparency. We received again the certification issued by the Junta de Asistencia Privada del Estado de México (JAPEM) for complying with our social object.

In 2017, we overcame big challenges which allowed us to strengthen our processes to continue building a reliable relationship with our UNETE donors, allies and partners.

We are certain that in the following years, UNETE will continue fulfilling its mission and providing next generation children, who are the future of Mexico, with a quality education.



**UNETE, I.A.P.**

**Balance statement**  
to December 31<sup>st</sup>, 2016

**Asset**

Current asset:

Cash and investment in securities	\$	213,270,279
Inventories		15,120,848
Advanced payments		579,210
		.....
	Sum of the current asset	228,970,336

Fixed, net: 187,935

Total asset 229,158,271

**Liability**

Current liability:

Suppliers	1,428,600
Other accounts payable	1,126,627
Taxes payable	579,210
	.....
	Sum of the current liability 2,555,226

**Equity**

Non-restricted 7,041  
Restricted 226,596,003

Sum of equity 226,603,045

Total liability and equity \$229,158,271

Attached notes are part of financial statements.

Accountant Esteria Herrera González  
General Accountant

Teacher Alejandro Almazán Zimmerman  
CEO

**UNETE, I.A.P.**

**Activity statement**  
for the year finished on December 31<sup>st</sup>, 2016

**Changes in restricted equity:**

Initial balance of restricted equity	\$	216,692,831
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**Income and profits:**

Cash donations	62,929,809
In-kind donations	115,907
Financial products	10,113,377
Other income	107,477

Total income and restricted profits	73,266,571
-------------------------------------	------------

**Costs:****Media Lab Equipment**

Equipment, accessories, wiring, setup, licenses, software, warranties and equipment reconditioning	15,613,688
Connectivity expenses	7,876,018
Teacher training	203,991
Mentorship	7,794,063
Media Lab evaluation	620,000
Granted donations	5,000
Salaries, allowances and related taxes	13,625,219
Travel expenses	2,807,785
Insurance	782,176
Events	1,869,243
Office rent and maintenance	2,154,959
Outsourced advisory	533,746
Communication services	117,532
Professional fees	50,470
Mail services	130,050
JAPEM fees	442,054
Website hosting	873,487
Deductible VAT	5,083,262
Other expenses	619,732

Total restricted costs	61,202,476
------------------------	------------

**Operation:**

Salaries, allowances and related taxes	853,851
Depreciation and amortization	28,964
Insurance	34,400
Office rent and maintenance	108,901
Outsourced advisory	176,792
Deductible VAT	55,309
Other expenses	16,468
Financial expenses	886,236

Total expenses of restricted operation	2,160,922
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Increase in restricted equity	9,903,173
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Final balance of restricted equity	226,596,003
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**Changes in non-restricted equity:**

Initial and final balances of non-restricted equity	7,041
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Initial and final balance of restricted and non-restricted equity	\$226,603,045
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Attached notes are part of financial statements.

  
 Accountant Estera Herrera González  
 General Accountant

  
 Teacher Alejandro Almazán Zimmerman  
 CEO



**UNIÓN DE EMPRESARIOS PARA LA TECNOLOGÍA EN LA EDUCACIÓN, A.C.**

**Balance statement**  
to December 31<sup>st</sup>, 2016

**Asset**

Current asset:

Cash and investment in securities	\$	75,760,251
Endowment		159,203,540
Clients		58,000
Donors		4,250,488
Inventories		6,571,397
Advance payment		93,175
		.....
Sum of the current asset		245,936,851
		.....
Fixed, net:		1,783,157
Security deposits and other assets, net		2,364,644
		.....
Total asset		250,084,652
		.....

**Liability**

Current liability:

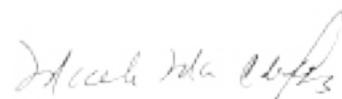
Suppliers		52,221
Taxes payable		147,629
Working obligations		1,818,736
Other accounts payable		79,293
		.....
Sum of the current liability		2,097,879
		.....

