**IMPACT OF THE UNETE MODEL**

**UNETE SUPPORTED SCHOOLS IMPROVE IN**

- Better academic performance and development of digital skills  
  *(IFIE 2012)*

- Improved academic performance in the ENLACE test  
  *(UNETE 2013)*

- Greater improvement in rural communities  
  *(IFIE 2012)*

- 79.18% of beneficiaries have no other option  
  *(Filantropia 2013)*

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**PERFORMANCE OF UNETE-SUPPORTED SCHOOLS ON THE MEXICAN STANDARDIZED TEST**

- Our impact is higher in primary than in secondary school
- Our impact is higher in mathematics than in Spanish
- Our impact is higher in rural schools than in urban schools

---

**MOBILE TECHNOLOGY ON ACADEMIC PERFORMANCE**

Results of the pilot program in 2 schools of the Hidalgo State with students from 5th and 6th grade.(

**MATHS TEST**

<table>
<thead>
<tr>
<th>Subject</th>
<th>5th grade</th>
<th>6th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores (percentage)</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**SCIENCE TEST**

<table>
<thead>
<tr>
<th>Subject</th>
<th>5th grade</th>
<th>6th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores (percentage)</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**SPANISH TEST**

<table>
<thead>
<tr>
<th>Subject</th>
<th>5th grade</th>
<th>6th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores (percentage)</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Scores (percentage)</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

**READING FLUENCY ASSESSMENT**

<table>
<thead>
<tr>
<th>Subject</th>
<th>5th grade</th>
<th>6th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of words read</td>
<td>140</td>
<td>120</td>
</tr>
<tr>
<td>Number of words read</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Number of words read</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Number of words read</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

---

IFIE: Instituto de Fomento e Investigación Educativa, A.C.  
(5) Evaluated by the consultant in ICT Alicia Bautíos
ASSESSMENT IN RURAL COMMUNITIES

Impact assessment performed on 131 schools with 50 control-group schools in low income municipalities in the states of Chiapas, Yucatán, Campeche and Quintana Roo. (6)

### MOTIVATION

<table>
<thead>
<tr>
<th>Statement</th>
<th>Schools not supported by UNETE</th>
<th>Schools supported by UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get better grades in the subjects where we use computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like using the computer because I can correct my work easily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When using the computer I put a lot of effort into making my work look nice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I pay more attention in class when we use computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With a computer it is easier to complete difficult tasks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I progress more when studying if I use the computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand my classes better if we use the computer because I can see pictures and videos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand the lessons better with the computer because I can listen too</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can work longer without losing focus when I am using a computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get better grades in those subjects where we use the computer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DIGITAL SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Schools not supported by UNETE</th>
<th>Schools supported by UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using different font sizes in Word documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using drawing and painting software like Paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downloading music from the Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quickly locate reliable information on the Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sending emails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introducing data to Excel sheets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PROBLEM SOLVING

<table>
<thead>
<tr>
<th>Task</th>
<th>Schools not supported by UNETE</th>
<th>Schools supported by UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I double-check my work to make sure it’s right</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make a mental or written outline of my work before starting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I follow my own work plan to see how well I’m, doing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I control my fear of making mistakes, and I look for solutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I explore unknown computer functions and programs to learn more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I surf the web until I find the answers I need</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to learn by myself how the program or computer works when I don’t know how it’s done</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t waste time when I look for information online</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t limit my search to the webpages suggested by the teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do web searches using keywords</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IMPACT OF THE UNETE MODEL

CRITICAL THINKING

- I do my best even if a task is difficult
- I try to deliver better work than asked
- I enjoy inventing new solutions
- When in doubt, I look for different points of view
- I think about my arguments before talking
- I seek original ways of presenting my projects
- Even if it takes time, I search different sources of information
- I argue my points of view
- I look up in different websites to make sure the information is accurate
- I'd rather have doubts than find inaccurate information

COMMUNICATION SKILLS

- Write a school project according to teacher's sections
- I can communicate ideas through drawings
- Design a presentation and offer to the group
- Create a concept map to summarize a text

COLLABORATION AND INTER-PERSONAL SKILLS

- I pay attention to classmates' ideas
- I do my part of the job
- I help classmates as much as I can
- I support classmates ideas and answers to problems
- I share my ideas and answers with classmates
- I don't complain about work
- I feel confident when talking to classmates
- I listen and respect classmates points of view
- I don't share my opinion in an angry way
- I'm not afraid of speaking my mind
EVALUATION OF MODEL 2014-2015

LEVEL OF COMPETENCES
Based on a 6th grade elementary school study plan

LEVEL 1. This level refers to the use of digital tools, specially to the use of "spread-sheets". Although students are able to understand the overall information from spreadsheets, they show an essential ability to create complex calculations.

LEVEL 2. They show a higher development of digital abilities. They also show a combination of knowledge and abilities while solving their daily life situations where students must determine how to solve every situation.

LEVEL 3. Students show a more developed digital ability and knowledge of the related information. They solve their homeworks faster and more accurately. A better understanding of statistical concepts allows them to have a better performance and achieve right answers. They also show qualities useful for their consecutive development.

