Those who can, teach

Adrian Dow originally wanted to be a bank manager but is now a mathematics teacher. He explains to **Marianne Freiberger** how his enthusiasm for teaching developed – and what his plans are for the future.

hen Adrian Dow left his native Trinidad in 1992 and came to the UK to complete a mathematics degree, he was firmly set on going into banking. "Bank director was very high on the list. [...] But during the lectures, I used to try to think of better ways of putting mathematical concepts across. Also, the idea of having a positive impact on the world around me suddenly became really important to me. I'd always liked the idea of working with young people, and at school I was good at explaining things to others, so I eventually decided to try and go into teaching."

A voluntary teaching stint turned Adrian's interest into a passion. He absolutely loved working with kids, but it was not all positive. "Talking to kids about how they felt they were being taught and the methodology behind the teaching raised a lot of questions. The teacher didn't manage to infect them with any kind of enthusiasm and it became clear to me that there had to be better ways than that."

But was Adrian himself enthusiastic about mathematics at school? "No, it really came about when I was doing my degree.

I came to love mathematics for what it is, for its beauty. And I wanted to show the kids that wherever you look, be it music, philosophy or nature, you get a hint of mathematics. I think this is what's lacking in a lot of mathematics teaching."

In his first school, in London, he spent four years putting his theories into practice. He greatly enjoyed his time there and felt that his teaching methods were successful, but it was time for a change. "I had always said that if I could teach for free, I would. It's a very rewarding job, and there are many places in the world where the education systems suffer from severe lack of funding. So teaching with the Voluntary Service Overseas [VSO] really appealed."

The big wide world

The VSO is an international development charity which sends skilled volunteers to countries where their help is needed. Adrian started at a school in a remote village called Bartica, in Guyana, South America. Surrounded by unspoilt nature, this was a far cry from busy London, but that was not the only difference. "In the school, everything was different from what you'd expect in England. There wasn't enough chalk, there weren't enough blackboards. The roofs were leaking, and kids were sitting four or five to benches that were designed for two. And there were no complaints! There isn't a social system out there that looks after people, and the children know

that school is their only ticket to success."

But despite the enthusiasm, school had to compete with families' more pressing, economic, concerns. "Amongst the older students, girls often outnumbered boys three to one, because the boys had to go out to work – sifting river beds in remote areas for specks of gold. It's a quick buck, but a hard and even dangerous one, as malaria is rife. We tried to get the parents not to sacrifice their sons' education. It's hard to break the cycle, but sometimes we were successful."

Two of the classes that Adrian taught were due to take their final examinations at the end of his stay in Guyana. To prepare them, Adrian set up voluntary Saturday lessons. The turnout was overwhelming. "On the first day, 75 kids turned up! We kept on going like that for 62 Saturdays: rain or shine, the kids would come. That really spurred me on to work with them, and sometimes we'd organise cricket games after the lesson and turn the mathematics lesson into a full day event."

The hard work paid off: that year, the school achieved its highest ever grades in mathematics.

Gear change

But what next? Adrian returned temporarily to London and there, the head teacher in his previous school

had a proposition that kept Adrian in the country for another four years. "An initiative, called the Behaviour Improvement Programme, was just starting. Truanting, lack of discipline and even violence was, and still is, a big problem in some schools. So the government had decided to invest money to find a way of addressing the problem.

"As a 'behaviour improvement project manager', I started by looking at the various sanctions for students, talking them through behavioural issues, but especially using restorative justice. This is about getting the kid and the teacher, or the kid and the kid, to talk about the problem they have with each other. That very quickly proved to be a successful strategy. It injects a human element into the process and gives students and teachers – the opportunity to identify the problem themselves, to explain their behaviour or to apologise."

And it wasn't only the kids who had something to learn. Adrian organised a few sessions with teachers. "We talked about how the children mirror you. So if you shout to communicate, don't be surprised if they shout back at you."

On the whole, Adrian feels that the behaviour improvement project is on the road to success. "Of course we didn't manage to solve all the problems, but what our strategies do very well is to differentiate those students who present a permanent problem from those who have the odd bad day."

But in a world where many kids face distressing family problems, and in which drug abuse and youth offending is rife, is there any virtue in learning mathematics? "Questioning the world around you, questioning life, is at the heart of mathematics. There are a lot of life lessons in mathematics, apart from the obvious 'it'll help you understand your bank statements' ones. How much of that is actually expanded on in a classroom is another question. I wish we had a slower system in which there was time to expand on the background of things, to talk about their beauty and meaning, but there just isn't enough time."

Sun, sea and more school

Now Adrian feels that it's time to return to Trinidad. Ultimately, he wants to set up his own school. "First, I have to get into the education system over there, and then see whether the state would support me, or whether I'd have to go private and, in that case, see how I can make it affordable for people."

"I'd like to set up a teaching environment in which you can explore things and delve into the children's

questions rather than rush through a syllabus. Most of all, I'd like to teach the kids to be inquisitive, to nurture their interest in the world. I often say to them 'well, this is Pythagoras' Theorem, what's yours going to be?' I'd like to have the best of both worlds, in which the teaching is enjoyable for the teacher and the workload is manageable, and where the kids are inquisitive and keen to interact. It's a really idvllic vision. Many teachers have told me that it just doesn't exist, but I think you have to go out there and create it."

Resources

More information about the Voluntary Service Overseas is available at: www.vso.org.uk

More information on the UK Behaviour Improvement Programme is available at: www.dfes.gov.uk/behaviour improvement/

Marianne Freiberger is co-editor of Plus Magazine (www.plus.maths.org), a free online magazine which aims to introduce readers to the beauty and applications of mathematics. This article was first published in Plus in a longer form (www.plus.maths.org/ issue37/interview).



