



MINIATURE COMPUTERS ARE ADDING UP TO FUN

PALM COMPUTERS ARE CONQUERING THE CLASSROOM, AND STUDENTS IN DUDLEY ARE AMONG THE FIRST TO TEST THE EDUCATIONAL VALUE OF THESE CLEVER GADGETS, WRITES PHIL REVELL

Phil Revell

Tuesday September 28, 2004

The Guardian

It's playtime at the Wren's Nest in Dudley. Children at the West Midlands primary school are running around, skipping, playing soccer – and exchanging music files on their personal digital assistants (PDAs).

In one corner, a couple are using Bluetooth technology to play noughts and crosses. In another, a girl is showing a boy how to change colours on the tiny screen.

The school has bought 50 Palm PDAs since February, and the Wren's Nest is in the first wave of an ambitious new project. 'We want to have handhelds for all the children in one of Dudley's townships by next year,' says John Davies from the authority's National Grid for Learning (NGfL) team.

'Then rolling out to all the schoolchildren in the borough.' Every student and teacher in Dudley? That's 40,000 handhelds.

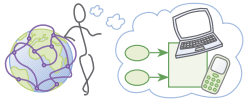
All the kit is coming from Palm. The Wren's Nest children were equipped with the Tungsten T2, while the T3s are going to the other first-phase children.

Palm's latest device, the Zire 72, was designed with Dudley's education blueprint in mind. It features a built-in digital camera, audio/video capture and playback, and Bluetooth technology.

In phase three, Dudley's kids will be provided with a 'learner's kitbag', which will contain the handheld, a Bluetooth modem, stereo headphones and a protective case.

Headteacher at the Wren's Nest, Ruth Wylie, took a careful look at the implications before agreeing to join phase one of the project. The school serves a disadvantaged estate and props up Dudley's league tables. In the past, results have been dire. 'We are working really hard to improve standards, and I didn't want anything to distract us from that,' she says.

There was also the worry about security. Children would be allowed to take the handhelds home. What about damage, theft, the risk of bullying or even mugging? 'We've had no problems,' says Wylie. 'Quite the contrary, the kids



have really looked after their Palms. We've had accidents, but the Palms bounce pretty well. We had one in a puddle which is drying out at the moment.'

This mirrors the experience of schools involved in similar loan schemes involving laptop computers. Damage and loss has been negligible. The disadvantage of laptop schemes hasn't been the security issue, but the weight of the kit plus the replacement cost of the machine at the end of its lifespan. A PDA bypasses both of those problems.

Year 5 children at the Wren's Nest were delighted when they received their handhelds early this year. '[You should have seen their] their faces when they found out,' says Wylie. 'We had 100% attendance on the day they were handed out and attendance has since improved in year 5. There has been a huge impact.'

Children were allowed to take the devices home to charge them up, with the intention that a training session would be held in school the following day. 'But it wasn't a matter of us telling them how to use the machines - they were telling us,' says Wylie. 'They'd discovered the voice recorder, they knew the time in New York, they worked out how to change the background colour of the screen.'

One real learning plus has been the handwriting recognition - which uses a program called Graffiti. 'It requires you to start your letters at the right place and form them properly,' Wylie explains. 'We had a handwriting scheme in school, but the Palm has been much more effective.'

Children at the school are enthusiastic about the Palm Pilots. 'We can write stories, and beam messages to each other,' says Brandon Freeman. The Palm-to-Palm communication, using infrared or Bluetooth, is probably the most popular capability, but pupil Reanne Beach points out that the device has a maths programme that can be used as an aide to learning tables. 'My mum can test me at home,' she says. 'And you can use the notepad if you have to jot down your homework.'

Teachers at the school are looking forward to a time when children use the handhelds as a matter of routine. 'One of the things I would like to explore is the e-book,' says Wylie. 'Boys seem more willing to read from the Palm screen.' She is also excited about the possibilities for children to act as researchers, making a record of their findings as they go along, with pictures and voice notes.

'We make wonderful models in design and technology,' she says. 'But when the project is over, they have to be dismantled. With these, the children could make a record of what they had done.'

The Wren's Nest is not the first school to use PDAs in class. A Monmouthshire primary has been using handhelds for some time. In fact, the logic for primary heads is inescapable. A PDA costs around £200, so for the cost of a half a dozen PCs, you can kit out a whole class.



- But Dudley's ambitions go beyond the classroom. The authority plans to offer
- the kit to every learner in the borough, child or adult. Funding will come from
- a mix of sources, with parents expected to pay a contribution. 'For Wren's
- Nest parents, that might mean the equivalent of a packet of crisps a week,'
- says Davies. He's trying to avoid the scenario where parents who can afford
- the kit enable their children to leapfrog ahead of the rest. 'We want a scheme
- that delivers a device to everyone,' he says.