



NEXT PRACTICE in
Resourcing Aspects of Personalisation

Harnessing technology for learning

COLLECTED SYNOPSES
(Updated 22 May 2006)

“...when we consider the systemic challenges posed by personalisation, it is clear that without digital technologies, we are unlikely to be able to meet the needs of learners. If we are interested in creating personalised learning environments in which learners can create a coherent experience of learning in diverse locations, collaborate with experts in areas of personal interest, track and review their own learning across different sites and stages of education, have access to resources in forms and media relevant to their language skills, abilities and personal preferences, it is highly unlikely that we will be able to enable all of these activities without using the communication, archiving and multimedia affordances of digital resources.”

Hannah Green et.al, *Personalisation and Digital Technologies*, 2005.

“Information technology creates a shared platform for learning, linking school, home and community, in which learners and teachers work together far more collaboratively. That is the way leading edge businesses operate. It should become the norm for schools.”

Charles Leadbeater, *The Shape of Things to Come: Personalised Learning through Collaboration*, 2005.

“Any economic theory involving price elasticity says that there should be more computers, but there are not...The main thing that’s holding technology back is a fear – a well-placed fear I might add – that if technology becomes ubiquitous, it will totally transform the practice of education. There are a lot of people who don’t want the practice of education transformed, because they’re very comfortable with it.”

David Thornburg, author of *Campfires in Cyberspace: A Guide to Teaching with the Web*, 2006.

Introduction

The Next Practice project, *Resourcing Aspects of Personalisation* investigates how schools might marshal and deploy their resources more effectively to support an educational provision that meets the needs of all learners. This event looks specifically at how the potential of technology might be released to embed a personalised approach to learning across our schools.

Next Practice projects seek solutions to pressing systemic problems through fostering and supporting radical innovation in current practice. Reflecting on the experience of practitioners working in this area, our aim is to create a launching pad at these events for our thinking about what might be 'next practice'.

In preparation for this event, we asked practitioners to send us a written synopsis of how they are harnessing technology towards personalisation in their schools. These are presented, in alphabetical order of institution name, in the following pages and we hope you find them interesting. Together they provide a sketch of the landscape of current practice, illustrating the directions in which we are moving today. Hopefully, they will stimulate our thinking about what might be possible, desirable and important as a next step in educational practice.

Messages from the edge of current practice

Key messages resonate through these synopses of practice, and are emphasised by the findings of research and thinking in the area of personalisation through the use of new technologies. Practitioners across the country are using new technologies in ways that are transforming traditional learning. Through these technologies teachers are better able to organise their work efficiently, to manage and use data effectively and to increase their impact on learning. The use of laptops, internet and email; interactive whiteboards and Personal Digital Assistants (PDAs); video-conferencing, wireless networks and Virtual Learning Environments (VLEs) is becoming commonplace in our schools, enabling learners to develop new kinds of skills and to access a greater range of resources than ever before. New technologies are allowing students greater levels of choice in terms of how, when and where (and with whom) they progress with their work. Through new applications of ICT, students are accessing lesson plans and resources from home and working collaboratively with their peers on projects, with 'experts' from beyond their school, and with students from other parts of the globe. In other examples, like Notschool.net (a project aimed at students whose needs are not being met by the current system) 'school' can be an entirely virtual experience. Schools are using ICT to experiment with new forms of assessment which allow students to be assessed in personalised ways, at times appropriate to their own development. ICT is also being used to give students a greater voice in the running of their schools.

The inspired use of technology will be absolutely fundamental to meeting the challenge of delivering a personalised approach to learning. We are beginning to harness technology towards this end, but what more might we do and what might we do differently? Current research and thinking suggests that innovations in this area have been "evolutionary rather than revolutionary"¹ and that, across the globe, we have barely dared imagine – let alone exploit – the transformative potential of new technologies for education. What would a revolutionary step forward, from best practice into 'next practice', look like?

ALTWOOD CE SECONDARY SCHOOL

Kathleen Higgins, Headteacher

From a school which once had no ICT development plan, no ICT infrastructure and low levels of ICT use, Altwood School has now become a school which uses ICT to advance the aspiration and achievement of students and enhance the standards of teaching and support available for students. We are a fully-networked school with additional wireless capability. We have installed interactive whiteboards/digital projectors in all curriculum areas and have equipped all teachers and many support staff with lap tops. These developments have enabled us to:

¹Hannah Green, Keri Facer and Tim Rudd with Patrick Dillon and Peter Humphreys, *Personalisation and Digital Technologies*, DEMOS and NESTA Futurelab, 2005, p. 26.

- be a data rich school which knows students and their potential better;
- involve students in their own academic monitoring and target setting;
- engage students in lesson delivery and peer assessment;
- identify students' personal learning styles and consequently develop support strategies to advance greater learning;
- 'skill' students to engage in independent study out-of- hours (e.g. SAM learning, accessing materials / lesson plans that department teams have on common drive);
- facilitate a dialogue between teachers and students using e-mail (e.g. assessment of work);
- improve communication between home and school; and
- collaborate with other secondary schools on the development of a VLE.