**Equity**

Non-restricted		84,944
Restricted		247,901,829
		.....
Sum of equity		247,986,773
		.....
Total liability and equity		\$250,084,652
		.....

Attached notes are part of financial statements.

Accountant:  rra González  
General Accountant

  
BFA Marcela María Cataño Cataño  
Administration and Finance Director



**UNIÓN DE EMPRESARIOS PARA LA TECNOLOGÍA EN LA EDUCACIÓN, A.C.**

**Activity statement**

for the year finished on December 31<sup>st</sup>, 2016

**Changes in restricted equity:**

Initial balance of restricted equity	\$	199,967,906
<b><u>Income and profits:</u></b>		
Income per donations		71,068,569
Income per mentorship services		2,452,925
Financial products		49,481,243
Other income		380,241
	Total income and restricted profits	123,382,977
<b><u>Costs:</u></b>		
<b>Media Lab Equipment</b>		
Equipment, accessories, wiring, setup, licenses, software, warranties and equipment reconditioning		5,333,481
Equipment model with IAP		44,495,253
Connectivity expenses		42,000
Teacher training		2,014,655
Mentorship		938,857
Media Lab evaluation		203,500
Granted donations		2,400
Salaries, allowances and related taxes		4,341,790
Travel expenses		1,207,993
Insurance		168,172
Events		480,582
Office rent and maintenance		131,242
Outsourced advisory		112,467
Communication services		213,820
Professional fees		70,000
Mail services		3,499
Deductible VAT		1,158,510
Other expenses		186,194
	Total restricted costs	61,104,414
<b><u>Operation:</u></b>		
Salaries, allowances and related taxes		183,969
Depreciation and amortization		604,474
Insurance		7,668
Outsourced advisory		116,172
Deductible VAT		25,866
Other expenses		85,071
Financial expenses		13,321,420
	Total expenses of restricted operation	14,344,640
	Increase in restricted equity	47,933,923
	Final balance of restricted equity	247,901,829
<b><u>Changes in non-restricted equity:</u></b>		
Initial and final balances of non-restricted equity		84,944
Initial and final balance of restricted and non-restricted equity		\$247,986,733

Accountant Estela Herrera González  
General Accountant

Attached notes are part of financial statements.

BFA Marcela María Cataño Cataño  
Administration and Finance Director

COMMUN

# COMMUNICATION

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2017 was a year full of communication initiatives to improve social responsibility strategies of our donors.

We are grateful to mass media for providing us the space to spread UNETE's mission.

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**“I LEARNT THAT WE DON'T HAVE  
TO BE AFRAID OF HANDLING  
COMPUTERS!”**

Noé Muñoz Salazar, 5th C, 2nd C, Benemérito de las Américas School, Chihuahua

# CAMPAIGN

## EDUCATION TRANSFORMS LIVES

This institutional campaign was launched on June 2017 aiming to spread our mission and support F2F fundraising activities in malls. We integrated audiovisual and printed materials, as well as BTL activities.

## HEROES FOR EDUCATION

In 2017 we developed and carried out the “Heroes for Education” Dell campaign, with which we disseminated volunteering programs at UNETE and schools supported by Dell. Thanks to this campaign, we reached over 100 volunteers from Dell Mexico and LATAM.

## DIGITAL: E-MAIL MARKETING

As part of our F2F fundraising strategy, the Communication Department developed spreading contents and materials, as well as materials to ensure donors’ loyalty. In 2017 we issued over 294 digital materials for mailing such as newsletters and infographics, among others.

## DOCUMENTARY MENTORSHIP NATIONAL

In June 2017, the Documentary of National Mentorship was recorded. It covered mentorship from Tijuana to Campeche, and the goal was to spread the work teachers and facilitators perform for Mexico’s education.



On the school year 2016-2017, we succeeded in documenting more than 5 success stories, 8 operation coverage and events, 4 picture shootings and 2 documentaries aiming to continue spreading UNETE’s work.

