COVID-19 in Uruguay
Educational Disruption and Response

Plan Ceibal
About Plan Ceibal

National Uruguayan ICT plan created in 2007 to support education and promote digital inclusion and equal opportunities.

Provides:
• a personal computer to every student attending, primary and middle public schools
• internet access at all schools
• a comprehensive set of educational resources, and pedagogical services and programmes.

Total of students in Uruguay: **817,617** (84.9% attend public schools)

Total primary and middle public schools: **2675**

Source: Observatorio de la Educación, ANEP, 2017, 2018
Computers and Internet Access in Uruguay

- Household Access to Internet: **88%** (93% homes of children younger than 14),
- Internet Users: **87%** (99% access from home),
- Household Access to Computers: **76.6%**,
- Plan Ceibal’s computers are the only PC available in **45%** of low-income houses (quintile 1).

Percentage of Household Computer Access by Age and Quintile

Columns show 2018 percentages
2007 figures are shown in darker shades in each column

Disruption & Mitigation Plan

- The first cases of COVID-19 in Uruguay were officially confirmed 13/03/20.
- Schools of all levels from state and private education were closed since 16/03/2020.
- Classes are expected to resume 13/04/20.
- Plan Ceibal launched a contingency plan to mitigate the educational disruption: Ceibal en Casa

Main services:

- Digital Learning Platforms and Resources.
- Support for teachers, students and families.
- Communication Campaigns.
- Reduced charge for data usage to access resources.
1. Teachers

Digital teaching resources and support

Main services:

- **Virtual Learning Environments**: full learning management system and social networking functionalities, including resources for teachers’ professional development.
- **Math Platforms**: adaptive and gamification learning systems.
- **National Digital Library**: including 7,000 books and multimedia resources.
- **Training and Support**: tutorials, consultation services, exchange forums, virtual training and guidelines for remote teaching.
2. Families

Main services:

- **Content and Guidance**: content provision and advice on how to support pedagogical continuity from home.
- **Multiplatform Approach**: delivery by media, social networks, and the plan’s sites.
- **Socio-emotional Support**: orientation in managing stress caused by the crisis context.
3. Students

Digital teaching resources and support

Main services:

• **Virtual Learning Environments**: full learning management system and social networking functionalities, with preloaded educational resources.
• **Math Platforms**: adaptive and gamification learning systems.
• **National Digital Library**: including 7,000 books and multimedia resources.
• **Support**: tutorials, consultation services, virtual training and guidelines for remote learning.
Special Activities

Raising social awareness on the sanitary emergency with an educational perspective. Collaborating in emerging initiatives for contingency medical resources.

Including:

- **COVID-19 & Computational Thinking**: Digital simulations of the virus spread with open software.
- **Ceibal is contributing with 3D printers** for the production of protective gear for medical personnel and parts for ventilators.
## Contingency Organization and Service Delivery

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<td>Facilitating access to most educational resources and platforms without charging data usage.</td>
<td>Increasing capacity by 400% and redesigning architecture to allow more concurrency. Contingency maintenance organization, including night shifts to minimize downtime service during high traffic hours.</td>
<td>Delivering students’ devices at schools with a contingency layout to guarantee social distancing.</td>
<td>Implementing an end-user tool for automated service, including account set-up and password reset.</td>
<td>Adjusting 95% of Ceibal’s employees to home-office, using virtual internal and external communication networks and systems. Generating proper sanitary conditions for in person activities (5%) at Ceibal premises, such as computers repairs.</td>
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Use of Educational Platforms

Since the classes were suspended, the use of all educational platforms have increased exponentially.

Unique users** of single sign-on* raised 2452% in March 2020, compared to March 2019

Single Sign-On Users per day in March 2020 and 2019

1.3M Unique users

†2,452.0% Increase vs Mar 2019

*Single Sign-On (SSO) is an authentication scheme that allows a user to log in with a single ID and password to any of Ceibal platforms, yet independent, software systems.

**Using cookies allows Google Analytics to identify unique users across browsing sessions, but it cannot identify unique users across different browsers or devices.

Source: Plan Ceibal internal reports, 2020 based on Google Analytics of single sign-on Ceibal’s site: ingreso.ceibal.edu.uy
Use of CREA, Ceibal’s LMS & main platform

- **Users**: in 2020 -in less than 3 months-, unique users increased **374%** compared to 2019*.

- **Access**: users access on 20/03/2020 increased **1010%** compared to the same date in 2019.

CREA: Weekly Access by Role

First Week of School Closures


Access Time

Access moved to later hours in the day and expanded to weekends.

Most frequent single sign-on users access time:

- **Before school closures**: Monday to Friday, from 8AM a 4 PM
- **After school closures**: Monday to Sunday, from 12 PM to 21 PM (traffic until midnight).

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**Single Sign-On Users by Time of Day in March 2020**

![Chart showing access time]

Before school closures (2/3 to 13/3)

After school closures (16/3 to 31/3)

Source: Plan Ceibal internal reports, 2020 based on Google Analytics of single sign-on Ceibal’s site: ingreso.ceibal.edu.uy
Infrastructure Demand

Single Sign-On impact over technological infrastructure - March 2020

1/03/20 16/3/20 School closures 31/03/20

Source: Zabbix (Monitoring system).
Outreach in Public Primary Education

165.169 students (67%) and 13.844 teachers (85%) are now using online resources. This benefits 100,000 families.

Available resources 173,900
Available computers 148,086

*Online educational resources made available by Ceibal's central management teams.
COVID-19 Response Protocol for Massive Migration to Distance Learning

1. Emergency
   - Protecting learning
   - Maintaining contact channels
   - Contexts are unequal

2. Normalization
   - Maximize available infrastructure
   - Centralize extended innovation

3. Expansion of Adoption Cycle
   - More actors with additional skills
   - Interconnectivity and institutional agreements

4. Design Specification for Distance Learning
   - Extent of: synchronous / asynchronous
     on-screen / off-screen
     physical / mental
     by oneself / with others
   - In coordination with the National Administration of Public Education

Working Environment
Response Framework for Schools

1. Communication
   - Identifying available technology for continuous communication with teachers, students and families.

2. Culture
   - Promoting and ensuring a collaborative, supportive and safe culture.

3. Curriculum
   - Assuring a minimum curriculum.

4. National Standards
   - Securing relevancy with national or emergency agreed standards.

5. Competencies
   - Promoting interactions for competency development.
Research and International Collaboration

- Fundación Ceibal, an independent research centre created by Plan ceibal, is analysing the current situation with a national and regional perspective and promoting collaboration between countries across Latin America.

- Efforts are concentrated in data collection, analysis and collation, including virtual meetings with policy-makers, think tanks and other relevant actors in Uruguay and the region.
Opportunities and Challenges in Uruguay

• After the classes were suspended, Plan Ceibal immediately facilitated a robust offer of digital resources, which showed an exponential increased in use, facilitated by the relatively high access to internet and computers in Uruguay.

• The Plan also managed to continue fundamental operational activities, such as computers’ deliveries to students and repairs, while most of the staff worked from home, thanks to the robustness of its virtual infrastructure.

• Challenges are focused on continuous monitoring and improvement of current resources, and generating opportunities for international collaboration, while analysing the current situation and still uncertain possible future scenarios.

• Intended outcomes include further development and implementation of the COVID-19 Response Protocol for Massive Migration to Distance Learning and the Response Framework for Schools for systematic coverage in the event of extended pedagogical disruptions.
Thanks

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