Some of these developments are well advanced and some at earlier stages. All promise to be successful and indicate massive potential for further development in the use of ICT to make a difference for our young people.

CHAFFORD HUNDRED CAMPUS **Rod Boswell, Director of E-Learning**

Chafford Hundred Campus in Thurrock is well-known for its innovative use of technology. One of its current initiatives is 'handheld learning'. All students in Year 7 and 8 at the Campus are issued Pocket PCs to close the information gap when they are away from a dedicated ICT environment. These novel devices are fully integrated with the Campus wireless network and provide universal access to services such as email, the internet, Microsoft Outlook™, Word™ and Excel™. They also act as powerful reflective learning tools and even support the delivery of modern foreign languages. Handheld technology is not only used within a typical classroom setting but also provides a unique resource as a home learning tool and even to measure performance in Physical Education. The Campus is also currently using a new method of showcasing achievement. Using eCase, students are issued a portion of webspace which will be used to store digitised evidence of their achievement. Learning is photographed, scanned or filmed to enable all stakeholders to celebrate individual achievement. This new system also includes reflective video entries which students will complete each term with their tutor. These novel assets will be used to set targets, reflect on achievement and compliment existing attainment raising strategies. Through this technology, parents, carers and potential employers can all witness a student growing in confidence and developing new skills.

CIRENCESTER DEER PARK SCHOOL **Chiquita Henson, Headteacher**

Cirencester Deer Park School is currently in the process of transforming our academic mentoring programme (which entitles all pupils to three one-to-one sessions with a member of staff a year) into effective individual learning planning through the creation of a bespoke database. We are looking not only at the quality of the goal orientated 'learning conversation' and the role it plays in raising achievement, but also at creating new opportunities to harness pupil voice in lessons and, through the use of ICT, developing innovative strategies to support teaching and personalised learning in the twenty-first century. We have reviewed our curriculum structure in Key Stage 3 and 4 and have appointed a joint 14-19 Curriculum Co-ordinator with our partner schools and a primary specialist to support our development of critical transition projects. Working across our partnerships, they, and our team of ASTs, help us determine and provide appropriate pathways for all learners. We use ICT in a variety of ways to engage our learners and, to ensure that our on-line curriculum is current; we use 'development time' and secondments judiciously.

COOPER PERRY PRIMARY SCHOOL
Steve Hall, Headteacher

Cooper Perry is a small 3-11 village primary school serving a rural community north-west of Stafford, at which the use of ICT underpins the development of students' creativity and enterprise skills. We have interactive whiteboards in all classrooms, along with networked PCs and additional access to wireless laptops and a fully-fitted ICT suite. Year 6 pupils run their own live radio programme, CPM Radio, from the school's recording studio and create their own digital videos and animations. Copper Perry maintains strong links with the local community and with local businesses. The children run their own coffee mornings for parents and the community in the school coffee shop where visitors can see the work of the school displayed on a plasma screen. Year 5 pupils run their own mini-enterprise businesses and create their own advertisements in the recording studio. There are plans for pupils and staff to open and run a village shop (there currently is no shop in the locality) on the school premises. The school has many links with other schools locally (within the Stafford area), nationally (in Birmingham, Cheshire, London and Belfast) and internationally (Malta, Poland, Germany, Slovenia, Finland, Turkey, Spain, Ireland, Tennessee USA, Uganda, Norway, Holland). Pupils, teachers, school leaders and governors use these networks to extend their learning and share good practice.

CROSSHILL SPECIAL SCHOOL
Mike Hatch, Headteacher

Crosshill Special School is a school for learners who have a range of learning and/or physical difficulties and is the first school of its kind to achieve Specialist College status. Teaching students with such a diversity of needs has made the impetus to design learning around the individual needs of the learner even greater, and the school is now a leading example of the ways in which ICT can transform students' time in school. ICT has been found to transform learning for our students and now we have a 'bookless library' with racks of CDs that can be read in comfy chairs on hand-held computers, an iBar with the latest Apple Macs, a multi media editing suite and a cyber café for pupils parents and local residents. Our students regularly attend mainstream high schools and Blackburn College for science, food technology, performing arts, English, maths and vocational training. In return, pupils from other high schools visit Crosshill for ICT learning. As part of their ICT learning pupils have taken on the promotion of a local rock band, designing promotional materials including CD covers and a website and organising a charity gig for the band. The conference centre is partly run and catered by students, giving them practical work-place experience and Yr 11 students study in offices rather than classrooms. The new e-Learning Centre will enable the school to expand its community use as well as helping students develop practical skills for the world of work.

