

"one laptop per child" is an education program, not just a laptop project

One Laptop per Child (OLPC) is a non-profit organization founded in 2005 with a goal of transforming primary school education by ensuring that every child has access to a connected laptop computer (the XO laptop). OLPC's founders – world-renowned leaders in technology and education – are driven by a firm belief that laptops have a unique ability to leverage children's innate curiosity and desire to learn, to develop critical thinking skills, and to foster a life-long love of learning.

OLPC vision The argument for olpc is simple: learning should be the most engaging, most rewarding, most positive aspect of a child's life, inside and outside school. High-quality education should be the paramount objective of any government. Connected laptops provide a cost-effective way for states to create learning environments that facilitate the greatest possible development of all children, rich or poor, urban or rural, male or female, white or black.

Why laptops? Deployment of the XO laptop has the power to transform education almost immediately, at a cost that is lower than that of textbooks. Computers, through innovative use and ubiquitous presence, have enabled the unprecedented growth of knowledge (i.e. learning) in the world, bringing change to virtually every field of study and even creating new fields of endeavor. However, in the classroom, technology is often used primarily to teach the same material that was taught prior to the arrival of technology. Not surprisingly, such efforts do not produce the results that justify the cost of computers. By providing laptops to every child without cost to the child, we bring all children rich new opportunities for learning.

Five Principles of OLPC

- 1) Child ownership When each child has his own machine we've seen that he will view it not as government property, but as a personal medium, cherished like a bicycle. We've witnessed that these children are more confident, have greater self-esteem, and are more educationally entrepreneurial than children without this tool. They spend more time on schoolwork; read and write considerably more; and take a new, more positive view of their potential. Their parents engage in their children's learning and involve themselves in the schools. Learning becomes a focal point of their lives.
- 2) Low ages The XO is designed for the use of children ages 6 to 12, covering the years of the elementary school, but nothing precludes its use earlier or later in life. Children don't need to be able to write or read in order to play with the XO and we know that playing is a fundamental basis of much human learning. Moreover those digital activities will help the acquisition of the writing, reading, mathematical, scientific, and reasoning skills.

- 3) Saturation The OLPC commitment is with elementary education. In order to attain this objective we need to reach a "digital saturation" in a given population. The key point is to choose the best scale in each circumstance. It can be a whole country, a region, a municipality or a town, where every child will own a laptop. Namely, if you have 1 million laptops for 5 million children, you do not give them out to every 5th child or every 5th school. You should instead provide computers to all the children in 1/5 of the regions, so each of those regions is saturated. With every child owning a computer there will be the support from many institutions, individuals and groups in the community.
- 4) Connection The XO has been designed to provide the most engaging wireless network available. The children in any given neighborhood are wirelessly inter-connected to chat, share information on the web, gather by videoconference, and collaborate to make music, edit texts, read e-books and together enjoy the use of games on line.
- **5) Free and Open Source** The child with an XO is not just a passive consumer of knowledge, but an active participant in a learning community. As the children grow and pursue new ideas, the software, content, resources and tools should be able to grow with them. The bottoms-up nature of OLPC means that growth will be driven locally, in large part by the children themselves. Each child with an XO can leverage the learning of every other child. They teach each other, share ideas, and through the social nature of the interface, support each other's intellectual growth. Children are learners and teachers.

Making Vision Reality While the previous section advocates seemingly lofty ideals, they are not idle speculation. Rather, they are based upon over four decades of well-documented experience creating technology and working with children in real settings, in the U.S. and abroad, from elite schools to the worst performing schools. The benefits of computational thinking are myriad: customizing the learning experience, building upon interests, learning by doing, learning collaboratively, supporting teachers remotely, and opening disciplines to more children more deeply.

Beyond school Parents who have a laptop or desktop at home almost undoubtedly have asked their child for help. What then follows is a change in one's relationship with the child, with more elements of friendship and (on the child's part) self-esteem. This enhances the parent-child relationship. A bond to learning is formed between the child and parent at home.

For much more information, visit our web site at http://www.laptop.org.