NOTE: The sum of every measure equals 100%

DIGITAL ABILITIES
Percentage of students in elementary school

LEVEL 1. Students handle the "mouse" to slide through the screen. They are supported to be able to accomplish several homeworks in spreadsheets.

LEVEL 2. Students in this level have used or at least are aware of programs such as drawing, painting, graphics, spreadsheets or text processors. Most students browse the Internet to search information.

LEVEL 3. Students browse the Internet to copy or download information and music. They are able to login their social media and use their email.

LEVEL 4. Students acquire the knowledge and have a limited use of programs to create interactive lessons or evidence portfolios and specialized software in overall.

LEVEL 5. Students show abilities to create animated films or videos to document school, community or local events, as well as to develop websites.
**MOTIVATION**

To learn how to use the computer

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>97%</td>
<td>75%</td>
<td>0%</td>
</tr>
</tbody>
</table>

More than 90% of students would like classes to be given in media classrooms.

**LEVEL 1.** Students are willing to use the computer for school work.

**LEVEL 2.** Students are willing and eager to develop their use of the computer.

**LEVEL 3.** Students with high expectations on the use of computer understand and acknowledge how useful is to use a computer so that the teacher could show a better job reflecting his learning and development.

**COOPERATION AND INTERPERSONAL ABILITIES**

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>89%</td>
<td>98%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**LEVEL 1.** Students show difficulties to fulfill some agreements with their classmates while working. They prefer individual work or working with friends.

**LEVEL 2.** Students accept homeworks entrusted in a collective work. Supportive relationships are easier when the team members are closed classmates, however they succeed in integrating to different working teams.

**LEVEL 3.** Students are able to create supportive relationships with their classmates by getting involved in the team work to enhance collective work with other groups. They make proposals and agree with being responsible of integrating to a work team.

**COMMUNICATION**

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>66%</td>
<td>47%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**LEVEL 1.** Students show difficulties with exchanging ideas and writing simple texts.

**LEVEL 2.** Students organize ideas and proposals by sharing them through short writings. They show difficulties with sharing ideas and proposals through computing media.

**LEVEL 3.** Students show abilities to use a computer while developing different forms to communicate ideas.
After curricular classes, students from 4th, 5th and 6th grade in elementary school were invited to take part in English and Reading Comprehension workshops. The impact of these courses was evaluated by third party organizations as follows:

### PLANEA 2015

**Difference between mathematics among elementary schools supported by UNETE and those NOT supported by UNETE:**

<table>
<thead>
<tr>
<th></th>
<th>UNETE</th>
<th>NO UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OVERALL SCHOOLS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>54%</td>
<td>19%</td>
</tr>
<tr>
<td>0%</td>
<td>16%</td>
<td>11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>UNETE</th>
<th>NO UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>58%</td>
<td>18%</td>
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<td>14%</td>
<td>9%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>UNETE</th>
<th>NO UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>67%</td>
<td>13%</td>
</tr>
<tr>
<td>0%</td>
<td>13%</td>
<td>7%</td>
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<table>
<thead>
<tr>
<th></th>
<th>UNETE</th>
<th>NO UNETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>71%</td>
<td>14%</td>
</tr>
<tr>
<td>0%</td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>

### WORKSHOPS IN SCHOOL YEAR 2015-2016

**WORKSHOP ON READING COMPREHENSION USING ICT**

After curricular classes, students from 4th, 5th and 6th grade in elementary school were invited to take part in English and Reading Comprehension workshops. The impact of these courses was evaluated by third party organizations as follows:

**LEVEL 1**
- Understand main attributes of a text: Author, main character, characters' attributes, plot.
- Main ideas of a text: Topic
- State cause and effect relation within the plot.

**LEVEL 2**
- Summarize information without losing the core message of the text.
- Understand main aspects of a text
- Identify texts characteristics.
- Use different consultation sources
- Understand main aspects of a text:
  - Purpose. Identify main ideas of a text.

**LEVEL 3**
- Infer information from a text to recover non-expressed information.
- Meaning of unknown words by context where they were found.
- Infer information from a text to recover non-expressed information.
- Interpret information shown in charts and tables.
- Identify and use specific information of a text to solve specific problems

---

**FOURTH GRADE**

- **PRE**
  - Level 1: 14
  - Level 2: 25
  - Level 3: 8

- **POST**
  - Level 1: 17
  - Level 2: 25
  - Level 3: 22

**FIFTH GRADE**

- **PRE**
  - Level 1: 64
  - Level 2: 25
  - Level 3: 21

- **POST**
  - Level 1: 67
  - Level 2: 25
  - Level 3: 21

**SIXTH GRADE**

- **PRE**
  - Level 1: 66
  - Level 2: 40
  - Level 3: 23

- **POST**
  - Level 1: 40
  - Level 2: 37
  - Level 3: 23

---

**Assessed by**
IMPACT OF THE UNETE MODEL

WORKSHOPS IN SCHOOL YEAR 2015-2016

ENGLISH WORKSHOP

LEVEL 1
- Understand instructions in a message
- Identify months of the year and put them in order.

