"Hole in the Wall" Education & its Benefits to Society

Taylor N. Farris
Berglund Student Fellow

"Hole in the Wall" Education & its Benefits to Society

Rights

"Hole in the Wall" Education and its Benefits to Society

by Taylor N. Farris

In the realm of today's technology, the TED organization has the power and mobility necessary to spread the buzz about any number of topics dealing with Technology, Entertainment, or Design. The nonprofit company, which began in 1984, aims to spread ideas across the globe and provide insight and inspiration in nearly every aspect of life. [1] These inspirational, educational perspectives have given a new depth to the concept of lifelong learning for many, and have spawned numerous creative and innovative environments. In recent years, the group's TED Talks have been particularly insightful, and have spurred the coveted TED prize—a $1 million grant in support of "one wish to change the world." Previous noteworthy winners include Jamie Oliver for his quest to provide a nutritional revolution, Bill Clinton for a healthcare system in Rwanda, and Bono's push for American activism in Africa. [2] The 2013 winner of the TED prize is a man by the name of Sugata Mitra [LINK TO http://en.wikipedia.org/wiki/Sugata_Mitra], who may be less famous but certainly possesses no less ambition or success. As an educational researcher, Dr. Mitra has long studied different learning styles and methods, but has received most notable praise for his groundbreaking "Hole in The Wall" experiments.

Dr. Mitra, Chief Scientist Emeritus at NIIT and Professor of Educational Technology at the School of Education, Communication and Language Sciences at Newcastle University, England, was constantly struck by the notion that the children living in the nearby slum may never have the opportunity to experience technology-based learning. At the same time, Mitra was being constantly approached by wealthy families making interesting claims. He stated that: "[I] had…lots of parents, rich people, who had computers, and who used to tell me, "You know, my son, I think he's gifted, because he does wonderful things with computers. And my daughter -- oh, surely she is extra-intelligent." And so on. So I suddenly figured that, how come all the rich people are having these extraordinarily gifted children? What did the poor do wrong?" [3] For his own curiosity, Mitra made a hole in the boundary wall separating his office from the slum, and put an English-based computer through it in the hopes of attracting nearby children.

Sure enough, kids flocked to the device, eager to learn more about it. They asked Mitra what it was, and how to use it—questions which he shrugged off before leaving the children to their own devices. After eight hours, Mitra returned to find the children browsing the internet and teaching their peers how to do the same. However, Mitra and his team were skeptical; perhaps a passerby had shown the kids little tips and tricks. Instead of discounting the findings, Mitra traveled to a remote village approximately 300 miles from New Delhi, where he put another computer and returned home. He came back a few months later to find children from all around the village playing games. Mitra laughed:

When they saw me, they said, "We want a faster processor and a better mouse." So I said, "How on Earth do you know all this?" And they said something very interesting to me. In an irritated voice, they said, "You've given us a machine that works only in English, so we had to teach ourselves English in order to use it." That's the first time, as a teacher, that I had heard the word[s] 'teach ourselves' said so casually. [3] Mitra has since repeated the experiment over 20 times in India, and has implemented over 100 permanent setups in Cambodia, Egypt, and South Africa. The experiments, called the Hole in the Wall experiments, are backed by such organizations as NIIT, the International Finance Corporation, and the Ministry of External Affairs from the Government of India. [4] His goal of providing access to education through individual manipulation and exploration of technology has been echoed in each unique setup, all garnering some form of positive feedback.

With the vast amount of resources and technology available today, Mitra—along with many others—believes that the education system focuses too much on what esteemed educational philosopher Paulo Freire considers the "banking model;" teachers are the almighty depositors, whose purpose is to fill the children, or the depositories, with information. [5] The most valuable lessons we learn generally come from things we do ourselves through a process of trial and error, but by "teaching" our kids that the most socially accepted form of education happens because of someone else's intelligence, we are doing them an immense disservice. The Hole in the Wall model seeks to allow children to study both individually or in large groups, and learn of their own accord despite their location or socioeconomic status. The November 2006 issue of the British Journal of Educational Technology points out that "[i]t enables contact and exposure to a large number of school children, particularly to those who are unable to attend regular school." [6]

The philosopher Plato famously wrote in Book VII of the Republic, "Knowledge which is acquired under compulsion has no hold on the mind. Therefore do not use compulsion, but let early education be rather a sort of amusement." This is exactly the philosophy Mitra considers throughout his

ongoing Hole in The Wall trials. By giving children the means to advance their learning, but not necessarily the constructs, they are free to explore boundaries in a safe, healthy environment. A follow-up article in the British Journal of Educational Technology commends this belief; "A child is curious by nature; he or she has a natural instinct to make sense of the world around him. The need to explore on their own is a strong motivating aspect that provides the necessary impetus to go ahead with learning." [7] Because the technology itself has so much potential, children find themselves propelled to explore countless new concepts besides the basic click and browse techniques we typically see. For example, during the Hole in the Wall experiment in Madantusi, both boys and girls were exposed to a computer without internet access; they not only learned how to manipulate and utilize the keyboard and CD-ROM drive, but also managed to acquire the English language—the children were observed using over 200 words to describe their interactions with the technology, and their methods of teaching one another. [9] Creating an interactive environment to foster development of new linguistic skills is incredibly beneficial to a child's overall educational success. According to the American Speech-Language-Hearing Association, advantages for bilingual children include a better ability to learn new words, the ability to use information in new ways, good listening skills, and improved problem-solving skills. [8] Overall, the potential for children to develop different pathways of learning is nearly infinite.