CROSSWAYS ACADEMY
Anthony Bravo, Principal

Crossways Academy, a newly-built Sixth Form College in London, makes an instant impression with its commitment to ICT. It has hundreds of desktops, student laptops and laptops and tablets for staff. There are interactive whiteboards and desktop computers in every classroom, four dedicated IT suites and a learning resources centre with forty-four computers. The Academy has an integrated network for voice and data, wireless and security applications. This means that things as diverse as the college's telephony, video conferencing, CCTV surveillance, access control and all its digital learning content hang off a single network, and there is wireless coverage throughout the campus. Part of Crossways' remit as a pathfinder is to develop online teaching methodologies. The aim is to become the leader in Lewisham for blended learning, disseminating knowledge to other schools in the borough. At the heart of this approach is the Academy's VLE, a pool of online content for students and teachers, containing schemes of work, homework assignments, lesson plans and resources, divided into different subject areas. The Academy also uses a wi-fi network which means that if teachers want to conduct full class teaching with computers, they can wheel in a bank of wireless laptops to supplement the four or five desktops in each class. If they need to take students outside (e.g. to collect species data for a science lesson), students

can use the laptops to record information there and then. The Academy is also undertaking an exciting project using PDAs. It is initially being piloted with AS English Literature students, then to be rolled out to the entire Academy at a subsidised rate. These units are totally integrated with the IT system and will allow viewing of videos, note-taking, voting, mind-mapping and a range of other functions.

DE FERRERS SPECIALIST TECHNOLOGY SCHOOL

Andy Bird, Assistant Principal for Research and Development

De Ferrers is a large, split-site comprehensive school with 1964 students. It was designated a Specialist Technology College in 2001, and has recently been awarded the position of Development and Research Hub for the SSAT. The effective use of technology is at the heart of our curriculum, and we employ its use in the full range of teaching and learning strategies. The college won the Microsoft Award for E-Learning in 2004, as it had developed a distance learning platform called 'Learn Extra'. This has been extensively used by the Maths, Technology and Humanities faculties to provide students with the opportunity to enhance their learning from home. This bespoke system is currently being upgraded and, along with the roll out of our Personal Learning Environment (PLE) across a network of twelve schools, we hope to personalise the learning for every child from infant to secondary. A radical and creative new TLR structure has now been implemented at the college and revolves around the Personalised Learning agenda set out by Professor David Hargreaves. A totally new approach to managing and leading the establishment is now underway!

EDENHAM HIGH SCHOOL

Jacey Downs, Headteacher

Even six months ago, Edenham High School could have been described as a very average comprehensive school. Our students almost all followed the same curriculum. There was some access to ICT in a few areas of the school, with not all members of staff having access. There was no access from home and students did not have email addresses. We have had, in many ways, a clean state in which to innovate and to glean from the best practice nationally ideas that are right for our school and we have been able to take this forward at a very fast pace. The curriculum for next September is radically different in three out of the five year groups. All staff have now got laptops, the ICT infra-structure and technical help has been expanded significantly. We have become a pilot school for the work that is being done by the London Grid for Learning. Students are helping to develop schemes of work. They are designing the new school motto and take part in interviews for all jobs at the school. Crucial to this rapid development has been our middle leaders as they join in the innovation of how they can use the new technologies and work with students to develop personalised learning in their areas.

EMBC LEARNING SERVICES

Clare Usher, Learning Services Manager

As a regional education consortium established by the nine local authorities across the East Midlands, EMBC Learning Services use a variety of enabling technologies to create communities of learners. Key to our approach has been the development of a Community Gateway (CG), a shared regional portal that requires users to have just one username and password in order to collaborate, and access their personal work, email, a library of contents and potentially any commercially-sourced content or software, such as VLE. This portal is for learners, staff and community partners and can be accessed from anywhere with an internet connection, in and out of school. It is not a VLE in itself, rather a core entitlement for all users of the network, which can be enhanced by third parties. In practical terms, this means that members of staff and learners are not restricted in their access by time or place and that the resources and services they are accessing are more precisely tailored to their needs. By logging on to the CG account, for example, a user can access licensed materials from home, rather than being restricted to access from the school network only, as is currently the norm. The CG is just part of the ongoing developments supported by the work and funding of DfES, Becta and LAs to increase access to learning in and out of school.

HAZEL GROVE HIGH SCHOOL
David Hazeldine, Headteacher

Hazel Grove High School became a Development and Research hub for learning technologies in the north-west as part of the SSAT's Personalising Learning programme. We have been developing ways in which new technology can be used to promote interactive learning in the classroom. A range of wireless devices are being used and every classroom has the basic standard of provision: a networked computer linked to a ceiling mounted digital projector. Staff and pupils make use of radio keyboards with gyro mouse handsets. Three class sets of voting-pad handsets are also available. Half our classrooms have interactive whiteboards but we are finding that conventional whiteboards with digital projection are just as effective in engaging learners when used with very cost effective radio devices that can be passed around between students. Lesson observations and student feedback is showing us that learners are more readily engaged and motivated when interactive technology is used and there are clear signs that this is impacting upon the concentration and participation levels of boys. Our next step is to learn from the experiences of others in making portable devices such as 'Pocket PC' PDAs available with wireless access to learning resources within school.

