PERSONAL DIGITAL ASSISTANTS (PDAs) are displaying important benefits in Sandwell, helping to develop staff ICT skills as well as improving pupil levels of achievement. Paul Butler, Strategic Manager of Schools Management Information Systems (SMIS) in Sandwell, reports on Sandwell's PDAs into Education Project.

The project began in 2003, when two schools equipped staff with PDAs. The main focus was on introducing staff to mobile technology by encouraging their use for management purposes. Links to pupil registration were trialed but lack of robust wireless and MIS connectivity meant that hard wired solutions proved more effective. However, confident with the experience of using mobile technology, Schools within the Project began implementing the usage within the classroom. Valiant's MathAmigo has made an important contribution to the curriculum in some of our Primary Schools and we are now trying to replicate the benefits in our Secondary Schools.

Sandwell is in wave three of Building Schools for the Future and this will give Schools the opportunity to invest in mobile technology It is important to plan how the technology will be used and how staff will gain experience in their use to ensure the investment is not wasted.

Here are a number of accounts in the story so far……

PDAs at St Hubert's Primary School - Having fun with new Technology!

By - Christine Finnegan – ICT Co-ordinator, Year 6 Teacher and Sandwell Lead Teacher

The PDA Project has been running for two years, in partnership with SMIS and Valiant/MathAmigo®, using the PDAs to raise standards in mental maths. All the children in Y6 have a PDA, which they use in class and take home, as part of their learning.

I am researching this as part of my Leading Teacher Role in Sandwell, and accrediting it with the Teaching and Learning Academy. This work is continuing to prove that the use of new technology, along with MathAmigo, is having a considerable impact upon the children's learning, especially in mental maths. I have shared my findings with colleagues from SMIS, BECTA and Microsoft at conferences in Sandwell and London. The results have been fantastic and as a result

St Hubert's have purchased 34 PDAs, as part of ICT Development within the school. This same project will be run with Y4, Y5 and Y6 during the next academic year.

"We have great fun learning with MathAmigo, and it's really cool to take the PDA home!"

Y6 Child.

PDAs in Alexandra High School
By John Hendry Sandwell Secondary Advisory Team

It's always difficult to know how to introduce a team to a new technology they have limited or no experience of. With the pressures that are on Senior Leadership teams, it is often difficult to convince them that investing time in developing their understanding of a new technology will actually save them time in the long run. I am pleased to say, however, that this was not the case with the Senior Leadership Team at Alexandra High School. From the moment I asked them if they would like to be involved in piloting a PDA Project and investigating how they may be used to support leadership and management they were enthusiastic.

The predominant use for these machines has been for use as electronic diaries and 'to do' lists., although some staff have become more advanced using them for storing and accessing pupils information exported from SIMS. The PDA's have also been used for viewing and sharing word and excel documents and on occasions taking notes during meetings. Staff are currently investigating how the device can be used to store a database of both permanent and supply staff that can be accessed immediately to help increase the security around the school.

As the weeks have gone on the technology has been embraced and it is now unusual to see a member of the team without their PDA.

The development of IT skills have been considerable over the short time that the technology has been used. The amount of training has been kept to a minimum, with staff trying and 'playing' with the PDA's to learn. Where problems have arisen, they have been dealt with quickly with staff knowledge being shared informally in corridors and over the table at meetings.

The future use is obvious with a move towards an integrated system where all of the school MIS can be accessed remotely on the hand held device. This along with the ability to phone out and access the internet will improve the connectivity and enable better communication between staff and parents.

PDAs in St Michaels High School Mathematics Department

By Mike Rickhause – Sandwell Secondary Advisory Team

Finding alternative novel engagement strategies for mathematics classrooms using new technologies has resulted in a partnership between Valiant Technology, a Sandwell School and the local authority. The school has been provided with a class set of PDAs and one each for all the teachers in the mathematics department. They have received training and are in the process of using the equipment with a number year 9 groups. The early indications are that the PDAs have inspired the pupils and teachers. The class set of PDAs have been loaded with a selection of mathematics material / exercises from the suite called MathAmigo.

