A HOLE NEW WAY OF LEARNING

Online learning is transforming India's primary education landscape through initiatives such as Hole-in-the-Wall, set up in Delhi and now available across 23 states

THE BIG IDEA

E-learning
Provides education opportunities to children who otherwise have no access or time to attend schools.

No Pressure
Learning is made interactive, often in mobile classrooms, without fear of failure or punishment.

Customised Subjects
Each child gets a chance to learn what he or she wants to from a seamless database, rather than study a generic curriculum.

IMPACT OF E-LEARNING

Reach
E-learning is changing the way education is distributed, with 420,000 children benefiting from Hole-in-the-Wall alone.

Retention
A study done by eCore in the US showed that retention rates for e-learning courses were 83 per cent, 20 per cent more than those for regular classes.

Flat World
Enables connections with like-minded students in the global e-learning community.

In the remote village of Laya, Bhutan, two eight-year-olds, Sakyamuni Dorje and Chana, sit in front of a computer placed beneath a tree in the village, explaining key points of a Wikipedia entry on arthritis to a semi-nomadic yak herder. Two years ago, the two children couldn't read English and had never seen a keyboard. This computer is one of the 500 stations set up around the world by the Hole-in-the-Wall initiative (HiWEL), a branch of the NIIT Group. With no qualified teacher, these stations give 420,000 children a chance to teach themselves.

"The traditional system of schooling where each person is trained to read, write, do maths and not think independently, is obsolete today. We need a curriculum that equips children with skills they can actually use in the 21st century. In a world where calculators are available on every office desk, why do children need to mug up the 15-times table?" says Sugata Mitra, chief scientist emeritus at NIIT, who won the first-ever $1 million grant from the TED Foundation to further his work and research in the field.

Mitra, 61, who teaches at Newcastle University, UK, set up the first HiWEL station on January 26, 1999 as an experiment to see what would happen if a computer was introduced to slum children with no guidance or supervision. "I cut a hole in the boundary wall that divided our NIIT office in Kalkaji, Delhi, from a nearby slum. A few days later I visited them and found the children teach each other how to read English and use the mouse," explains Mitra. He went on to replicate the same experiment across the country. "I watched slum children in Karnataka use a voice command software to learn an American accent, students in Tamil Nadu pick up basics of DNA modelling and children in Delhi teaching each other English nursery rhymes. I realised when children are given the means, they start thinking for themselves. They start learning instead of just studying," says Mitra. **by Sonali Acharjee**

CHILDREN AT THE HiWEL CENTRE IN MADANGIR, DELHI

> ❝ IF YOU LET CHILDREN THINK FOR THEMSELVES, THEY COME OUT OF THEIR SHELL AND START LEARNING INSTEAD OF JUST STUDYING. ❞
> SUGATA MITRA
> HiWEL founder

Sugata Mitra, 61
Creator of Hole-in-the-Wall; chief scientist emeritus, NIIT

Mitra is an academic who has been termed a polymath by the University of London for the range of disciplines he has worked on. A PhD in solid state physics from IIT, Delhi, Mitra set up India's first LAN newspaper publishing system in 1984, and went on to research in the areas of learning and memory, helping simulate neural networks that can help decipher the mechanisms of Alzheimer's disease.

HOW E-SCHOOLING WORKS

- Computer systems are introduced and students divided into groups.
- Students are asked to search for answers online and justify their findings.
- Students learn by teaching and helping each other at their own pace.
- Answers are not learnt by rote but questioned, discussed and analysed.

E-LEARNING FOR ALL

Students
design their own path and pace of learning.

Schools
save time and energy.

Teachers
serve as motivators and not supervisors.

Parents
save money on expensive after-school tuition classes.

Companies
employ students who have distinct thought and analysis patterns.