

English for the underserved: technology to close the digital divide

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Conference**

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Outline - ELT4D

- Who are the underserved?
- What do they need?
- Challenges
- Tech solutions
- Content solutions
- Next....

‘When we achieve a digital society that serves everyone, we have the potential to improve the lives of millions of vulnerable people around the world’

Digital Alliance for Impact

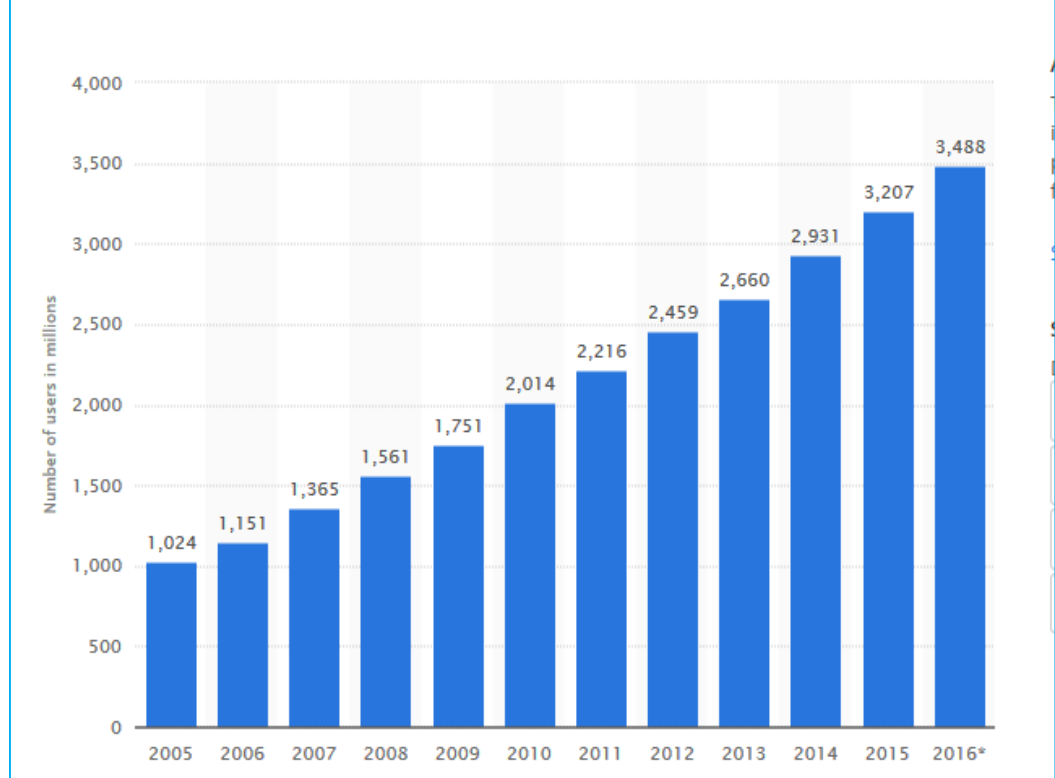
‘The key premise is that the global spread of ICTs has increased inequality, and that the poorest and most marginalised have therefore failed sufficiently to benefit.’

UNESCO

Digital divide

Who are the underserved?

Number of internet users worldwide from 2005 to 2016



Even though there are more phones than people, only ca. 50% have online access & need:

- Access to power
- Access to low-cost connectivity

Challenges?

Learners need English for:

- Education, employment, mobility
- Access to global knowledge
- Study readiness
- Income uplift

Learners lack access to:

- Power
- Connectivity
- Devices & Data plans
- Teachers
- Learning materials
- Practice opportunities

