

# MirandaNet Fellows working in a global context

The UK was the first country in the world to design and implement a programme about Information and Communications Technology for all teachers at the turn of the century from 1999-2003. We learnt a good deal about teachers' needs and requirements in those years and I was asked by our government to evaluate what had been achieved. What I found was a very mixed picture of highs and lows because this was a far more complex challenge than we had realised. The challenges that teachers face in bringing digital skills and competencies to their pupils vary in each cultural context. I am going to itemise our findings in detail later in this module so that you can relate what we learnt to your own context.

But what I am going to focus on now are some of my observations as I travelled around the world advising governments and regions around the world as they prepared their teachers for the digital age. The countries I evaluated and advised on professional development programme were Argentina, Chile, China, the Czech Republic, India, Mexico and South Africa. Much was achieved but there were also challenges that were overcome and from which we learnt much.

## Global good practice

We met some excellent practice. In Chile for example they had already set up a national internet platform called La Plaza that was designed pictorially as a village to help teachers understand the concept of working together online (Preston ?). In one of the regions of South Africa they had already identified twenty-four teacher trainers from twelve schools to learn with twenty-four teachers from the UK. When the schools visited each other some of the pupils came as well. (Url Podar). Two teachers from each of the twelve school learning together turned out to be a good model for collaboration. In India we introduced Moodle as a platform for the Master Trainers and they quickly learnt to share ideas and resources. In China they had realised that in the average network room where the computers are round the edge the children have their backs to the teacher and they are isolated from each other. So the teachers designed circular pods where the cables came down from the ceiling which made exchange of ideas much easier (picture?).

## Meeting challenges

I am now going to describe the problems that had to be solved so that you can avoid these pitfalls in your programme planning. In Eastern Europe, for example, we found that the syllabus

was focused on Computer Science. This would prepare some pupils for specific jobs in the computing industry: the equivalent of knowing what is under the bonnet of a car. However, this approach missed the importance of Information Technology which is learning about how to use software and apps - the equivalent of learning how to drive the car. The other topic Communications Technology, that includes Digital Literacy and e-safety, guides pupils to use technology in a moral and ethical way and to be able to spot 'fake news'. That is the equivalent of understanding the power of a car and how we should deploy them with consideration and care.

The curriculum for teachers that our government was offering used to cover all these points. But one of the problems our government ran into early was that an assumption had been made that there were Master Trainers already to teach the teachers. There were not. We quickly realised that we would need to organise a programme very quickly. I found different situation had occurred when I arrived to evaluate a Master Trainers programme in a country in South America after it had started. In this country the government had realised that they needed Master Trainers but they had given this task to the best and most traditional universities. The Master Trainers were at the prestigious universities by the time I arrived. But the courses were very detached from school practice because the university lecturers had not been trained in education technology and its introduction into schools. In fact, they did not have computers themselves and did not use them in their teaching. As a result the training programme was too abstract and, unfortunately for the schools, 50% of the Master Trainers did not return to the schools as they decided to undertake Masters and Ph.D studies.

When my team was asked to train teachers trainers in Information and Communications Technology we always asked that all the equipment should have been delivered to the schools already because in our programme some equipment was delivered too late. We also asked that the teachers should be trained in basic skills so that they were competent by the time we arrived. In fact, it was often the company supplier who undertook the training. We had researched the most effective use of interactive whiteboards with teachers in England and based on their evidence we suggested to our colleagues in Africa that not only should the teachers use interactive whiteboards to extend the resources they could present to pupils, but also that the pupils should use interactive whiteboard to present their learning to their peers in groups. Imagine our surprise when we found that the interactive whiteboards had been fitted just under the ceiling because the delivery team thought they were film screens. They were too high for the teachers to reach, never mind the pupils. A couple of days were lost whilst they were refitted. What the advisers realised was that the suppliers needed some training as well in new equipment to be used in schools.

## Conclusions

Over the years it has become very clear that a national training programme for teachers in digital technologies is very complex. It is also impacted by the culture of teachers that tends to

be traditionalist. First ideas may well have to be revised when you see how the teachers respond. What is clear is that listening to your teachers in schools along with an attitude of flexibility when a professional development programme is being planned is vital.