Abstract

In this document I present the TICómetro, an instrument to evaluate access and use of Information and Communication Technologies of students in High School at National Autonomous University of Mexico.

The TICómetro is a diagnostic evaluation instrument that provides information about how much access has students to ICT, it means Internet access at home and number and kind of electronic devices. Likewise, information about how students can use technology in four dimensions: Information processing; search, selection and evaluation of digital information; security and collaboration and communication through digital tools.

TICómetro development was founded on international standards like ICDL and ISTE. We considered other sources like research results and national policies in digital education (Chile matrix of digital skills). This diagnostic is an online test, created on MOODLE platform using questionnaire module. Questions are multiple choice type, a problem which requires knowledge and doing skills to solve them. Other questions are denominated “answer construction”, a problem and a series of images or phrases that the student must put in order to show that he knows how to execute a procedure, or point into an image to demonstrate knowing about software interface. Finally, we have developed three simulation question type for MOODLE, to present real situations to solve problems related to text processor, spreadsheet and Internet search.

Assessment population is about 33,000 students each year. So, we have results of seven generations of high school students which allows us to affirm that young people are not digital natives. They have educational needs about using technology, especially in regard to the use of ICT for learning.