The project is in an early stage of development and will be evaluated on the objective and subjective impact on pupils. A report is likely to be produced for other local authority mathematics departments (and the wider mathematics community) evaluating PDAs as a method of delivering mathematics lessons. Additionally the appropriateness of the mathematics materials will be evaluated. This later part of the report will be written in partnership with Valiant Technology.

PDAs in West Bromwich Albion Playing for Success Team

By Dave Kelly Program Manager

Widening the definition of alternative learning environments

Here at the WBA FC[1] Study Support Centre, we use PDAs to allow us to develop learning in alternative environments. So far, we've used the PDAs to enable us to deliver learning in the football stadium during matches (please see photographs below) and on ground tours in a more innovative, interactive way. They have reduced the amount of work that has to be done to prepare these sessions, and has resulted in a level of excitement from the young people that can't be matched with paper!
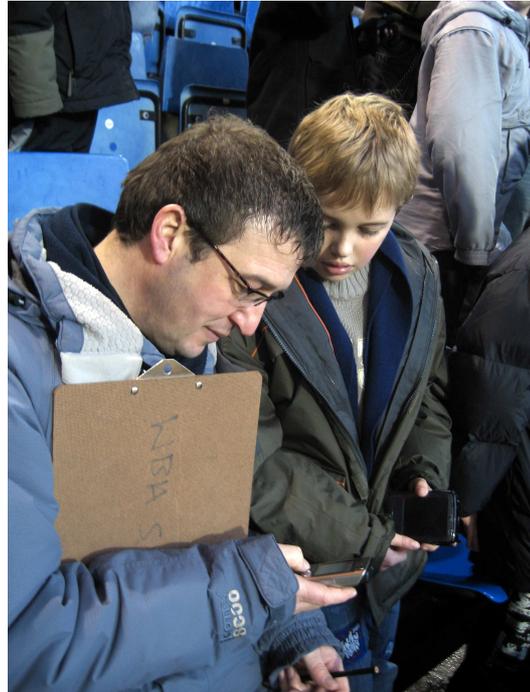
We've also used the PDAs creatively with schools to develop the use of ICT in lessons that wouldn't normally use them – for example, in P.E. lessons, using the PDAs to record fitness levels in spreadsheets for use in theory

"Dads and Lads" using their PDAs at a West Bromwich Albion match to report the match.

lessons or cross-curricular in Science lessons – combined with our "Tracksuit Teacher" ethos, this helps to adjust the atmosphere of any learning environment into a less formal, more personal area. The ability to also connect the PDAs to any WiFi hotspot in range, has let us really be creative with lesson plans that involve being out of the Centre, and the Bluetooth feature has enabled young people to become more involved in lessons by taking their own images to put into their work after downloading back to the computers in the Centre.

The PDAs have also helped transform how staff interact with ICT. In conjunction with our Apple Mac rollout, the PDAs have widened the perceptions of our team with regard to new and innovative technologies, and has raised expectations. Embedding ICT has become easier as staff have become more comfortable with using technologies that would have previously been looked upon as "scary".

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[1] West Bromwich Albion Football Club.

If You Are Considering Using Mobile Devices Like PDAS: Read On

► Implement PDAs on a whole-school basis and establish the system as the preferred means of exchanging information. This way, staff will share with each other their own knowledge of the PDA and use grows organically.
► Ensure you have the staff's commitment to the technology before you implement. It prevents cold-spots of acceptance further down the line.
► Reliability is crucial to ensuring that staff are happy to depend on the system, so buy wisely and make sure you have good technical support.
► Do not think that PDAs can replace laptops or desktops. They are designed for portability and a standard computer is still the best thing for lesson planning or preparing presentations.
► Train, train and then train again.