MOOCs4D: Potential at the Bottom of the Pyramid

April 10-11, 2014

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You say you want a revolution...
Flipping the classroom

Mastery-based learning
Mission: Ubiquity

"changing education for the better by providing a free world-class education for **anyone anywhere**"

"connecting people to a great education, so that **anyone around the world** can learn without limits"

"the future of online education for **anyone, anywhere, anytime**"
2/3 of the world has no internet access.
Percent Internet Users by Country's Economic Status

- **High income**: 76% have internet
- **Middle income**: 27% have internet
- **Low income**: 6% have internet
Percent Internet Users by Country's Economic Status

Lack of Education

Poverty

- 27% have internet
- 6% have internet

Middle income
Low income
1. High bandwidth, urban connections
2. Low bandwidth (dialup, 3G, etc)
3. Sneakernet (USB sticks, memory cards)
The Parallel Revolutions

- Low-cost computing
- Openly licensed content
• 4300+ videos on topics from math through art history
• 400+ interactive exercises
• Knowledge map and coach reports so students, teachers, and parents can track the learner's progress

• Khan Academy... offline!
KA Lite server running on the same computer as browser.

Dedicated KA Lite server with multiple client computers.
Challenge: Even electricity can be scarce/flaky
Solution: Solar/battery-powered hardware support
Challenge: Supporting learning in local languages

Initial solution: Internationalize the interface/content
Frequently Asked Questions

> I have already used up my student quota for the month. Can I buy more Internet bandwidth?
No, it is not possible to buy more Internet bandwidth. You will need to wait until your next month’s allocation. You can, however, access many library and academic sites without using your Campus Internet Quota.
Many locals, including a number of teachers, come daily to watch the videos and practice the exercises as well; what was meant to be a classroom for some kids is now a classroom for the community.”
KA Lite Pilot in Liberia (by Taylor University)

29% improvement between pre-test and post-test, after a 3 day program with KA Lite!
4 classrooms → scaling up to 40 classrooms (1400 students) (Akanksha Foundation / Motivation for Excellence Foundation)
Conclusions/Exhortations

- Simply waiting 20 years is unacceptable!
- We need to proactively design around the current infrastructural constraints

- We need to encourage the use of open licenses (e.g. Creative Commons) on content
- These are essential to easy offline distribution

- Tools need to empower local communities
- Enable local content creation, empowering participatory engagement in the global community

https://learningequality.org/