

Textbook affordability and challenges

In several countries in Asia, Africa & Latin America



In a large number of low-cost private K-12 schools,

Monthly school tuition is ~\$10 Family income: < \$80 / month

National/state textbooks

- \$1-3 per textbook (varies based on region)
- Centralized printing and distribution
- Non-market, often subsidized, pricing
- Generally, poor quality and and outdated content

Private publisher textbooks

- \$4-8 per textbook (varies based on region)
- Printing, pricing, distribution and content coverage determined by popular market forces
- Dependent on cycles of national / state textbooks
- Thriving second-hand textbook markets
- Lack of timely availability of high-quality affordable textbooks





Lack of curriculum innovation

Open, innovative & market incentive

Learning Resources

Textbooks

Schools & learning institutes

Curriculum

Tightly controlled, rigid and outdated

United Nations Education First Movement on **Outmoded curricula and learning materials**:

"Reviews from around the world find that today's curricula and textbooks often reinforce stereotypes, exacerbate social divisions, and foster fear and resentment of other groups or nationalities. Rarely are curricula developed through a participatory process that embraces excluded and marginalized groups."

problem

"Educational Technology" challenges

Technology / Product









Acquisition cost

\$80

\$160

\$100

\$500

Value proposition

Low-cost, touch-screen

Low-cost, rugged, design, open-source

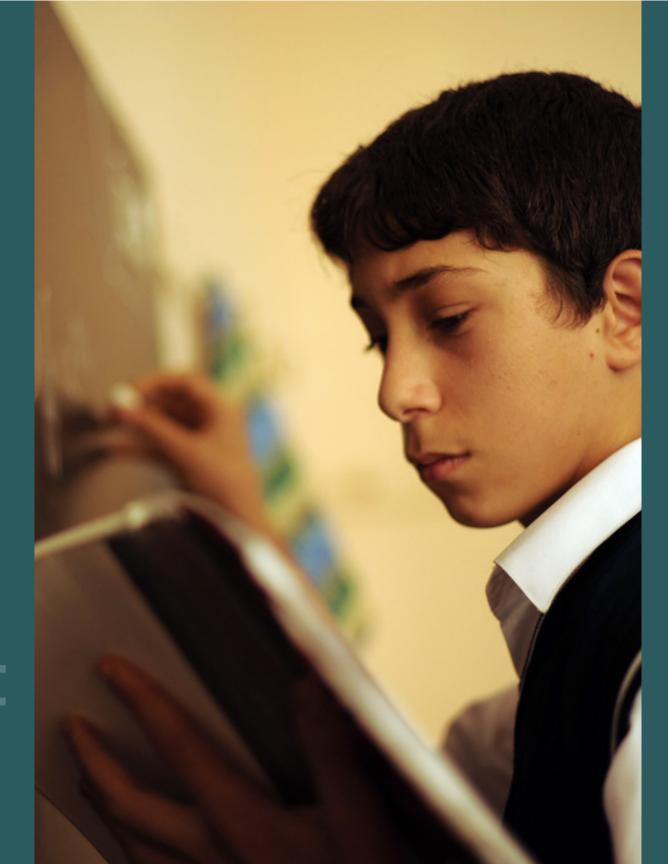
Low-cost, physical book replacement High-fidelity, interactive, beautiful

What's missing?

A thriving ecosystem of usable locally-relevant K-12 curricular content

Each of these gadgets, marketed as being the next big revolution in education, lack an ecosystem of educational content that is usable in classrooms where these are deployed. Content, especially locally-ready content, continues to be the harder problem to solve.





Challenges with Open Educational Resources



Lack of local adoptability capacity in small schools



Lack of standardization in resources created and shared



Challenging quality control and content noise reduction



Poor metadata and mapping to existing curricula worldwide

The William and Flora Hewlett Foundation define Open Educational Resources (OERs) as:

"OERs are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge."

OpenCurriculum

is an online platform hub for textbooks where communities can collaboratively create and share K-12 curricula material. It aims to become the Wikipedia for K-12 education - and by applying open source software principles, it strives to ensure highest quality of free K-12 textbook content on the web.

