

Making a Real Difference: Laptops in the Guatemala City Garbage Dump

by David Ahl

How can we explain the life-changing economic miracles of the past 50 years? Why have some nations and some peoples prospered and others not? And what can we learn from this to make a real difference in the lives of the people in the Guatemala City Garbage Dump?

Some people say it was the English language. India, Ghana, and Malawi were all former British colonies and inherited the language of Shakespeare, yet the GDP per capita in Malawi is \$600/year while it is \$3,700/year in India. English may help, but it's not the whole story.

Perhaps success comes from turning relative poverty into an asset and becoming a low-cost producer like Ireland, which attracted a flood of manufacturing investment in the 1970s and 80s. Again, that's only part of the story. Greece succeeded Ireland as the poor man of the EU, but no excess of investment ever materialized there.

Perhaps it is democracy and people being able to flourish in a benevolent, open political climate. If that were the acid test, communist China would not be today's greatest economic turnaround story.

So what do the big turnaround success stories of the last four or five decades—Singapore, Korea, Ireland, India, China, Brazil, Japan—have in common, and what separates them from the abject failures—Somalia, Malawi, Congo, Yemen, Cambodia—and the people living in the Guatemala City Garbage Dump?

In a very practical sense, these life-changing modern miracles resulted from giving priority to three important areas: education, innovation, and communication.

Education: Widespread and Relevant

Like the old adage that says that the three most important things in retailing are location, location, location, education is of paramount importance to every successful people or country. Japan, Korea, Singapore and all the so-called "tiger" economies of the Pacific Rim emphasized the importance of literacy, engineering, and technical knowledge, and invested heavily in education long before their economies took off.

The rapid ascent of India, China, and Ireland in recent years is due largely to their ability to bring masses of literate, numerate workers into high-tech industries that depend increasingly on R&D for growth. Even in labor-intensive sectors where R&D is not a big factor, skilled workers play a critical role in devising new methods and improvements in manufacturing. A culture of education permeates societies where economic miracles have occurred.

Educating five or ten percent of your population, exposing a handful of children to the computer, and awarding a few scholarships doesn't do the job. China's goal is to graduate 250,000 engineers per year and India is shooting for a million (the U.S. awards just 60,000 engineering degrees per year these days). In 1978, Singapore declared that every high school graduate would know how to use a computer; today they do. To have real impact, education must be widespread and relevant.

Innovation: Different and Better

"Same old, same old" is not a recipe for building an economy or breaking the cycle and getting people out of the dump. For decades Korea modeled its economy on the economy of Japan and with its cheaper labor made inroads into shipbuilding and steel production. But in the 1990s Korea made a bold bid to become a knowledge economy and resolved to make high-speed

Internet access available to every citizen. Today it is the world leader in broadband penetration and Samsung, LG, and others are the nucleus of a growing knowledge-based economy.

Recyclers around the world focus on reusing the same few materials and the prices on raw recycled paper, rags, aluminum, copper, and plastic are at 20-year lows. Recycling in New Jersey has dropped by a third in the past ten years. Why? Because it just isn't cost effective. You can't make recycling pay. Unless you look at it in an innovative way as did Peter Strugatz and Miranda Magagnini who developed a process that involves crushing and compacting discarded auto glass and concrete into a product called Ice Stone, a "green" building material for counter tops, floors, and wall coverings. Today, Ice Stone is the primary material in every new Starbucks throughout the world.

Recycling of traditional materials is the main business in and around the Guatemala City Garbage Dump. But will it get people out of the dump? Not likely unless they start developing opportunities like Ice Stone, shredding tires into crumb rubber for playground surfaces, improved asphalt, and fuel for cement kilns, or something altogether new, different and better.

Communication: Thinking Globally

Had Paul not taken his three missionary journeys, what would have happened to Christianity in its early decades? Where would we be today without the printing press, airplane, telephone, or Internet? These are not rhetorical questions: you can find the answers in the grinding poverty, short life expectancies, and pagan rituals of remote African and Asian villages. And to some extent in the Guatemala City Garbage Dump.

Singapore did not achieve an annual average per capita income of \$31,000, the highest in Asia, by looking inward. They have no natural resources whatsoever, except people. However, 50% of the population are regular users of the Internet and there is an Internet server for every five people, higher than nearly any other country in the world (except Iceland, which is the world leader in Internet usage per capita). Moreover, Singapore is one of the only countries in the world with more than one telephone per person (1.1 phones for every single man, woman, and child). The effect: Singapore today is a technology manufacturing powerhouse, unemployment is a low 3.1%, and its port is one of the world's busiest.

One Laptop Per Child

So we see that three vital aspects of life-changing success are education, innovation, and communication. How can these elements be brought to the people of the Guatemala City Dump? The answer is surprisingly simple: one laptop per child. The experts tell us that it is unlikely that any of the adults now living in the dump will ever leave. It's all they know and, bizarrely enough, for many of them, it's all they want. The cycle can only be broken with the children. Laptops are both a tool and a window: a tool with which to learn to think and a window into the world. A laptop helps provide all three elements for making a real difference: education, communication, and innovation. Most important, it's the one tool that will get them out of the dump, well-prepared not only to integrate into society at large but to become leaders.

There are several innovative projects throughout the world built on this theme, including the MIT Media Lab "One Laptop per Child" project, the Microsoft "Flexgo" computer now in Brazil and Mexico, and Dell's \$300 PC now being sold in China.

Sponsors of the One Laptop Per Child project have negotiated huge commitments with five countries—Argentina, Brazil, Libya, Nigeria, and Thailand—to put computers into the hands of millions of children. The Microsoft Flexgo computer works like a prepaid mobile phone which the user pays a little at a time by means of prepaid cards available at a local kiosk.

Implementing the Project

Initially we pictured a large-scale project for Guatemala starting with a hub and 250 laptops; then moving on to getting a laptop for each of the 2,500 families in the dump, and finally furnishing one to each of the 5,000+ school-age youngsters. But that assumed that some foundation or corporation with deep pockets would ante up some significant funds to get it going.

However, our experience of the last two years indicates that 1) with the world economy in the tank, we probably aren't going to get a foundation startup grant and 2) we can have just as much impact, albeit a bit more slowly, by giving donated laptops to one family at a time. So that's what we're doing. At the moment, it's a very grass roots effort.

It starts with getting the word out through newsletters, e-mail, word of mouth, and a web site. Dave Ahl of SwapMeetDave.com is acting as the collection point for donated laptops. They then go to Raul Caceres of Computer Pro Inc. who erases the old programs and installs Spanish-language software. Next Betsy Ahl of Beyond-the-Walls arranges to get the laptops to Guatemala using people going there on missions trips. Finally, Potter's House distributes the computers to needy families and tutors them in the use of them.

Making a Real Impact

If we want to have a real impact on the people living in the Dump, equipping and motivating them to live a new life outside the Dump, it can be done. Entire countries from China to Chile, India to Ireland, went back to the basics of education, communication, and innovation and made broad, dynamic advances. With your help, why not the people in the Guatemala City Garbage Dump?

Our Goal: 2,500 Laptops in 5 years (by 2014)