HYDE TECHNOLOGY SCHOOL
Denise Spence, Headteacher

Hyde Technology School is a mixed comprehensive school with approximately 950 11-16 year olds on roll. The school has been a specialist technology school since 1996 and is due to re-designate for fourth phase this year. It is a high performing school with contextual value added of 1055. Hyde is a Leading Edge lead school and a training school. The school is also a mentor school in the SSAT Raising Achievement Transforming Learning programme. Much of our success has been due to our use of ICT as a tool for learning and teaching. Virtually all curriculum areas have their own dedicated ICT suite (14) and many classrooms have interactive white boards and projectors. We are developing our VLE to facilitate a more interactive learning experience for our students. We employ 1.5 web designers who manage our VLE and e-learning. We invest heavily in ICT CPD for all staff and use an ICT strategy group to develop, maintain and monitor innovative and leading edge practice. The school has been invited to be part of the following developments: NCSL SLICT host school; RM Pioneer site for Maths Alive; RM reference site for BECTA FITS; RM reference site for Kaleidos; Member of RM COMPASS Schools Development Group; and SERCO reference site and host school for CMIS.

INVICTA GRAMMAR SCHOOL
Carol Webb, Director of E-Learning

Invicta has setup an e-learning foundation to equip (in time) every student with mobile technology. All Year 7 and 8 have laptops. The governing body is committed to rolling the programme forward so that the new intake will also have mobile devices. The school has a full site-wide wireless network enabling true anytime, anywhere learning. Students take the laptops home and are able to access the school network offsite providing the home environment has an internet connection. Home-school links are very well developed. Both staff and students actively use e-mail for communications, setting and receiving work. An increasing number of staff and departments run websites for delivering courses and celebrating student achievements. The school, after much research, has still to find a VLE which will provide what the school needs for teaching and learning – the majority are far too constrained. We are currently investigating open source software with personalised learning and e-portfolios very much the focus.

JOHN KELLY GIRLS' TECHNOLOGY COLLEGE
Kathryn Heaps, Headteacher

At John Kelly Girls' Technology College we need to address access to spoken and written English for close to 70% of our girls as many of our students' homes have no texts in English and very little spoken English within the family. We therefore needed to make reading books in English exciting, desirable and cool. We are using networked software that provides the

impetus for our girls to pick up a book and read it. All of our Year 7 and 8 girls have reading time every day and access to our networks from 7.30 am until 5.00pm. The girls complete a quiz on line after reading a book and they are awarded a score based upon their results. Scores bring points and therefore rewards, to both individuals and groups. The books are categorised by reading levels and range from the most basic to advanced level. The quiz results are closely monitored by the parent company and they provide our staff with the necessary information to target students in most need of extra support and also our gifted readers. The students are also directed to the next most appropriate level of text based upon their comprehension of their reading so far. We have had to buy huge numbers of extra books to meet demand and our Learning Resource Centre boasts an 80% increase in book loans.

KING EDWARD VII SCHOOL

Max Buczynski, Assistant Headteacher

Kind Edward VII has heavily invested in and taken risks with the application and use of ICT over the years. We applied to become a new Technologies Development and Research Hub with SSAT and were successful. Our aim as a Hub is for interested schools to join and share good practice in the use of new technologies to support teaching and learning in their institutions and, with the support of students' views, take forward innovations in this area to 'next practice'. Two areas we have been developing with the support of Sharepoint (Microsoft collaboration and document software) have been professional learning provision and the use of Learning Resources Assistants to deepen learning experiences by developing e-resources. Having already established a comprehensive professional learning provision for the whole school and family of schools, our aim through Sharepoint is to make the resources easily accessible to all through an online portal. We are already using the portal as a one stop document shop, diary and evaluation system and are looking to widen access to the portal and develop its use through online booking facilities and a skills/need database with online request facilities. WE also employ Learning Resource Assistants (LRAs) and their role includes developing learning resource materials which can be used in the classroom. An LRA is a support role created specifically to enhance the quality and range of ICT-based learning materials, and to support and assist with the use of these materials in the classroom.

KIRKLEES LA

Saiqa Liaqat, School Improvement Consultant for ICT

Through my current and previous roles in education I have been able to experiment with different types of technology to see the worth in the education process. Projects which are relevant to the agenda include the development of a virtual learning environment using Moodle (open source VLE) to enable teachers and pupils to feel comfortable in the new Key Stage 4 ICT qualification DiDA. The VLE is being developed across authorities with several schools trialling out the resources with their pupils. The pupils are encouraged to use all of the digital communication tools in their learning experience. Feedback is regularly sought from both pupils and teachers. Another project enabled three different secondary schools to work with their feeder schools to develop an online radio station as part of their transition work. Pupils from the three secondary schools supported each other using electronic communication tools whilst acting as e-buddies for the Year 6 pupils who were developing their content for the online radio stations. Pupils had complete editorial access to the radio station 24/7. The latest experiment is in the use of blogging to help Key Stage 3 & 4 pupils evaluate each lesson they attend identifying their outcomes from the lesson and using this information (especially Key Stage 4) to present a plan to their teacher of what they intend to do in the next lesson.