## COMMUNICATION WITH DONORS

Part of our communication strategy is to improve materials and deliverables for our donors. During 2017, we succeeded in delivering 15 global reports on accountability to our donors.

## SOCIAL MEDIA

In 2017, we succeeded in growing our Facebook community to 10,000 followers and we created alliance with organizations such

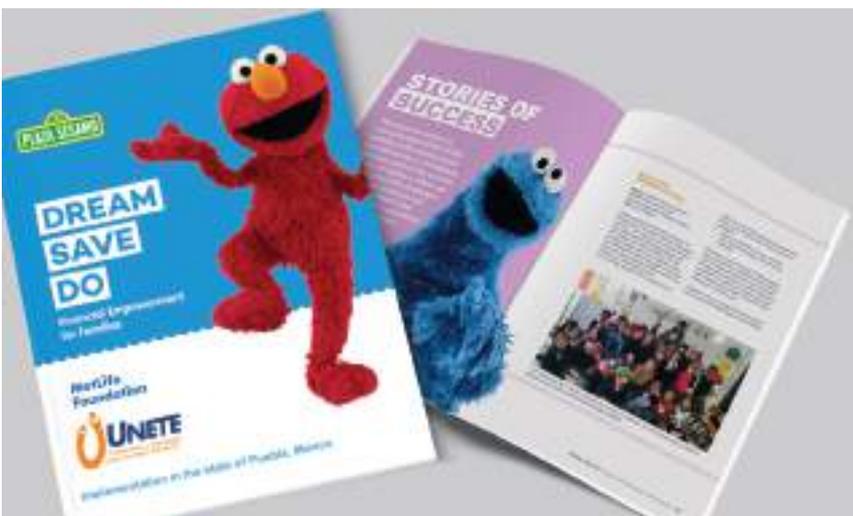
as @prendemx to spread different contents. We also launched different spreading campaigns from our donors like Dell’s “Heroes for Education”.

## IN-HOUSE COMMUNICATION

In 2017, the UNETE VALUES campaign was performed to promote institutional values among collaborators through digital graphic materials.

## COMMUNICATION CAMP

In school year 2016-2017, we were able to perform big projects with students from social service and internship. Students developed different audiovisual materials, as well as the record of the first pilot radio in UNETE.



## EVENTS

### MAX SHEIN REWARDS 2017

As every year, the Max Shein Award 2017 was carried out at the Centro de Convenciones de Ixtapan de la Sal, State of Mexico, where 325 students and 63 teachers were awarded.

At Mexico City, the host of the event was the Escuela Secundaria No 8. Tomás Garrigue Masarik, where 300 students were acknowledged.



**GESS 2017**

On April 27th and 28th, 2017 the GESS 2017 event was performed at the WTC Mexico, where Alejandro Almazan, Chairman of UNETE took part as lecturer.



**BETT 2017 (5TH EDITION)**

UNETE and Bett Latin America have created a great alliance to promote activities and events that could strengthen the educational sector in Mexico. Last October 18th and 19th, 2017, the event was carried out at Banamex Center, where Alejandro Almazan, was involved in the high-level panel arranged by the @prende mx General Coordination, and the topic was “Educational policies in ICTs within the Mexican context”. He was also speaker at the panel “Teacher Digital Competences in the 21st Century.” Likewise, UNETE set a stand within the exhibition to spread their mission to improve education quality and equity in Mexico.



**AWARDS AND ACKNOWLEDGMENTS**

UNETE was awarded by Pro México Indígenas/ Pro Mazahua Foundation for improving education quality and equity in Mazahua communities from the State of Mexico.

**We thank Mass Media for giving us a space to promote our work.**



**We thank agencies for their support provided to improve education quality and equity in Mexico.**



# ANNUAL REPORT 2017

**unete.org**

 /UneteMexico  @Unete\_Mexico  @Unete\_Mexico



Torre Hipódromo, General Salvador Alvarado No. 8  
Piso 2 Col. Hipódromo Condesa, C.P. 06170, CDMX  
T. (55) 5027.1000