LEVEL 2
- Understand right expressions to ask for help.
- Understand expressions indicating routine activities and the order these happen

LEVEL 3
- Complete phrases and sentences from a set of words and identify the right way to make an invitation by making questions.

RESULTS FROM PLATFORM

LEVEL 1
- Understand instructions in a message
- Identify months of the year and put them in order.

LEVEL 2
- Understand right expressions to ask for help.
- Understand expressions indicating routine activities and the order these happen

LEVEL 3
- Complete phrases and sentences from a set of words and identify the right way to make an invitation by making questions.
EVALUATION OF DIGITAL ABILITIES AND TEACHING COMPETENCES 2015-2016

**MOTIVATION TO LEARN**

- I like using the computer because I can easily correct my works
- I get higher grades in those topics we see on the computer
- Using the computer makes me make an effort to have my works well done
- When I use a computer, it's easier for me to start a work
- I pay more attention to classes when I use computers
- I have a better understanding when I use a computer because I am able to listen to examples in audio or video
- I better understand classes by using a computer because I can see examples in pictures and videos
- When I use a computer, it gets easier for me to finish difficult works
- I get more concentrated when using a computer
- I feel I advance my studies faster when using a computer
- I feel like going to school when I know we are going to use the computer
- I can work for a longer time without losing concentration when using a computer
- I better write texts on the computer rather than on the notebook
- Classes at school are more interesting when we use computer

**ABILITIES TO COOPERATE**

- I listen carefully to my classmates' ideas
- I help my classmates in anything I can
- I fulfill my agreements and the part of the work I have to do
- I share ideas and solutions with my classmates
- I don't mind to accept the part of the work I have to do
- I talk to my classmates in order to determine agreements
- I accept and am opened to others' views
- I talk to others showing self-confidence
- I express my views without getting angry
- I express my views without fear

Assessed by

CONTROL

UNETE
IMPACT OF THE UNETE MODEL

ABILITIES TO COMMUNICATE

- Communicate ideas through drawings or other pictures
- Create a mind map to summarize a text
- Write a school work with sections required by the teacher
- Design a presentation to exhibit before the class

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

ABILITIES TO SOLVE PROBLEMS

- I review every detail after finishing to check if the work is OK
- I browse the Internet until I find the answers I need
- I control my fears from making mistakes and look for solutions
- I think and write every step to follow before starting
- I explore new functions of a program or I explore the computer to learn more
- I research in additional websites to those teachers indicate
- I make the best of my time and don't waste it browsing the Internet
- I select key words to look for information on the Internet
- I look by myself for a solution when I don't know how a program works or the computer
- I make a working plan and check it to find out if I am fulfilling it

0 - Don't know  1 - Hardly ever  2 - Sometimes  3 - Almost every day

ABILITIES OF CRITICAL THINKING

- I make an effort although it is a hard homework
- I try to do my homeworks better than I was asked to
- I look for original and innovative ways to deliver my works
- I use good arguments to explain any view
- I enjoy making up new solutions for those homeworks I am entrusted
- Even if it's late, I look for different sources of information
- I look for different views when I have doubts
- I think on my arguments before expressing them
- I look up in several websites to ensure information is accurate
- I prefer doubting about the information I find on the Internet

0 - Don't know  1 - Hardly ever  2 - Sometimes  3 - Almost every day
The Teaching Diagnosis of Digital Abilities assesses two main aspects: the technical profile and the educational profile. The first one refers to those digital abilities the teacher shows while the second regards how educational activities are developed in a classroom.

### Basic Level
Teachers only know a limited number of basic functions from digital programs. They are able to create very simple products with digital tools.

### Mid Level
They are familiar with several functions of digital programs. They are able to perform edition and format homeworks on their digital projects.

### Advanced Level
Teachers know most functions of digital programs and they are able to perform configuration homeworks and to enable advanced options. They use digital tools to fulfill their goals, start sophisticated projects and create information products.

#### Levels of digital ability of the technical profile:

- **Basic Level**: Teachers only know a limited number of basic functions from digital programs. They are able to create very simple products with digital tools.
- **Mid Level**: They are familiar with several functions of digital programs. They are able to perform edition and format homeworks on their digital projects.
- **Advanced Level**: Teachers know most functions of digital programs and they are able to perform configuration homeworks and to enable advanced options. They use digital tools to fulfill their goals, start sophisticated projects and create information products.

#### Proportion of teachers per level of digital ability positively changed:
For the second evaluation moment the number of teachers on a basic level decreased while the proportion of teachers in advanced level increased from 12% to 44%.
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.

The use of digital tools in teaching practice is occasional. The teacher creates digital products such as lists of attendance or schedules, creates digital presentations for his class and strengthens some of his students' digital abilities.

The use of digital tools in teaching practice is continuous. The teacher relies on digital tools in a systematic way to perform his teaching practice. He considerably strengthens his students' digital abilities, creates technological projects and fosters digital collective work.

Regarding the educational profile, results are also favorable since teachers get higher scores at the second assessment. In fact, distance is so remarkable that the teacher obtains an average score related to the advanced level.