LENT RISE PRIMARY SCHOOL

Brenda Bigland, Headteacher

ICT is embedded throughout the curriculum at Lent Rise Primary School. We holds a Leading Aspect Award for Embedding ICT creatively across the curriculum and were a Pilot for the new ICT Mark. Pupils have the opportunity to develop their skills, knowledge and understanding in the use of ICT to solve problems, find information, develop their ideas through text, graphics and video, work through a range of media, and write procedures to

control external robots or images on the screen and model real situations. The youngest pupils gain confidence with ICT through regular use, both as part of interactive teaching in literacy, numeracy and other subjects, and through using applications themselves in a wide range of contexts. Throughout the school the children use software to develop the presentation and content of their work through multimedia, word processing, desktop publishing or art and design packages. Video conferencing is utilised by all classes and is called, The Icing on the cake of education! The children enjoy animation weeks, Art and ICT focus weeks and use a multi media approach when appropriate to enhance learning. The use of voting systems also makes learning even more fun. The school is currently developing materials which are tailor made to meet the needs of the individual child and which will enhance their offering as regards personalising learning. Co-ordinators are also enhancing the offering to the more able child by offering "Challenges" which are input onto the schools intranet, in each subject area which will again allow a personalised approach to learning. Pupils are very positive about the school in general and the learning opportunities provided. They are keen to participate and lessons have a strong visual element which significantly motivates the pupils. They particularly enjoy using ICT as a tool to learn with and for the development of their own work.

LITTLE HEATH SCHOOL

Peter Johnson, Headteacher

ICT is an integral part of all elements of our special school. We have 100 workstations for 140 children. All children access the computers and do a range of activities including word processing, using spreadsheets, publishing, e-mails and accessing the web. In addition, activities include animation (we have a range of budding Wallace and Gromit makers), creative filming (pupils writing, acting, directing a variety of films including a black and white silent movie), non-fiction documentary-style films incorporating blue screen technology (includes work on Anne Frank and Rosa Parkes), internal radio station broadcasting across our intranet (pupils become budding DJ's and end of term 'beat the Intro competitions are looked forward to), e-mail pen friends and video conferencing. We also use the schools intranet to manage pupil information. This includes a highly detailed incident monitoring system which all staff enter information. An observation monitoring system runs concurrent with this. Details from these are automatically e-mailed to pastoral heads and our social worker. Childrens' good work is entered into our 'gold book' section and letters home self-generated after five entries. Annual reports are written on-line and grades are automatically transferred into our assessment package to produce an on line longitudinal record. ICT has transformed the work undertaken by pupils and staff at Little Heath and we are continuing to develop new areas and fine tune existing ones.

LOXFORD SCHOOL OF SCIENCE AND TECHNOLOGY

Andrew Bainbridge, Deputy Headteacher

At Loxford School, we have three elements to our current work. Firstly, we are experimenting with palm PDAs to inform teachers who have responsibility to monitor achievement, as a tool to personalise learning. This extends the school information system to staff who can have impact on the 'learning conversation' teachers have with students. We have a business partnership with TruSmart (USA PDA software developer) using their 'Schedule Finder' program as the core database. We are analysing the potential other uses for the PDA, making a greater use of it, and putting our school inside it. It is being trialled with potential users – heads of year, teachers 'on call', support staff, Trips. Secondly, we are looking at how to embed the use of interactive white boards (IWBs) into lessons by staff and students. We are encouraging students to be IWB teacher buddies thus promoting their use by students and new staff. We are aware that students adapt faster, with more energy and enthusiasm. Finally, we are extending the variety of 'New Technology' available to staff in their own classroom (e.g. visualisers) and are specifically looking at the impact this will have on teaching styles and student motivation. There are strong elements of learning-by-making, mentoring and coaching, enhanced social skills and a new positive relationship between teacher and student.

NINESTILES

Dexter Hutt, Executive Headteacher

Ninestiles Technology College is a mixed comprehensive for students 11-18. The school has implemented a variety of ICT initiatives aimed at improving both individual achievement and personal development for each student. ICT is taught as an individual subject (Key Stage 4 students take a vocational ICT qualification) but it also pervades the rest of the curriculum. Our classrooms have been enhanced by digital projectors and student laptops, connected to a wireless network, one of the largest in Europe. Ninestiles Plus is a consultancy programme run by the school teaching, amongst other things, the use of ICT across the curriculum as well as in Assessment for Learning, Behaviour for Learning and other school-improvement initiatives. As well as delivering a different kind of learning, ICT is used to monitor student behaviour and teacher performance. Once the school's behavioural records were kept on paper and perceptions of class behaviours were anecdotal. It quickly became apparent once behaviour and attendance became monitored electronically that perceptions did not match reality and that a bad class reputation often came down to one or two individuals. The school has become far better at identifying patterns of behaviour, leading to a greater success rate in rooting out causes. The most tangible result of this has been a consistently high outcome in the quality of teaching and learning.

PARRS WOOD HIGH SCHOOL,

Jo MacKinnon, Deputy Headteacher

The network at the heart of the electronic provision in this 11-19 school provides us with a single desktop across the campus, regardless of point of access – including access 24/7 from home or further field. Our website is a point of access from outside into school and a window on our world. All of our users can access the various components of the network with a single username and password, including our Open Source VLE (Moodle). We also have a programme of provision of free thin-client laptops for families to help to overcome the digital divide. Our Independent Learning Centre, and the online personal and skills development courses used in the centre, is giving our students precious opportunities to develop their independent learning skills, keep a learning journal and access online resources such as careers software and ILPs or Progress Files. This centre also represents an innovative approach to workforce reform and cover for absent colleagues. Other ways in which we use the learning technologies to enrich the learning experience and raise skill levels and attainment in school and beyond include such activities as podcasting, CAD/CAM, sound & lighting technologies for our student production team, online partnerships and Red Hat training.

