Independent Evaluation of the Implementation of the Learning Platform *LP+* across Schools

Report on Early Implementation Outcomes in Wolverhampton Local Authority

by Don Passey, Senior Research Fellow
Department of Educational Research,
Lancaster University

Acknowledgements

The author of this report would like to express his most sincere thanks to all those who have helped to support the essential evidence gathering for the study reported here, by providing invaluable insights and open responses. In particular he would like to thank the head teachers, teachers, co-ordinators and pupils in the following schools, the key LA officers and consultants involved, and the background support of key personnel in LP+.

The schools:

Bilston C.E. Primary School
Edward the Elder Primary School
Goldthorn Park Primary School
Holy Trinity Catholic Primary School
Lanesfield Primary School
Long Knowle Primary School
Manor Primary School
Merridale Primary School
Northwood Park Primary School
Penn Fields Special School
Penn Hall Special School
St. Alban's C.E. Primary School
St. Anthony's Catholic Primary School
St. Bartholomew's C.E. Primary School
St. Edmund's Catholic School
St. Jude's C.E. Primary School
St. Luke's C.E. Primary School
St. Michael's C.E. Primary School
St. Thomas' C.E. Primary School
Tettenhall Wood Special School
Trinity C.E. Primary School
Wilkinson Primary School
Wood End Primary School

The LA personnel:

Dave Whyley
Gavin Hawkins
James McFarland
Jill Purcell

Disclaimer

Whilst every effort has been made to ensure that all details in this report are accurate, inaccuracies can occur, and if these are present, then the reader should recognise that these are entirely the responsibility of the author.

Contents

1. Executive summary

Background

Wolverhampton Local Authority (LA) have procured, developed and supported the implementation of a learning platform (*LP+*) for use across all schools within the LA. The procurement, development and support processes deployed in this implementation were able to use and build on the positive experiences and practices that had been previously employed in their procurement and development of technology-based infrastructure, access devices and learning resources. As a consequence, schools in Wolverhampton LA were well placed nationally, in terms of being able to gain from experience and support based on positive implementation approaches. Even at this early stage (some two years from the initial stage of procurement), schools already have in place some successful and valuable examples of integration of the learning platform.

This report offers evaluative feedback about the support, development and implementation practices and processes undertaken and in place by the end of 2009, as well as providing details of extents of and findings about uses at that time. It additionally offers some recommendations for the future. Evidence for the report has been gathered from a number of sources. An LA consultant completed schedules on two occasions, to indicate levels and forms of school uses and practices, in November 2008 and June 2009. LA consultants and officers were involved in discussions on a number of occasions, teachers and managers in twenty-two schools were involved in discussions providing details about management, teaching and learning practices (with observations of practices and discussions with some pupils in some of these cases), and head teachers in five schools completed schedules to give specific details about highlighted management practices.

National policy requires schools to implement learning platforms to support management, teaching and learning processes. An existing research literature highlights both the pitfalls involved in this form of undertaking, and the benefits that can accrue. From visits to the

schools in this LA, it is clear that this initiative has led largely to a rapid implementation, and to a range of recognisable benefits. The recently published *Becta Harnessing Technology Review 2009* reported that 40% of primary schools surveyed in England in 2008 to 2009 had a learning platform, while 13% of primary teachers in those schools used their learning platform 'a few times a month or more'. Figures in the section of this report that follows suggest that primary schools across Wolverhampton LA have surpassed these averages – by June 2009 there were 52 primary schools out of a total of 62 (84%) that had a learning platform, there were 69 nursery, infant, junior, primary and special schools out of a total of 90 (77%) that had a learning platform, and 52 schools (mostly primary schools, from the total of 72 schools involved in the implementation) where all teachers were using the learning platform.