Vision

To ensure that every child in the world has access to a high-quality early education

Mission

To give people the power to make K-12 education open and innovative



OpenCurriculum is a 501(c)3 non-profit organization

Platform overview



K-12 Article base

Free & openly-licensed Wikipedia-like K-12 articles divided based on topics and subject categories, strictly moderated for high quality, and closely linked with open & paid educational resources.

(Linux equivalent: the kernel)



Public projects

Open curriculum projects by public communities freely distributed under open Creative Commons licensing, with linkage to open and paid resources.

(Linux equivalent: Ubuntu, Debian)



Private projects

Privately run curriculum projects (neither free nor in the public domain) run by local or strongly purposed communities. May be externally licensed.

(Linux equivalent: RedHat, Novell)

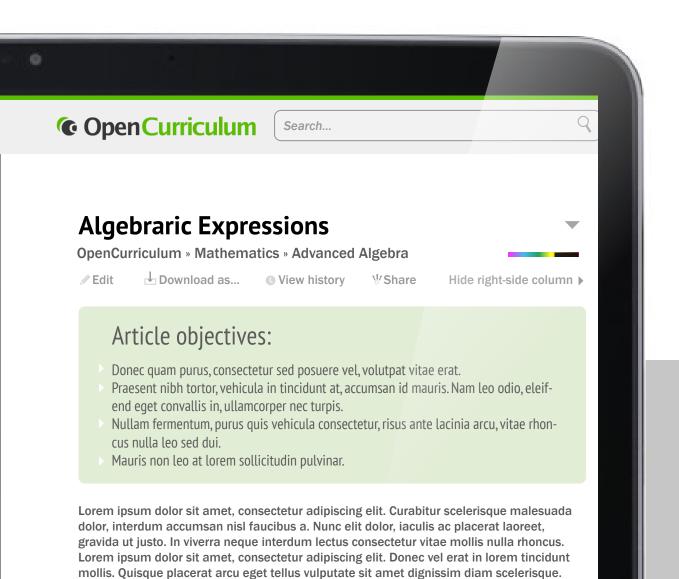








A Wikipedia for K-12 learning



Duis consectetur mollis risus, non eleifend velit venenatis in. Ut in est est, ut porta ipsum.



Rich coverage

Extensive coverage of K-12 learning materials in the form of highly moderated articles sorted and organized to perfection.



Community

Rich social and community features to enhance collaboration. accountability and sharing of learning content.



Open-source

Ready for sharing, remixing and reusing as a result of non-toxic teacher and publisherfriendly default licensing (BY-SA).







21st Century Skills support ecosystem

21st-century-skill-readiness toolkits and adherance indicators on articles to establish and encourage contribution standards for canonical content.

Collaboration for innovation

A birthplace for new ideas

OpenCurriculum brings the best practices in collaboration and co-creation from the world of software and sociology to educational content creation.







fork

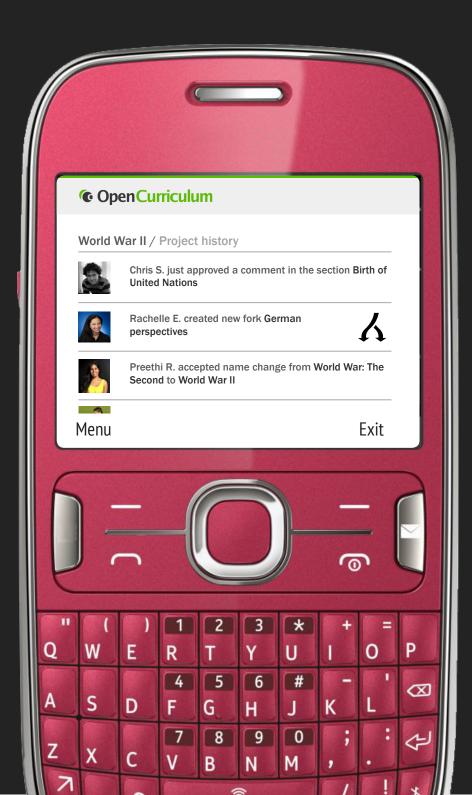
ability to create derivative of content from current state

