



Helping young minds click

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By Thomas Hazlett

The \$100 laptop for kids is here. And the good news is that it sells for just \$200.

That is close enough for charitable work and MIT's Nicholas Negroponte ought be toasted. His ambitious plan to distribute millions of light, energy-conscious notebook computers to children in developing countries - One Laptop Per Child, or OLPC - is already brightening some lives.

Moreover, by pushing hardware and software suppliers to innovate for a market with much potential but little effective demand, further progress may come. Indeed, the XO-1 (as this machine is called) may be buried by the rivalry it has triggered. As Negroponte coolly responds to the burgeoning competitive threat: "make my day."

What is not to like? Probably nothing at all. Yet before this laptop-for-kids parade marches off to Stockholm to pick up a prize, we might make a few inquiries.

First, are "in-kind contributions" best? What is awarded the recipient may be considerably more costly than the value delivered. Hence, beneficiaries generally prefer cash. If a notebook PC costs \$200 and an inoculation \$10, the cost of the computer is 20 doses - a gift that may well do more worldly good.

A money transfer, in lieu of laptops, permits the folks we aim to help make their own trade-offs. They will typically improve upon the choices of donors in far-off lands, although depositing the resources into their accounts requires some attention to detail. Governments are not always reliable conduits. Monies delivered to regimes in developing countries have often paid for more villas than vaccines.

In-kind contributions can yet be defended, however, due in part to two ironic attributes. First, they appeal to wealthy westerners' egos, fortifying them with the thought that they are making poor kids a half-world away tech savvy. This selling point increases donations. Second, the bright green machines are more difficult to skim than dull green currency. If turning cash into laptops improves the chances that poor kids end up with the contributions, an important problem is solved.

Second, will the PCs educate children? The reflex assumption that computers make everyone smarter is only that. No doubt PCs are valuable business tools, improving productivity in the modern economy. But so are electronic calculators and it is probably unwise to substitute these machines for the sticky human brain processing required to learn our multiplication tables.

There was a 1980s/1990s rage in the US over PCs in the classroom. Desk-tops were placed in American schools, but proved an educational bust. Research finds that computers can be a distraction that crowds out learning. Perhaps where an entire village is without a PC the introduction of connectivity will have a more positive impact. I think that is likely, in fact. But the positive result can also swing past the optimum, as schools elsewhere appear to have done. Nine-year old boys almost surely have better things to do with their time than fiddle with PowerPoint. (The same might be said of 39-year old boys.)

Third question: is this campaign a diversion? In reality, used PCs have long been available for under \$200. While independent power packs attached to Negroponte's PCs may spark sales in new markets, network connections remain a problem. (Mesh radios are included, but will prove challenging in practice.) More essentially, the human capital that complements computer use - and which drives the demand to augment our talents by acquiring such assets - is largely lacking. The OLPC campaign attacks that problem by distributing the physical capital, hoping that technology supply will create its own demand.

A thought experiment is in order. Suppose you are responsible for an impoverished 12-year-old orphan living in Hyderabad, India, and you have a budget of \$200. After due diligence, I suggest you will then invest in tuition at a private school. With two-thirds of local children attending such institutions and fees running at about \$2 per month, buying one hundred months of schooling (academically much superior to that found in the public schools there) would stretch this girl's "development budget" the furthest. Perhaps your next \$200 would buy her an XO-1. But not your first.

According to a recent paper by James Tooley, professor of education policy at Newcastle University, private schools charging such tuitions have sprung up throughout much of the developing world, including the Hyderabad slums. These institutions are driven by the grass roots, reflecting the desires and abilities of the people served. They are promising candidates to support. In a world of limited options, they end up competing with laptops. Those tough choices sometimes get obscured. Dropping gifts from a high altitude may hit the mark, but may miss. Results bear careful scrutiny. And, still and all, gratitude for Negroponte's bold venture.

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