

Sample Summary of a Ted-Talk

Presenter: Dr. Sugata Mitra

Title: The Child-Driven Education

Date given: September 7, 2010

Dr. Mitra began his presentation with this statement: "There are places on earth in every country, where, for various reasons, good schools cannot be built and good teachers cannot or do not want to go."

He also pointed out that the places where good teachers will not go are also (1) where they are needed most and (2) where trouble comes from.

Dr. Mitra explained about his first experiment in a New Delhi slum in 1999 where children had never seen a computer, had no schooling, and spoke little or no English. Dr. Mitra set computers in walls and left them. He discovered that in 4 hours groups of children had taught themselves how to record and listen to themselves. Other groups learned how to play games and how to take animated characters off the web and insert them into video productions. His conclusion from these experiments was that children can teach each other.

In 2002, Dr. Mitra conducted another experiment in Hyderabad, India, by setting up a text interface system on the computer and leaving it for 2 months. He discovered that the students using the computer had actually changed their accent to mimic the English accent on the computer.

Mitra spoke with a famous educator in New York who concluded: (1) A teacher that can be replaced by a machine, should be. And (2) If children have interest, education happens.

Dr. Mitra continued with similar experiments in South Africa and in Cambodia. After 4 years of further experiments, he concluded that children can navigate the internet for their own purposes.

He pushed his experiments a little farther when he worked with 26 Tamil-speaking children in a small southern Indian village. The children were 12 years old. He asked whether these children could teach themselves bio-technology in English on their own? He supposed that it would be too difficult and that their failure would prove that for certain goals, an adult instructor is necessary. When he returned after 2 months, the students told him that they had understood nothing. He said, "Nothing?" One girl said, "Apart from the fact that improper replication of DNA material causes genetic disease," we learned nothing else! After testing these children, he

found that their scores on bio-technology went from 0 to 30%. After he introduced a “grandmother” (a friend who stood behind them to admire and question and encourage) their scores, after 2 more months, had gone from 0 to 50%.

In Gateshead, England, with a class of 32 children, he set up groups of 4, telling the children that they could move back and forth between the groups and also “steal” information discovered by other groups. He also supplied the groups with contact with, what the students called, the “granny cloud,” available “grandmas” on skype, ready to encourage and give feedback. Dr. Mitra then considered “deep” learning and retention by checking with a paper, non-computer test and found that the students had retained 76%. When he came back 2 months later, the scores were 76% once again, and some students had reached 82%, proving that the students not only retained the information long-term but had continued to investigate and study the issue.

Next, Dr. Mitra worked with a group of 10 year old’s in Turin, Italy. He spoke English and they spoke Italian so communication was limited to say the least. He wrote questions in English for them to answer but gave them no help. He asked them (1) How and why did dinosaurs cease to exist? (2) Where is Calcutta and (3) What was Pythagoras famous for? In a matter of minutes, the children googled to translate the questions to Italian, found the answers, and then translated them back into English.

From what was learned from these experiments, Dr. Mitra created SOLES (self-organized learning environments), pods with one computer and seating for 4 children. He told the children that they could move freely between the pods and share information.

Dr. Mitra also concluded that a self-organizing system was one where a structure appears without explicit intervention from the outside. The system also shows emergency; that is, it starts to do things it was never designed to do

Finally, he concludes that **EDUCATION IS A SELF-ORGANIZING SYSTEM WHERE LEARNING IS AN EMERGENT PHENOMENON.**