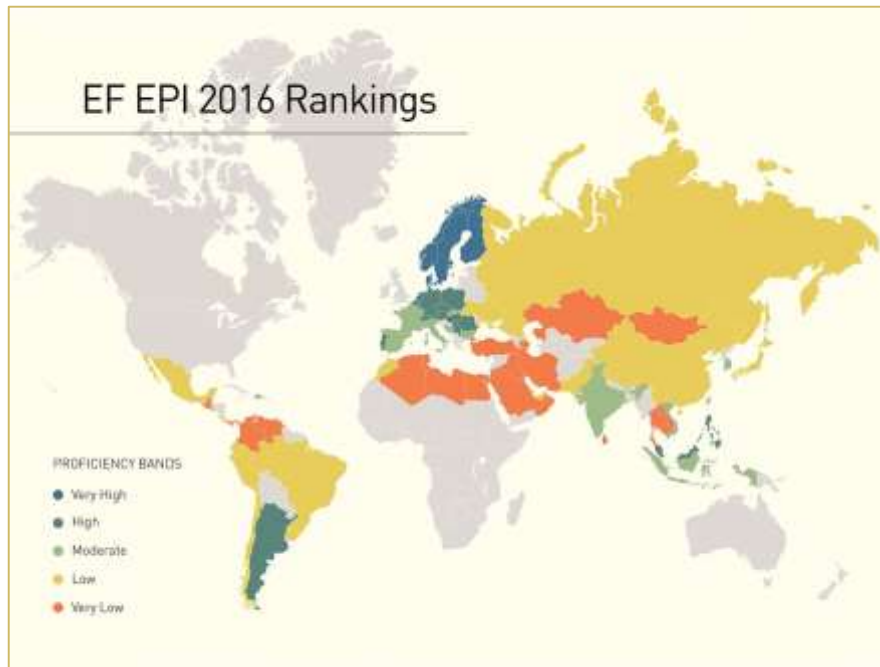


The economic pyramid

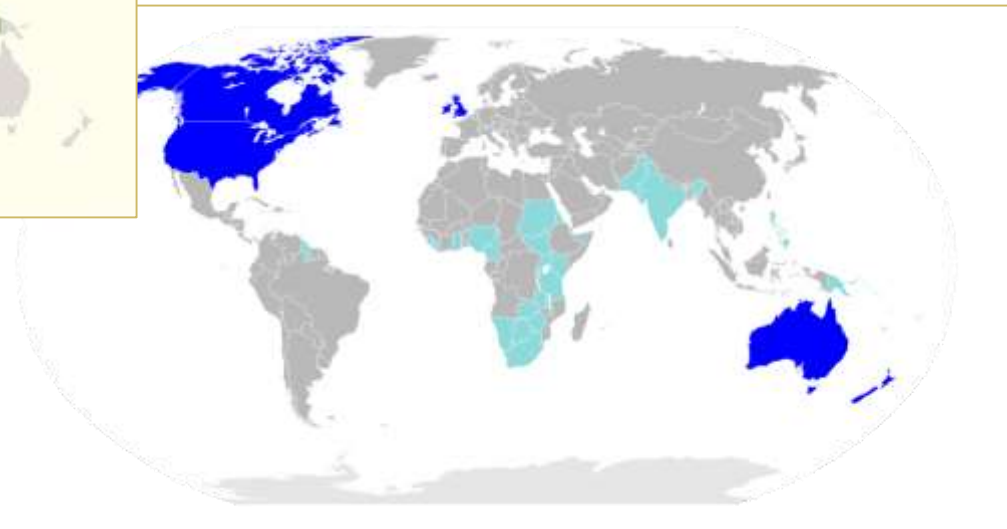


- Emerging economies (\$1-\$10/day)
- Developing economies: growing middle class (\$10-\$100/day)

English proficiency issues



‘Sadly, there is no denying that many of today’s high school or even college graduates have difficulty in expressing their thoughts clearly and logically in English.’
Philippines *Inquirer.net*