PHILIP MORANT SCHOOL

Simon Brennan, Deputy Headteacher

Our 'learning gateway' integrates communication, central management of information, VLE and web technologies into a resource for school stakeholders, designed to personalise, advance and encourage the skills of independent learning. We draw upon the expertise of a staff/student focus group to incubate new ideas. Specific examples include:

- electronic Individual Learning Plans;
- web-based GCSE student resources;
- self-help analysis tools (learning styles) and web access to school e mail accounts;
- the use of e-mail, SMS and electronic message/discussion boards
- electronic stakeholder surveys;
- electronic gallery of student work;
- on-line competitions e.g. digital art, literary review blogs and music composition; and
- developing the use of IM, discussion boards and VoIP to promote international learning experiences.

Staff use electronic administrative support materials, staff handbook, weekly bulletins, e pigeon hole and professional development resources, collaborate easily, flexibly and take part in electronic consultations – all of which is web accessible. Web-based storage facilitates

personalised GCSE mentor support and teachers have immediate access to personalised assessment data, targets and reports. We are developing web access to data, electronic mailing of reports and RSS to personalise services for parents. These resources have been very flexibly and widely used and we believe that students feel clearer about their next steps in learning and exhibit greater levels of engagement. We are also using our learning gateway to advance and build the networks in which we are partners.

ROBIN HOOD PRIMARY

David Broadfield, Headteacher

Robin Hood Primary School has been harnessing technology for learning for many years. More recently this has been particularly evident in personalising learning for our youngsters. Our technology resources are available to our pupils before school, throughout the day and after school. Those with internet access (70%) have access to the school intranet from home and some older pupils have access to the network through a Citrix server. ICT is embedded in the learning culture of the school and it has had a profound effect on our pupils, both in terms of outcomes and pupils views of themselves as learners. Our curriculum is innovative, it encourages pupil independence, choice and decision-making and issues based education and visual literacy feature strongly. Independence time (the first 30 minutes of every school day) gives opportunity for real pupil-directed learning. ICT is fundamental to this process as our pupils have free access to it (this includes laptops, PDAs, tablet PCs, scanners, still and digital cameras). The school intranet has many digital tutorials to enable pupils to follow their own interests. This is particularly the case with digital art and animation. Pupils achieve impressive results within the area of visual arts. The school has its own art academy which is run by the pupils themselves. Pupils are engaged in their own assessment through the schools' database. This is further enhanced by pupils' web based record of achievement.

SELLY OAK SCHOOL

Graham Ridley, Headteacher

Selly Oak School is a large Moderate Learning Difficulty (MLD) secondary special school. We are dedicated to the use of computing power to organise the data handling which underpins successful personalised learning and have developed our own software for flexible micro assessment, teaching and collating to realise these aims. Personalised learning at Selly Oak is supported by our belief in the importance of organising the environment, the timetable (including vertical and variable setting, grouping and streaming), and pastoral support. We are committed to the use of technology to track and collate information on students' social development. We have a very high Child Value Added (Top 5% CVA across all key stages) and, in 2005, OfSTED reported that our children were 'as happy as bunnies'.

SHALDON PRIMARY SCHOOL

Frances Moules, Headteacher

For learning to be productive in our school we believe that pupils need to be motivated, to learn in context and to learn as part of a social activity. Teachers acting as facilitators harness technology to promote this productive learning. Their planning is theme-based and fully incorporates strands of ICT to enhance and enrich the process. For example, pupils making multi media presentations to consolidate cross curricular learning. Video conferencing around the world has enabled pupils to experience at first hand NASA, the Great Barrier Reef, an Indian school, the National Portrait Gallery and the Museum of London. The 'visits' have been interactive with pupils designing their own questions and co-constructing new knowledge and skills from the experience. All classrooms have interactive white boards enabling teachers to tailor web based resources, interactive CD-ROMs and PowerPoints to match the appropriate learning contexts of their pupils. Teachers provide open-ended technology opportunities that help pupils to learn with and from each other. For example, older pupils taught themselves to use video camera and software to make environmental reports to present to the rest of the school. Our technology provision is promoting a deeper level of personalised learning from our pupils through their full involvement, excitement and challenge.