branch

ability to build on top of current state in isolation

diff

ability to compare content revision changes



• OpenCurriculum

Technology readiness

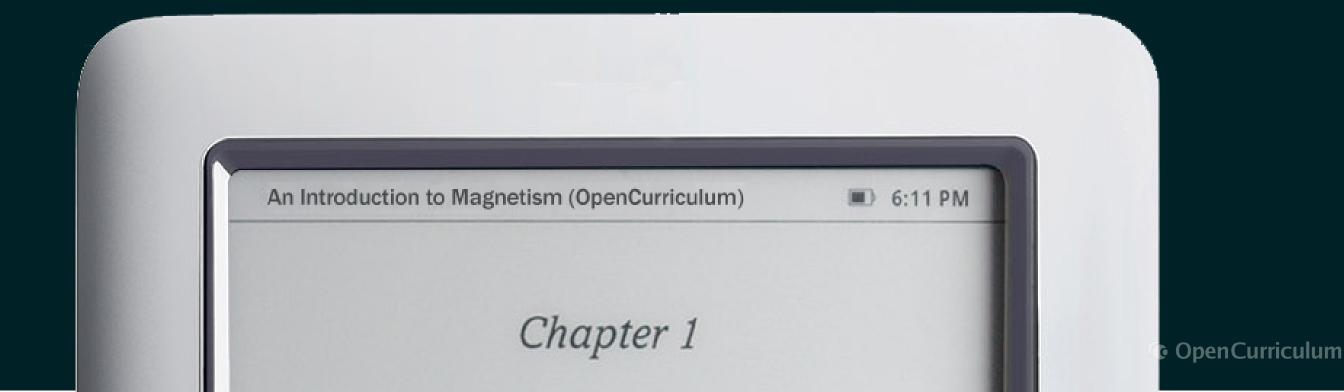
With cross-platform HTML5 readiness, open licensing and export features to most content publishing standards, OpenCurriculum's medium-agnostic content can be consumed over a spectrum of technologies including tablets, smart phones, feaure phones, e-readers, browsers and the ever-so-fashionable print books.



Developer APIs

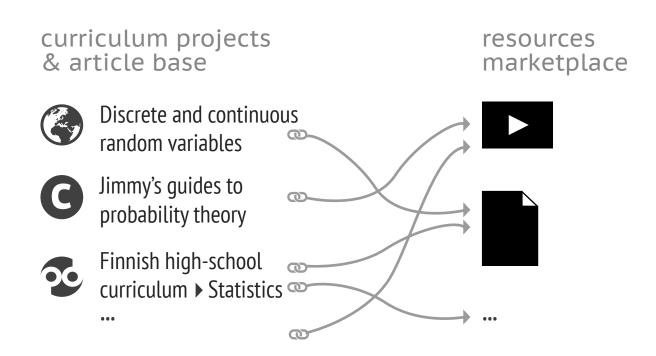
OpenCurriculum's rich and open LRMI*-compliant 3rd party developer API empowers innovators around the world to invent with no boundaries.

* Learning Resources Metadata Initiative





A thriving gallery of linked OERs



With rich metadata and linkages to local curricula, OpenCurriculum's organically growing library of Open Educational Resources (OERs) and premium resources is a one-stop shop for all teacher and student needs.

Images courtesy: World Bank

Opening slide: Ecole du Cirque, National Initiative for Human Development Support Project (INDH). Photo: © Dana Smillie / World Bank

Textbook affordability slide: A girl reads. Photo: © World Bank

Curriculum innovation slide: Mauchak Scout High School, Gazipur. Photo: Scott Wallace/ World Bank

EdTech challenges slide: IT training for kids in the Eastern Cape. South Africa. Photo: Trevor Samson / World Bank

OER challenges slide: Ayyub Najarada, attends school at the Kalbajar School #56 in Absheron Region. Photo: Allison Kwesell / World Bank

OpenCurriculum Intro slide: Education for girls. Photo: Curt Carnemark / World Bank