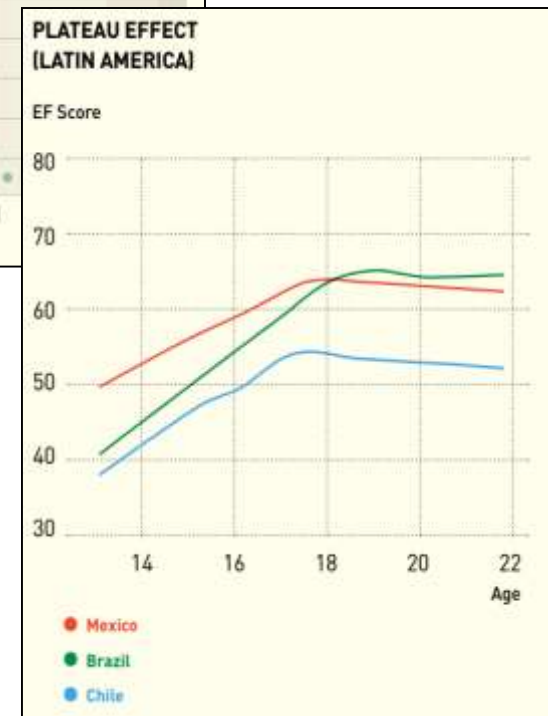
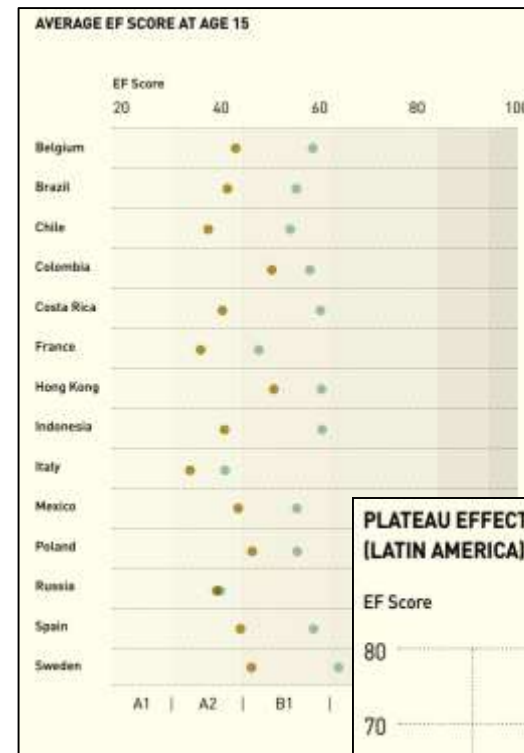


‘Thus, it is arguable that proficiency in English is one of the greatest opportunities that the **Nigerian** education system ought to provide children with. However, this is not the case as too many students, upon completion of secondary school in grade 12, lack the required skills and competencies in the English Language’ *Olayide Tikolo, Harvard*

Challenges in emerging market schools

Common deficits:

- Shortage of teachers
- Shortage of trained teachers
- Low language proficiency
- Low salaries / better jobs
- Curriculum quality
- Shortage of materials
- Political issues: eg EYE, MTB-MLE
- Mismatch between final assessment and teaching method
- Mismatch between secondary exit and tertiary needs
- Lack of technology
- EMI skills gap in HE



Who serves the underserved?

- State education - under-resourced
- Private education - elite access only
- NGO - focused on STEM
- Aid agency - focused on poverty alleviation & gender
- Mobile providers - expensive data

Actors:

- Intel Teach
- Microsoft Badaliko
- British Council
- US Office of English Language programs
- mEducation Alliance / USAID
- UNESCO
- Techfugees
- GIZ, Norad, NEDA etc

The English Access Microscholarship Program (Access) provides a foundation of English language skills to talented young people from economically disadvantaged communities through after-school classes and activities. Through these scholarships, participants gain:

- » English skills that may lead to better jobs and educational opportunities.
- » The ability to compete for and participate in future exchanges.

Program length
Two Years

Amy M.
Cambodia
Program

Countries and students that benefit from Access

Since its inception in 2004, over 100,000 students in more than 85 countries have participated in the Access Program.

in 85 countries

100,000+ students

ACCESS PROGRAM HIGHLIGHTS

Access students gain an appreciation for U.S. culture and democratic values through cultural enhancement activities.

Over 15,000 new scholarships were awarded in 2013.

Participants are achieving entry to local universities, obtaining employment, or receiving scholarships to study in the U.S.

Infrastructure: power



Kenya, Mozambique, Ethiopia – 50,000 children learning from British Council ‘ELT Learning Boxes’ with *LifePlayer*

Connectivity

Radiolabs

150 MBPS Reliable Wireless
Up to 5 Miles!

Instant 2.4 GHz Bridge

- Bridge up to 5 miles, line of sight*
- Transparent - Cannot be seen or hacked
- Fully Configured - Install and point antennas
- Works with all computers and networks

The diagram shows two houses with antennas on their roofs. A red and blue arrow points from the antenna on the left house to the antenna on the right house, indicating a wireless connection. The text '150 MBPS Reliable Wireless Up to 5 Miles!' is written above the arrow. Below the diagram is a green box with the text 'Instant 2.4 GHz Bridge' and a list of features.

