How can an increased access to low-cost computing devices improve the quality of life for people living in the developing world?

David Furendal, 2007

One Laptop per Child (OLPC) is a non-profit organization created by faculty members from the MIT Media Lab. By distributing millions of inexpensive laptops to developing countries, OLPC wants to give all children in the world access to knowledge and modern forms of education. In 2007 the first orders are supposed to be delivered to the governments in Argentina, Brazil, Libya, Rwanda and Uruguay. By marketing the laptops in very large numbers the cost of each unit will be low. The Libyan order are for example so big that each one of the 1.2 million school children living in Libya will get their own personal laptop. [1]

The price for the first version of the laptop is around US$135-140 but the goal is to lower this sum to around US$100 in 2008. The computers are Linux-based with full-color display, a 366 MHz processor and 128MB of DRAM. They contain three USB ports, a SD-card slot and a wireless network card. A 512 MB Flash memory is used instead of a traditional hard drive. The laptops are designed to be extremely power efficient and will be possible to use with innovative power systems such as wind-up. [1]

There are also many other initiatives, similar to that of OLPC under development. To find more information about them, see the bibliography [2, 3]. The goal for all of these projects is to increase the use of computers. How can an increased access to computers improve the quality of life for people living in the developing world?

Word processing, multimedia playback, video game play, online communities and internet browsing are some examples of popular computer-based tools of today. An increased access to computers will give more people the availability to use all of these tools to improve their daily quality of life. The Internet can also help to decrease the distance between people and help us to find new friends, or to keep in touch with old friends.

Computers can be a great tool to support and promote learning. One of the main reasons for the development of computers by OLPC is to give children access to "modern forms of education" [1]. Computers positive influence on the learning process has been shown in a research project in Maine where all middle schoolers have got their own Apple iBook laptop [4].

An increased access to computers can also improve people's quality of life indirectly. Programmers, computer technicians and creation of infrastructure for Internet access are examples of jobs that appear when more people start using computers. More people working with development of software and hardware also means that many new applications and systems will be created.

This was just a few examples on how computers can improve our quality of life. I think they are some of the reasons why a more widespread use of computers will help to improve the quality of life for all people living in the world! [5]

Bibliography

1. One Laptop per Child, visited March 30, 2007, http://www.laptop.org/.

A non-profit organization created by faculty members from the MIT Media Lab. By design, manufacture, and distribute millions of inexpensive laptops to developing countries, OLPC wants to give all children in the world access to knowledge and modern forms of education.

2. Quick guide to low-cost computing devices and initiatives for the developing world, visited March 30, 2007, http://www.infodev.org/en/Publication.107.html.

A list of different projects and initiatives for giving children in the developing world access to computers.

3. The Maine Learning Technology Initiative (MLTI), visited March 30, 2007, http://www.mcmel.org/MLLS/mlti/index.html.

A project in Maine, that provides every 7th and 8th grade student with a laptop computer. The initiative is firmly focused on improving learning for students and provides teachers with extensive support and professional development.

4. Mike Muir et al. (2004). The power of one-to-one: early findings from the Maine Learning Technology Initiative. *Learning & Leading with Technology 32 (3)*, p. 6-11.

Article that examines the history and evolution of the Maine Learning Technology Initiative through the lens of several research and evaluation studies.

5. John M. Artz. "Computers and the Quality of Life: Assessing Flow in Information Systems". Department of Management Science. George Washington University Washington. *Computers and Society, September 1996.* p. 7-12.

Interesting article from 1996, about how computer technology can impact the quality of life, now, and in the future.

Laptops are both a window and a tool: a window into the world and a tool with which to think. They are a wonderful way for all children to learn learning through independent interaction and exploration.
(Nicholas Negroponte)