STIPERSTONES CE PRIMARY SCHOOL

Mark Klekot, Headteacher

Stiperstones CE is a very small school in the Shropshire foothills. Before I start I must state that I do not believe that ICT equates to personalised learning and vice versa. I do believe that it is part of the teaching and learning armoury and that the children of today are 'digital natives' whilst people like me [older but not wiser] are 'digital immigrants'. In terms of ICT we tried using PDAs for 4 years at Stiperstones. All the children had their own PDA for home and school use. Now we have bought all the children in Key Stage 2 a laptop for home and school use and they have been purchased for each of the remaining families in Key Stage 1. The next step, hopefully in August, will be to connect all the households to broadband, which is very difficult in a rural area. We have already connected the pub to broadband and provided them with eight laptops for community use. Our Teaching and learning is strongly influenced by personalisation. The children have a voice, the parents are fully-involved and the governors are very supportive. We have written and spoken about it extensively and one day we might even know what it is!

STOCKTON CITY LEARNING CENTRE

Steven Kirby, Director

For almost two years now, Stockton City Learning Centre has been pioneering the use of synchronous, distributed learning environments (or real-time virtual classrooms). We use *Elluminate Live!* (a Canadian piece of software) because it is very robust, offers full teacher control and is hugely scaleable. The maximum number of students we have taught simultaneously is 210 kids across 15 cities (led by a single teacher and doing maths). It offers everything that live face-to-face teaching does plus a lot more. For example it allows us to talk live, text chat, video conference, use an inbuilt interactive whiteboard and application share. We can also run live quizzes and record sessions so they can be revisited by students at a later date, perhaps as revision.

Current uses we have for *Elluminate Live!* include:

- Use secondary MFL AST to teach primary children French in her feeder schools from her own class. No travel, no supply costs, no wasted time.
- Homework at home. Teacher leaves work for kids on VLE and then they meet up early evening to discuss in the Virtual Classroom. Everyone rested and relaxed.
- Meeting world experts live. We recently ran a session to join primary and secondary schools to the Open University astrophysics department, Interplanetary Space Science Conference (Houston, Tx) and the Smithsonian Institute as part of National Science week.
- International linking. We have linked children to countries such as China, Argentina, Poland, Germany and Scandinavia etc for subjects as diverse as Citizenship, Science, MFL etc.

This system offers true anytime, anywhere learning without limitation. New pedagogies are developing as we learn more and we are sharing them internationally now.

THE NETHERHALL SCHOOL

Alastair Wells, Head of ICT and E-Learning

Under the direction of Alastair Wells, the Netherhall School in Cambridge has come to specialise in the use of advanced technologies to develop new approaches to teaching and learning as well as involving the local community. A local education authority comprehensive without any special advantages, the school is nevertheless established internationally as a focus of good practice. This is based on good in-service training for staff and a multimedia authoring team of 50 students who are supporting subject departments in their development of ICT as well as materials for the school web site. Alastair has designed many educational software programs, interactive video and television materials, multimedia CD Roms and ICT curriculum support materials, including assessment software for National Curriculum Key Stages 3 and 4 and works closely with many leading ICT companies. As a result the school is particularly well resourced with a Citrix based fibre optic

and wireless network, a weather station and satellite receiver, data loggers, scanners and broadband Internet to over 400 computer workstations. The school participated in the two year Cambridge Superhighway Trial with On-line Media and Acorn who made interactive television available over a broad band 'superhighway' cable which encircled the city and linked pupils homes with the school and community resources. The materials that were developed for the Cambridge Trial, and the expertise that developed within the school, are now being applied to the impressive school web site. Netherhall has also been funded by a European Union Socrates programme where on-line links with the primary school parents and pupils have been established to promote stronger community relationships. The project has firmly established a local 'wired community' of schools, pupils and parents.

THE RIDINGS HIGH SCHOOL

Paul Lobb, Deputy Headteacher

Having examined a range of VLE platforms, the Ridings High School decided that the one-size-fits-all solution would not deliver the desired outcomes and has therefore employed a software developer to create a bespoke VLE. This development is at an advanced stage with the aim to launch for September 2006. The VLE will provide the core infrastructure to enable students to access appropriate learning at anytime via the internet. It will enable parents to monitor the progress of their child and staff to set individual tasks to those students they teach. The VLE will allow those students absent from school to access the framework and content of lessons missed as well as providing support for the existing extended school day programme. With complete interoperability with the School's Student MIS, again a bespoke software package, staff, students and parents will be able to track progress across all subjects, identify any potential areas of weakness and intervene at an early stage with focused online curriculum resources. The next step is to develop the concept of the 'virtual' tutor. This concept will build on the school's considerable experience in the use of video conference to support curriculum delivery. However, the 'virtual' tutor will provide students with web cam based access to a member of staff to provide support whilst accessing the VLE.

VARNDEAN SCHOOL

Andy Davies, Assistant Headteacher

Varndean School is the Development and Research Hub School for New Technologies for the South East Region. We are in the process of developing a CPD software tool for teaching and support staff. It will eventually be used by students. This self-evaluation tool enables staff to identify their levels of capability when using a variety of new technologies. Using the online questionnaire it is possible to identify whether you are working at a foundation, intermediate or advanced level. The questionnaire is linked to a database which provides support and guidance through video clips, web links and downloadable documents. We continue to work with a number of partnership node schools. In a collaborative effort we worked with the node schools generating the data necessary to create the software tool. Our Network Manager used the data to build a convincing demonstration product using a combination of a programming language called PHP and Macromedia Flash. The product will eventually be web based. We intend to publicise the work of the Hub through the use of our established networks, both within the Trust through Futures Vision, RATL and iNET, and beyond in programme such as the DfES Leading Edge Partnership scheme. Recently we were asked to present at the 'Personalising Regionally Annual Conference' and also took part in the roundtable sessions. During the presentation we discussed the evolution of the product, our progress so far and our involvement with other schools. We have published a number of progress reports on the Specialist Schools and Academies Trust Website and the SSAT VLE. We have reached the conclusion that in order for the product to evolve to the next stage of development we will require financial sponsorship. The funds will pay for development time and we are currently looking for prospective sponsors.