Infrastructure: portable servers



Features:

- Battery-powered
- Creates Wi-Fi network (even without internet connection)
- Storage for learning materials
- Content management portal
- Browser-driven access



USB 3.0

WAN GIGABIT ETHERNET

POWER

RACHEL

RACHEL Plus

*Remote Area Community
Hotspot for Education and
Learning*

-drives tablets & notebooks
in small offline learning lab

-hosts offline copies of websites,
audio, video, lesson plans:
anything a browser can access

-runs on Ubuntu

-accessible to major OS &
browsers



More than 60% of the world's population remains offline. This population is predominantly rural, low income, elderly, illiterate, or female.

“A common refrain we hear is that children are in school, the teacher is there, but no-one is learning. Offline content serves as a resource for students and teachers to not just educate themselves, but also develop vital 21st century skills in digital literacy, research and critical thinking.” Jeremy Schwarz, WorldPossible.

Offline Content

Rachel:

- Wikipedia offline
- KhanAcademyLite
- 2000 TED talks
- 400 Great Books/Gutenberg
- African Storybook Project
- RadioLab

Other sources:

- GCFLearnfree
- LearnEquality
- Kiwix
- WorldPossible



Students learning with CAP in Las Cereas Altas, Guatemala.

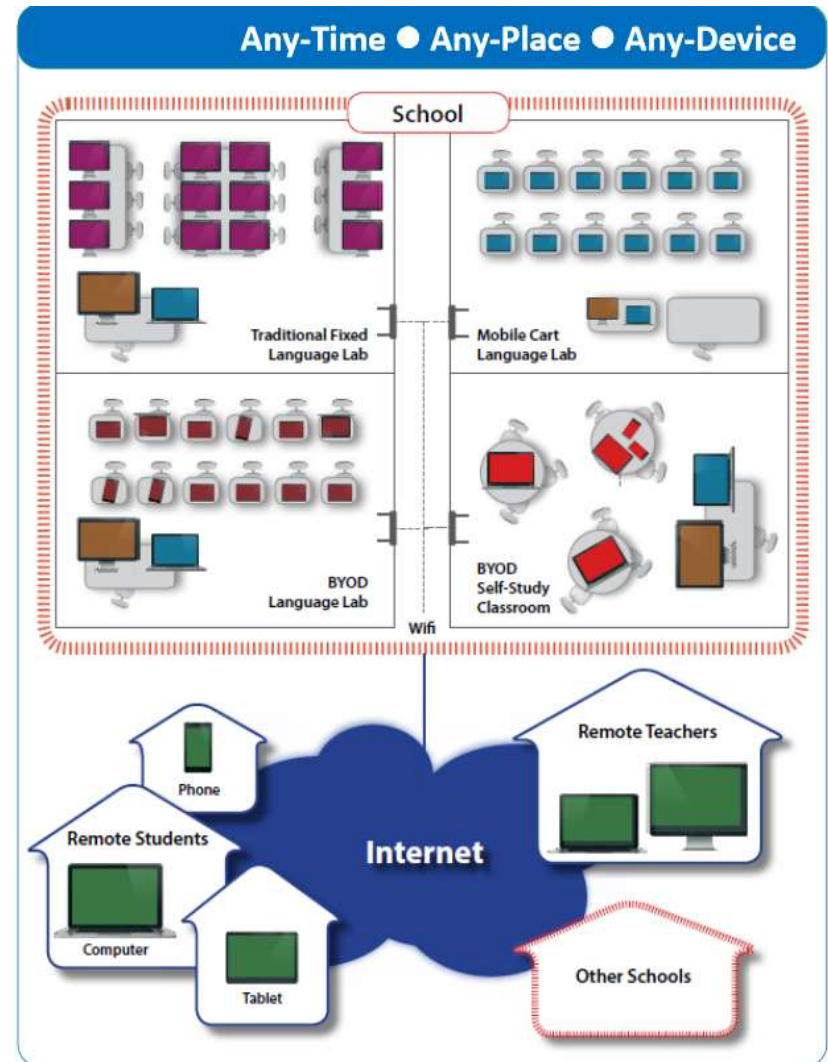
eGranary:

- 2,000+ complete websites, including:
 - [Wikipedia](#)
 - [Khan Academy](#)
 - [Project Gutenberg](#)
 - [MIT OpenCourseWare](#)
 - TED Talks
- 1,000+ partial websites
- 150+ academic and medical journals
- 50,000+ books
- 55+ educational software programs
- 80+ computer software applications

Infrastructure: classroom

Classroom:

- Offline server
- Netop/ Easylab classroom management
- One-to-one (e.g. OLPC, Classmate, tablet)
- Mobile BYOD
- Pico projector



Infrastructure: PC replacement

- Device + dock + monitor = full PC experience
- MS Display Dock, Samsung Dex, Lenovo Link, Nexdock...
- Superbook: laptop shell \$129
- Nokia: 'shared use' \$20 smartphone



Techfugees

A tech community response to the needs of refugees



Access to English for refugees and asylum seekers

Rwanda



Plan Ceibal



Bangladesh



ELT4D - Open Source ELT content

- Core curriculum
- Core training course design
- Core placement test
- Core achievement tests
- Core textbooks
- Core skills development
- Core readers

Open Source ELT portals

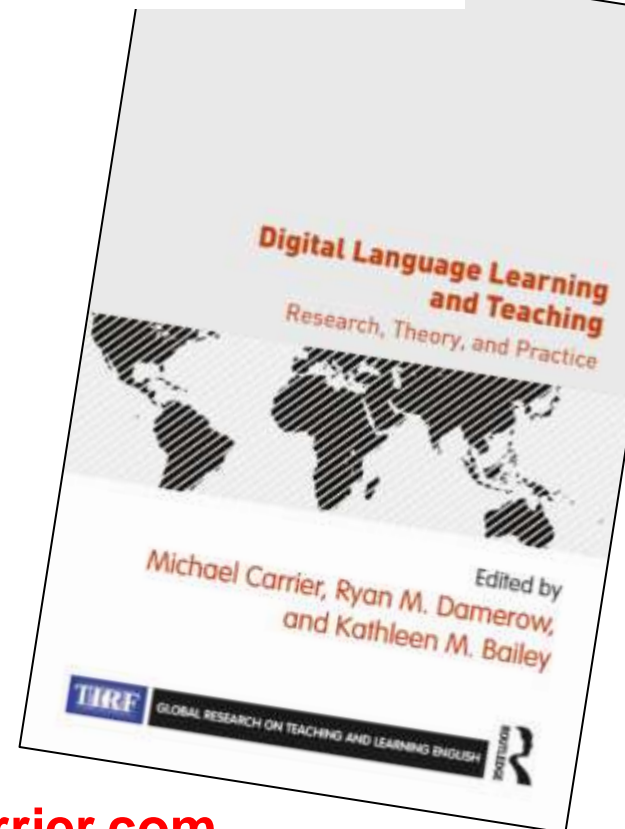


The screenshot displays the Cambridge English website interface for Antioquia. At the top, there are logos for Cambridge English, Cambridge English Language Assessment, and the Antioquia Department. The main heading is "English for Antioquia" with a "My results" link. Below this is a teal banner asking "What would you like to practice?". A navigation bar shows "Home" and "Learn More". The main content area prompts the user to "Select the area or subject you are interested in:" and features six interactive tiles: Introduction, Grammar, Vocabulary, Reading, Listening, and Speaking. Each tile includes a "Start" button.

ELT4D Take Aways



- 1 Learners need **equitable access to education** and therefore higher levels of English
- 2 Learners need new radical innovation in **digital infrastructure & connectivity**
- 3 Learners need access to good, free, **Open Source ELT content**
- 4 The teachers need access to good, free, **Open Source training** and CPD
- 5 Learners need us to **Influence** your professional network to get involved - lobby, act, train, donate material



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