

Dear all:

Welcome to the final day of our fifth week together!

Today I'd like to offer some information about **Community Technology Centers and Health Education**.

Community technology centers (CTCs) are generally nonprofit, locally-based organizations that provide IT (information technology) to people who could not access the technology in any other way. In developing countries a CTC is exemplified in a library or YMCA, where IT skills like typewriting or programming are taught. In many developing countries CTCs (such as in schools or traveling Internet vans) are the only means villagers have through which to access the Internet (Community Technology Centers as Catalysts for Community Change). In successful CTC models the community itself becomes a stakeholder in the center. As the community progressively perceives the marginal benefit of the center, there are increasing resources from the community (in time or funds) devoted towards its maintenance.

I will briefly explain some of the potential benefits to the health care system by employing a more expansive system of CTCs.

CTCs as Informational Portals

CTCs are excellent sources of free, fast information both due to access of technology, and further as community meeting hubs of information. By providing largely unencumbered access to the Internet, CTCs provide a wealth of knowledge that is directly transmitted to the user. CTCs further act as a multiplier of information with each user acting as an informational node. Knowledge acquired at a CTC rarely remains in the user, who will tell their friends about the cricket match score, or an article that they read.

Creating a Culture of Learning

A CTC will serve a basic purpose of providing an outlet for information and information sharing. What is traditionally ignored and almost more important is the learning change I believe the Internet introduces. Broken down, the Internet is a series of unrelated information points which make sense only by sifting through massive amounts of data. The sifting process we most commonly use to obtain the information we want is a search. However finding information on the Internet, unlike most mediums, is rarely a linear path. Imagine a user is searching for information on how to cure his ailing cow. The user types in 'cow, sick' and receives thousands of web sites; some related to the mad cow virus, others with veterinarians, others with symptoms cows exhibit. Our user knows his cow doesn't have mad cow, he doesn't want to pay for a veterinarian, so he clicks on the site which lists cows' symptoms. The first page he visits lists only a few of his cow's symptoms, but there is a link on the page to a network of cow professionals that will diagnose his cow for free. This page turns out to be a scam, but there is another link which is a social networking forum where another user posted a message including his cow's exact symptoms. He identifies the problem with his cow and saves her from near death.

While circuitous, the user found exactly the type of information he needed to solve his

problem. Through the voyage, a central learning change is occurring without the user's awareness. Users experiencing the Internet quickly learn there is no single route to solutions, and more importantly that being inquisitive and able to take small risks can have potentially very beneficial results. People using the Internet have the opportunity to select the first search result obtained and never look further. However once a wrong selection is made there are no punishments, and the more adventurous users are with their searches, the more they increase their likelihood of finding their desired results.

"Over a two-year period, MIT researchers helped build the capacity of the Camfield Tenants Association (CTA) to combine technology with community building, but also conducted a quantitative and qualitative evaluation of the initiative's impact on the lives of Camfield residents. The early results of the evaluation included the following... a positive shift in participants' attitudes and perceptions of themselves as learners."

(*Community Technology Centers as Catalysts for Community Change*, p.16:

http://www.bctpartners.com/resources/CTCs_as_Catalysts.pdf?bcsi_scan_A8AA4F79F19141A2=0&bcsi_scan_filename=CTCs_as_Catalysts.pdf).

CTCs and Health Care

CTCs can affect the health of their users and community only to the extent that they are able to coordinate with partners with local health care delivery entities. One can quickly see the intrinsic benefits of linking CTCs with health care delivery. CTCs have the ability of linking directly with a local hospital to provide a database backbone for health records and information in rural areas. Patient histories could be linked to a hospital, giving doctors the ability to access data from one village to the next.

Doctors and health care professionals too would be able to directly benefit from CTCs through distance learning programmes and telemedicine training sessions online. With a well functioning CTC, rural doctors in Nairobi would have access to the same medical journals and case histories as doctors in New York.

Individuals would also be directly impacted by CTC usage. An individual would have the capacity to quickly look up symptoms online and diagnose an ailment. The communal nature of a CTC further acts as a natural information dissemination tool. The user who 'googles' his symptoms can talk about common symptoms with his friend at the CTC, then with his family back home, who can spread the information further.

In emergency situations, CTCs are being used to provide evacuation routes during natural disasters and delivering prevention information during cases of virus outbreaks.

Questions

- How could CTCs be used to provide bottom-up information that could be used by researchers to analyze drug therapy results etc.?
- How could health care providers be more intrinsically linked to central databases of information housed in CTCs?