

# Sugata Mitra and the Hole in the Research

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In *The Shawshank Redemption*, Andy Dufresne escapes from the titular jail by finally crawling through the sewage pipe, clawing his way, hand over hand, through a river of turds before he emerges into a storm that washes him clean. It's a good scene. Every time I read someone claim that children will teach themselves maths and English if you only give them a computer, I feel like I'm watching that scene, but in reverse.

I'm talking about Sugata Mitra, of course. [According to a coy headline](#) for an article that appeared a few years ago on *TES*, 'Internet learning boosts performance by seven years'.

*Pupils can perform at more than seven years above their expected academic level by using the internet, a pioneering study has concluded. Professor Sugata Mitra found that eight- and nine-year-olds who were allowed to do online research before answering GCSE questions remembered what they had learned three months later when tested under exam conditions. Now the Newcastle University academic is giving undergraduate-level exams to 14-year-olds, and has told TES that these students are also achieving results far beyond their chronological age. Professor Mitra, whose famous Hole in the Wall experiment showed how children in a Delhi slum could learn independently if given access to the internet, argues that his latest work in the UK could challenge the entire exam system. A reliance on testing memory means that other cognitive skills are not being adequately stretched, he believes.*

Professor Mitra is famous for his "Hole In The Wall" experiment:

*In the initial experiment, a computer was placed in a kiosk in a wall in a slum at Kalkaji, Delhi and children were allowed to use it freely. The experiment aimed at proving that children could be taught by computers very easily without any formal training. Mitra termed this Minimally Invasive Education (MIE).... This work demonstrated that groups of children, irrespective of who or where they are, can learn to use computers and the Internet on their own with public computers in open spaces such as roads and playgrounds, even without knowing English. [Click here](#) for more*

These are big claims indeed, and many people have believed them, some of them with Monopoly cheque books. Mitra won the TED prize in 2013 (which now seems designed solely to annoy me) and US\$1 million. Many more sponsors have queued up to support it, which must be the first time anyone has queued up to put money *into* a hole in the wall.

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Unfortunately, Donald Clark has fairly comprehensively debunked many of the HITW claims, [most notably here](#). The allegedly miraculous learning hotspots had been largely vandalised and cannibalised; those that were left were dominated by older male children who used them not for teaching themselves Mandarin or critical race theory, but playing games and, I imagine, downloading stag flicks. It seems to me that the more outlandish the magic bullet claim in education, the more someone is willing to pay to subsidise it – and the less critical people become of it. But Mitra’s work taps into zeitgeists that are very, very groovy indeed: student-guided learning, the perpetually-approaching-but-not-quite-here-yet tech revolution of education, and the need to replace the ossified dogma of factory-farm learning.

His web page lists science fiction as one of his interests. I fear this passion has bled into the research. It’s proper to play the ball, not the man, so I’ll confine my comments to pointing out that Professor Mitra has a BSc, a MSc and a PhD in physics, not cognitive psychology, education or anything apparently related to learning, classrooms or pupils. Still, feel free to have a punt, mate, everyone’s an expert in education.

*“The findings on primary pupils answering GSCE questions were revealed in a paper published to little fanfare earlier this year,” [the feature in TES](#) says. There may well be a reason nobody got their trumpets out.*

Christian Bokhove of the University of Southampton has written [an important blog](#) about what he calls predatory journals; publishing platforms of ill repute where *caveat emptor* should be the reader’s watchword, where almost anything can be published for instant, superficial credibility. He refers to Beall’s List, a searchable database of journals that act more like vanity presses for desperate academics than respectable outlets for peer review. Read [more here](#), but suffice it to say that Professor Mitra’s work appeared in a very, er, boutique publication that features on Beall’s List. Which, of course, isn’t to say it isn’t perfectly respectable. Of course. I’m just saying it’s on that list.

Besides, there was a little bit of brass

action when it came out – just more of a ‘Last Post’ than a fanfare.

You can find [the actual publication here](#). In essence, what Professor Mitra and co did was this: they took groups of eight- and nine-year-old students, assigned a group research task to them exploring a specific question relevant to a GCSE exam, tested them for recall, and then tested them a few months later. The Year 4 pupils performed better in the later test. Professor Mitra’s conclusions contained the ideas that a) students could self-organise their own learning with minimal input from a facilitator (which is essentially the conclusion of the ‘Hole In The Wall’ caper), plus b) they remembered it so well that it showed our exams over-emphasised factual recall at the expense of other faculties.

It’s quite a read. To my mind, it represents a lot of what can go wrong in educational research. The design of the experiment is quite odd. [It’s explained succinctly here](#).

But for brevity’s sake, I’ll mention my highlights. For a start, it’s based on – wait for it – 23 students. You heard me: 23 students. Roll that about for a while, really rub your tongue around it. That’s tiny, – statistically meaningless. Secondly, are we somehow saying that students who collaboratively learn from the internet will improve as time passes with no intervening intervention? Holy smoke, we just invented educational cold fusion.

You’ll forgive me for not being particularly impressed by hand-picked students taking part in a test where they’re made to feel special, given a thin slice of a syllabus to work on, and then tested for that exact piece of syllabus ...and then scaling up that work into a magic GCSE grade. Give me a page of quantum physics to memorise, then ask me about it. Can I have a PhD?

The claim that children can teach themselves perfectly well using only a computer seems, to my poor mind, utterly unproven. I’ve taught a looot of pupils with largely unfettered access to computer-based projects, and unless you hover like a drone on some of their shoulders, they’ll be cruising Fifa emulators and googling PewDiePie all lesson. What about them? This belief in the power of children to self-organise and

self-tutor is, to me, a faith-based position. Who needs those bloody teachers, eh? Because that’s what this seems like to me: a somewhat brutal rejection of the power of teacher-guided education.

Further, the project seems to be pursuing an utterly overt agenda of disputing the way we assess pupils. Lord knows we’ve got leagues to go in this area, but presenting a tiny case study as some kind of evidence that we over-teach facts isn’t helpful. It seems like more of a pub philosopher’s opinion on education, a kind of “Who needs school when you’ve got Google?” for the Kardashian generation.

I’ve seen Professor Mitra speak, and I have absolutely no doubt that he is committed entirely to the education of children, and to this idea as a possible solution to the global education deficit. Unfortunately, this isn’t it, and good intentions are a worthless currency when almost everyone in the educational ecosystem has them. I would care less about this but people with money are listening to him. People with educational budgets are wondering if all they need to do is cut a few teachers and buy a few laptops, teachers eager to impress or improve are binding children to group work and self-led projects when they should be ... well, teaching them.

Children matter too much for their one chance for education to be blown on the roulette wheel of unfathomably bad science. Here’s to all the teachers trying to make a difference.

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*This article originally appeared on the author’s blog, Tom Bennett’s School Report.*

*Tom Bennett (@tombennett71 on Twitter) is the founder of researchED, a grassroots organisation that raises research literacy in education. Since 2013, researchED has visited three continents and six countries, attracting thousands of followers. In 2015, he became the UK government’s school ‘Behaviour Tzar’, advising on behaviour policy. He has written four books about teacher training, and in 2015 he was long-listed as one of the world’s top teachers in the GEMS Global Teacher Prize.*