In one example, Mitra visited the South Indian, Tamil-speaking village of Kallikuppam to install a computer with complex articles about DNA replication written entirely in English. As with previous experiments, Mitra assembled the system, told any approaching children that he was unaware of how to use the machine, before leaving for months at a time. Upon his return, he assumed that the childrens' literacy rates couldn't have improved, and that he'd finally thwarted his own research. However, though the children first admitted to learning nothing, their definition of "nothing" differs very much from ours; Mitra recalls "a little girl…she raised her hand, and she says…in broken Tamil and English, she said, 'Well, apart from the fact that improper replication of the DNA molecule causes disease, we haven't understood anything else.'" [3]

This statement gives a sliver of truth to what French journalist and Nobel Prize winner Anatole France once said: "[t]he whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards." The children were so driven and motivated to continue learning that they overshot their anticipated levels of education, and surpassed all expectations.

This raises a crucial question for education today: what are we doing wrong? Why aren't schools producing this sort of excitement or enthusiasm for learning? Mitra himself answers this question carefully; Schools as we know

them now, they're obsolete. I'm not saying they're broken. It's quite fashionable to say that the education system's broken. It's not broken. It's wonderfully constructed. It's just that we don't need it anymore. It's outdated. [3] In fact, Mitra's experiments have spawned a new spectrum of educational theory, called "minimally invasive education," or MIE. Indeed, one of the hypotheses from the original experiments sought to prove that "[i]f given appropriate access, connectivity and content, groups of children can learn to operate and use computers and the Internet to achieve a specified set of the objectives of primary education, with none or minimal intervention from adults." [9] Perhaps with the growth of this minimally invasive school of thought, schools could produce the same eager-to-learn results.

Though the concept seems almost overly radical, many other nontraditional forms of education exist that provide excellent alternatives for a child's educational well-being. For example, the K-12 Summerhill boarding school in England seeks to challenge the concept of forcing a child to absorb information in what could easily be called minimally invasive education. Here, the small population of pupils sleep in age-arranged housing units and are allowed to clean, dress, and play as they please; "lessons are optional…children can go to them or stay away from them—for years if they want to. There is a timetable— but only for the teachers." [10] Though many critics frown on this new form of learning, the founders of the school show little concern for their opposition. "When my first wife and I began the school [in 1921], we had one main idea: to make the school fit the child—instead of making the child fit the school," recalls founder A.S. Neill in his book Summerhill School: A New View of Childhood. [10] Even in the 1920's, educational advocates realized that a child's love of independent thinking and learning would be a key factor in their overall educational success.

Mitra's revolutionary Hole in the Wall project has catalyzed a reconsideration of not only technology's role in education, but also of the way our children learn in standard school settings today. By giving kids access to information, but not forcing it upon them—essentially leading our horses to water, but not demanding they drink it—an innate curiosity and overwhelming desire for self-betterment begins to flourish. Though the concept seems highly unusual, it begs a necessary question: how are our schools truly preparing our children to learn? By putting children through a schooling system, we are giving them information through a medium—a teacher—and expecting them to absorb it; however, there seems to be something to be said about the sheer power of letting children explore and absorb at their own rate. Just ask Arun Chavan, who experienced the Hole in the Wall at age 12 and is now is now on track for a PhD in Evolutionary Biology from Yale University. "Sugata Mitra's Hole if the Wall idea is quite radical, I think," he explains in an interview with TED. "But it's

too important to be ignored. I like how he dares to imagine (and also hopes for) a completely different future of education than most of us do." [11]

Notes

[1] TED. (2013a). About US. Retrieved from http://www.ted.com/pages/about.

[2] TED (2013b). TED Prize Winners: Sugata Mitra. Retrived from http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html#349794

[3] Mitra, Sugata. (2013). Build a School in the Cloud. TED Talks. Retrieved from http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html#349794

[4] Hole in the Wall Education & Learning. (2013). *HiWEL*. Retrieved from http://www.hole-in-the-wall.com/

[5] Freire, Paulo. (2012). The Banking Concept of Education. In Ed. A. S. Canestrani (eds.) *Educational Foundations: An Anthology of Critical Readings* (103-116, 3rd ed). Los Angeles: SAGE Publications.

[6] Dangwal, R., Swati, J., & Preeti, K. Impact of Minimally Invasive Education on children: an Indian perspective. *British Journal of Educational Technology* 37 (2) (2006): 295-298. doi/10.1111/j.1467-8535.2005.00514.x/

[7] Dangwal, R. & Preeti, K. "Learning through teaching: Peer-mediated instruction in minimally invasive education." British Journal of Educational Technology 40.1 (2009), 5-22. Wiley Online Library. Web. 22 Apr. 2013. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2008.00863.x/full>.

[8] "The Advantages of Being Bilingual." (n.d.) American Speech-Language-Hearing Association. Retrieved from http://www.asha.org/about/news/tipsheets/bilingual.htm

[9] Mitra, Sugata. (2003). Minimally invasive education: a progress report on the "hole-in-the-wall" experiments. *British Journal of Educational Technology* 34 (3), 367-371. DOI: 10.1111/1467-8535.00333

[10] Neil, A. S. (2012). The Idea of Summerhill. In Ed. A. S. Canestrani (ed.), Educational Foundations: An Anthology of Critical Readings (3rd, 133-138) ed. Los Angeles: SAGE Publications.

[11] From the Hole in the Wall to Yale: A Q&A with Arun Chavan. (2013) TEDPrize.com. Retrieved from http://blog.tedprize.com/from-the-hole-in-the-wall-to-yale-a-qa-with-arun-chavan/