The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization name:
Curriki

Organization URL:
curriki.org

Project Name:
Curriki

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

Around the globe, in poor and developing countries students are unable to get books due to lack of resources and teachers do not have access to the latest in "for fee" online curriculum. Even in the United States, the cost of commercial textbooks and teaching materials has become prohibitive for local school districts. It is clear that the cost structure of education must change, and that technology must be leveraged more effectively in the classroom to deliver better outcomes for more students. Curriki.org is an online community empowering educators, parents, and students to improve education by using technology to make free Open Education Resources (OER) readily available to all who need them. Curriki, which comes from combining the terms "curriculum" and "wiki," is many things: a collaborative social network for educators, an exchange of free learning resources, and a resource for parents and students. Anyone with access to the Internet can contribute to and use the quality and media-rich curriculum available on Curriki. Our strong community focus encourages collaboration, bringing diverse experiences from around the world to develop "best of breed" learning resources, peer-reviewed and classroom-tested, and to create a culture of continuous improvement. (See Appendix 1 and Appendix 2.) Key metrics illustrating the growth and success of Curriki are: 1) the number of users: more than 5.6 million since project inception; 2) the number of registered members: more than 238,000; 3) the number of contributed OERs (lesson plans, educational games, learning videos and simulations, digital textbooks, full courses, etc.): more than 45,000; 4) the quality of Curriki materials, measured in a July 2011 user survey: 4.1 on a scale of 5.

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Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

The Curriki.org free hosted services were developed using a 100% open source solution stack integrated though a service-oriented architecture (SOA). The development and production environments are deployed in a Tier 1 managed hosting environment, with our sponsor, AT&T. The Curriki service combines Java and PHP middleware components, which provide a set of RESTful APIs for transacting with the open learning resource repository. These APIs enable a wide range of third-party educational partners to easily integrate Curriki services and content into their web sites. Through federated services, each new Curriki server instance that is brought online anywhere in the world can become part of a single logical learning resource repository shared and managed by the global community of open educators and students. Through the development and integration of content and metadata standards for educational materials (such as IEEE LOM, IMS and LRMI, the Learning Resource Metadata Imitative), Curriki is helping create and propagate useful ways to tag, find and select appropriate learning resources. Perhaps most innovative in Curriki's tool set is the first of its kind use of Creative Commons Licensing to enable open adaptation, mixing and re-mixing or learning resources. This combined with the group collaboration tools and the ability to support any form or format of content makes Curriki a highly flexible solution for all educators.

Please list the specific humanitarian benefits the project has yielded so far.

There are many benefits of the open education model embodied by the Curriki project. Curriki has provided free, open education resources globally to more than 5 million users from 192 countries. In developed countries like the UK and America, we spend about $100K per child, whereas in developing countries like parts of Asia, Latin America, and Africa, less than $400 is spent on educating a child in his or her lifetime. By utilizing the free learning materials offered on Curriki, teachers in developing countries have been able to access high-quality teaching resources that would otherwise have been unavailable. In the United States, schools can reallocate resources towards much-needed activities that build teacher skills and effectiveness in the classroom. Teachers can avoid "re-inventing the wheel" by utilizing and adapting existing high-quality learning materials. Schools and districts can retain teaching content that might otherwise become unavailable when skilled teachers retire. More than 600 groups of educators with common needs have come together in topic-based Curriki Groups to collaborate on curriculum development and share their work with the larger community. Free curricula have been made available to parents who want to give their children additional help and students looking for self-help resources, all searchable by topic area and grade level. A teacher uses Curriki resources to teach science and mathematics at the Setumo Intermediate School, a small farming town in South Africa where many students are disadvantaged and where class sizes can reach 65. The Nassau BOCES serving school districts across Long Island, New York, were awarded a $1 million grant to train and develop content for American History teachers. They used Curriki to collaboratively develop, organize and share that content. Curriki offers a way to achieve better educational outcomes, at less cost.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

Here's how one charter school in New Jersey, ECO (Environment, Community, Opportunity), used Curriki to empower teachers to share curricula and best practices. (See Appendix 1.) We'll let founder Antoinette Dendtler tell the story: "We use Curriki to create a living repository of ECO's curricula. With Curriki, ECO teachers and administrators are able to: privately share curricula and

planning documents via our group on Curriki; access ECO curricula from present and past school years; continually extend and develop our curricula as individuals and as a team using Curriki's lesson plan templates and revision tools; get feedback on our curricula from Curriki subject expert reviewers and the Curriki global community; present our curricula to interested parents and school stakeholders; connect and collaborate with other schools and educational organizations who share a strong interest in environmental education. I surveyed a few of our teachers about Curriki. Here is what they said: "The Curriki site is used to post lesson plans and offer teachers a resource to find ideas for planning. It's a great way to link grades and gain insight about what teachers are doing in other classrooms" (Kate Goodman, First Grade Language Arts/Literacy/Social Studies Teacher). "We are able to view the lesson plans of other grades and see what is going on in our school and use the ideas of our colleagues" (Tiffany Ballard, Third Grade Language Arts/Literacy/Social Studies Teacher). "I like that we are able to keep a virtual copy of all of our lesson plans and are able to access other teachers' plans in order to help with our teaching. I think that being able to access others' lesson plans will help us to work closely within our grades and across the grades" (Diane Miller, Kindergarten Teacher).