

## Chapter 3

# Plan Ceibal as Where Technology Accelerates Pedagogy

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### ABSTRACT

*This chapter describes how the government of Uruguay believes that all children have the right to have technology at their fingertips and that all children have the right to connectivity and access to the internet, that it is as important to have electricity and running water as to have access to the internet, and that it would have a high impact on the country's technological deployment and, obviously, on education and teaching. The parts of the chapter are concerned with the technology and pedagogy relationship: how to improve pedagogy through technology, the importance of teaching English and math online with help of education inspectors and the teachers using modern platform—virtual classrooms, books in digital format, digital technology laboratories—that allows collaborative work, work on projects, logical thinking, an online assessment system. All these integrated tools transfer to the biggest investments which the author calls “global learning network.”*

### INTRODUCTION

Plan Ceibal was created in Uruguay in 2006 and its implementation started in 2007 (Plan Ceibal, 2006, 2007). It was not designed as an ICT programme or a laptop programme, but as an inclusion programme. From the first day, we in government believed that all children have the right to have technology at their fingertips and that all children have the right to connectivity and access to the Internet. In a school, it is as important to have electricity and running water as to have access to the Internet. Besides, all students should have the same devices throughout the national territory. Our focus was always on inclusion. We were aware that by the time this was established, it would have a high impact on the country's technological deployment and, obviously, on education and teaching. In a very short synthesis, our vision is to have a good Internet connection in schools, work with computers and use “the cloud” as the main basis for services.

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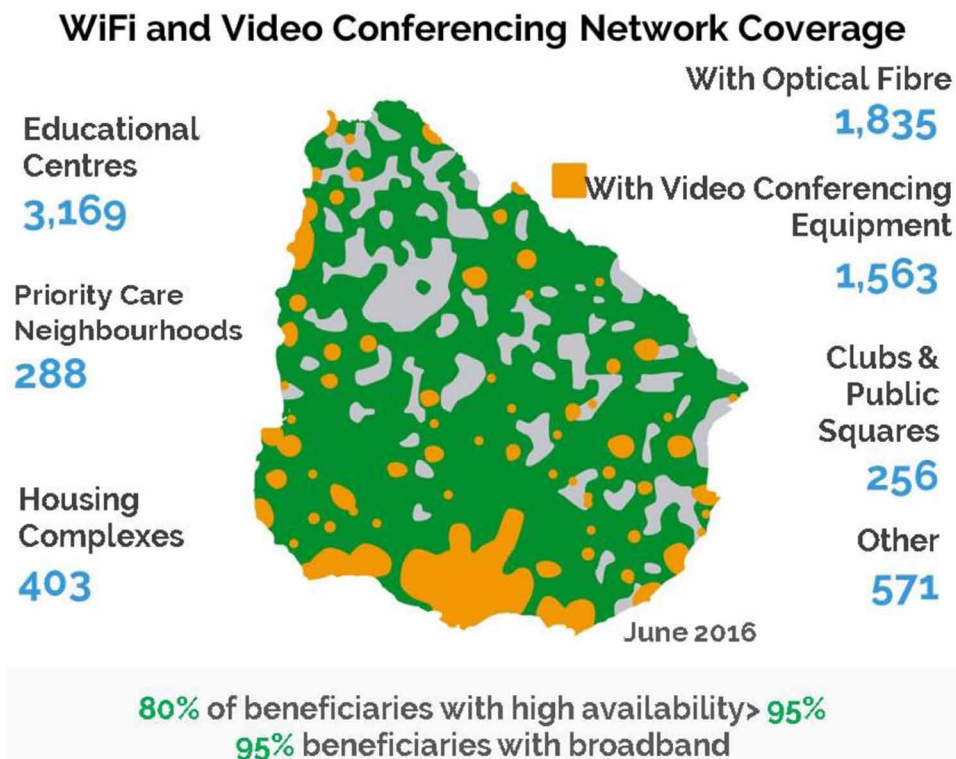
I would like to share where we are, how we are and what we are doing.

## **INTERNET AT THE STUDENT'S PLACE OF STUDY**

Uruguay is a small country (Wikipedia, 2018). If I look at the figures from Argentina and Colombia – fortunately Costa Rica, which is also a small country, Colombia overwhelms me with 8 million devices and I'd rather not hear how many there are in Argentina. In Uruguay, we have 566,000 beneficiaries (Plan Ceibal, 2015). This means all public-school students between first and ninth grade, or between the first class of elementary or primary school and the third class of secondary school, depending on how this is defined in different countries. We cover all students and all teachers, with 80% of them having Internet availability greater than 95%, and with 98% of students accessing the Internet at their place of study. We developed this basic infrastructure strongly since 2007. The work in the field of technological deployment (Croteau & Bergeron, 2001) allowed us to have optical fibre in all urban educational centres, with high-quality video conferencing equipment in those places, and access to the Internet in neighbourhoods requiring priority care or deprived neighbourhoods, in housing complexes, in hospitals, in public squares; i.e., wherever there is a Ceibal student, there is access to the Internet (see Figure 1).

The Internet is fundamental for the development of this plan, we believe in “the cloud” and we are working increasingly on “a centralised cloud infrastructure”.

*Figure 1. Deployment of WiFi and video network*  
*Source: Plan Ceibal (2016)*



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