WALKER TECHNOLOGY COLLEGE

Mike Collier, Deputy Headteacher

Walker Technology College is part of a small education action zone involving five of its feeder schools. We have taken the view that to fully harness technology for the future we need to build firm foundations in the feeder schools. To these ends from September 2006 we will have a very experienced ICT teacher working in every feeder school for a full afternoon developing students skills in e-portfolios and multimedia film making connected to raising standards in literacy. We are also keen to understand what is lost in transition from the Key Stage 2 curriculum to Key Stage 3 and where common technological platforms can make transition seamless. To these ends we have six other teachers team teaching six Year 6 classes for an afternoon per week in each of our feeder schools for an entire year. Harnessing technology for us is about high quality staff developing a clear vision for learning that is based on knowledge and firm research of the needs of the learners. In September 2007 we will introduce a Foundation curriculum in Year 7 which we hope will be the start of a process to create a Year 5-8 competence based curriculum that is underpinned by independent learning and appropriate use of new technologies. We must always remember that the biggest resource in harnessing technology for learning is a well-trained and creative staff team that can identify and pull together examples of good practice.

WANTAGE AREA SCHOOLS PARTNERSHIP

Andrew Markham, eLearning Specialist

I have been employed by a partnership of 13 schools for 3 years - in the first instance concentrating on embedding ICT, then using ICT as a tool to shape a creative curriculum and now as a tool for personalised learning and collaboration. The partnership has an incorporated email buddy system where same gender, same age pupils are matched at random to enhance PSHCE, communication skills and the transfer process to secondary. Two Learning Networks harness technology to raise standards in Literacy and Numeracy through focussed Video Conferences, the Digital Brain VLE and Email Conferences. A partnership website is used as one medium for teachers to post their own resources and for children to create reviews of lessons with examples of their work. ICT is now not seen as embedded in every subject but at the heart of the planning for every subject, this is especially prevalent in the use of Digital Video as an assumed activity in most subjects (shared partnership resources). We have organised parent events where pupils work with their parents in ICT focussed challenges. There has been a shift in teaching styles to accommodate a shared learning approach. Pupil interviews highlight pupil awareness that learning is not only centred on 'knowledge from teacher'.

WILDERN SCHOOL

Ceri Oakley, Assistant Headteacher

At Wildern School we have used ICT for several reasons: to enhance student motivation and commitment to learning; to promote professional learning and to share ideas and resources between schools. Students' motivation and commitment to learning is enhanced by the use of interactive whiteboards, ipods, digital media, e-mentoring and VLE. The Wildern VLE is produced 'in-house' to support students and staff and responds to the personalised learning agenda and workforce remodelling. It has discussion rooms/forums based on current affairs relating to school and the wider community; peer questions and answers about learning; homework on-line (for home study projects that do not link directly to classwork); classroom resources (these help when students are absent, or holiday, revision or exclusion). The VLE is designed for use on any platform including PCs and Apple Macs, and is accessible from any point with internet access (this includes interactive TV and mobile phones). It is based around an open source database with a development community spread across the world. This makes the system the most up-to-date product on the market. Governors have access to the database and, in future, so will parents. Teachers using VLE can make decisions about which resources can be accessed by which students and this includes the facility to protect resources as read-only. The system has been created by working closely with teachers making it very simple to use and its open source nature means that a VLE can be completely customised to any schools' needs. The VLE also enables the exchange of ideas and

resources amongst our network of local, national and international schools. We further use ICT to promote professional learning amongst staff, creating an environment in which staff can learn new skills which enhance student learning.

YEWLANDS TECHNOLOGY COLLEGE

John Innes, Deputy Headteacher

At Yewlands, the current main area of investigation is how to make best use of the mobile technologies that students bring to school every day. In a school where significant numbers struggle to bring the most basic equipment, many have either a mobile phone, MP3 player, or game player and some even have a PDA. September will see the introduction of PDAs for Year 7 in their skills for learning day (currently all day Tuesday every week) in preference to laptops. Students have expressed a preference to working with small handheld devices rather than carrying laptops around. We are researching the best formats/software to produce revision materials for Year 11 in various formats (e.g. geography have produced lesson notes in MP3 format), other revision materials in video format for iPods available through podcasting or through our school intranet. The next stage is to transfer lessons onto the school-designed intranet. The aim is to make a seamless interface for the new technologies whether the students are in school or outside. The intranet provides learning materials quickly in school that the students/parents can then pick up from outside through a secure logon.