Overall, successes across the period of the initiative were identifiable in all four main areas that were explored in the study:
- Implementation and integration of practice at school and LA levels.
- Management and cost-effectiveness benefits at a school level.
- Teaching and learning enhancements and support.
- Engagement with parents and enhancement of networking within communities.
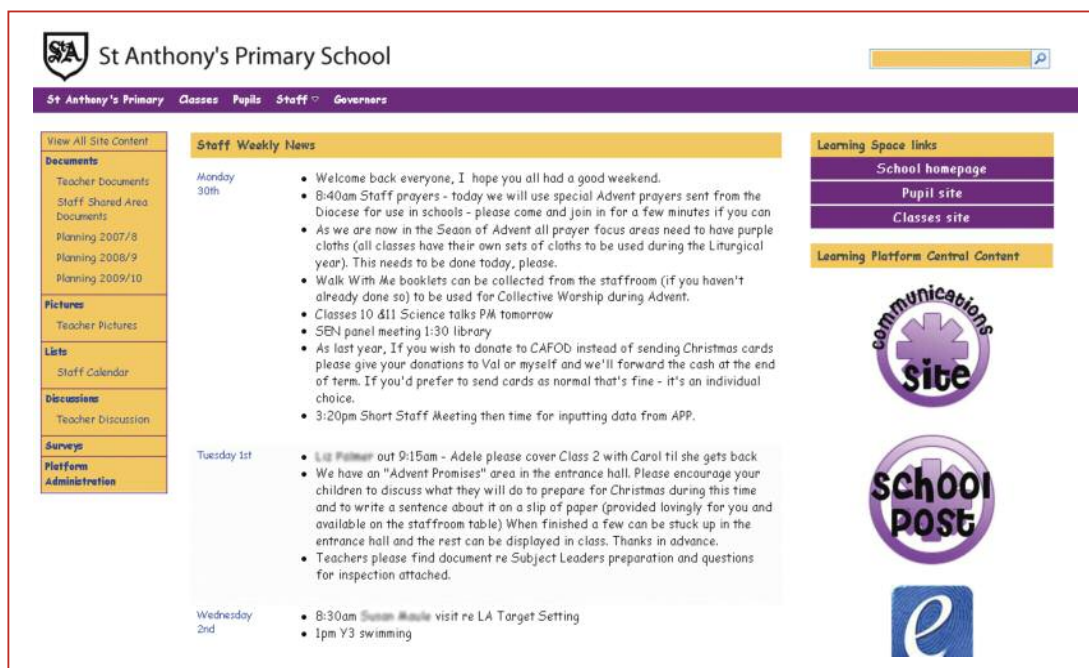
Key outcomes

Key outcomes are identified here in each of the four main areas studied. Key outcomes with implementation and integration of practice at school and LA levels concerned:
- Implementation through a phased approach - this enabled experiences from initial cohorts to be used within the implementation of subsequent cohorts.
- The appointments of an LA consultant and an LA technical consultant – these were crucial to the successes of the implementation and the development of practices arising, and their support and involvement was reported often by head teachers and teachers in schools.
- The provision of opportunity for schools to develop their thinking and practice, and to consider how they might integrate uses of existing school portals and document access on intranets – school staff have been involved

in many meetings and discussions, both with LA consultants and within their own schools. While time to discuss approaches has been clearly important, it has taken up to a year in a number of cases to lead to implementation of integration of practice through a single learning platform.

- Features of this learning platform (*LP+*) – although the features of this learning platform have sometimes differed from those that had been used by some teachers, managers and schools previously, the platform was nevertheless seen as being usable, and having features that offered benefits and advantages to the running of alternative or parallel platforms or facilities.
- Levels of use developed within a relatively short period of time - by June 2009 there were 72 LA schools involved in the implementation, grouped across 6 cohorts (according to the times they embarked on the initiative and their readiness to receive the platform). Thirty-seven of these schools were judged by LA consultants to be 'very well on' or 'well on' in terms of development at that time, and there were 52 of those schools where all teachers used the learning platform. There were 6,030 pupil users (increasingly involving users from Years N and R when compared to users reported in

November 2008), and 6 schools had developed facilities with parental access.

- Early implementation encouraged other schools to participate - between November 2008 and June 2009 more secondary schools became involved. Shifts in implementation stages reached by all schools indicated the ease with which many schools could adopt platform uses within reasonable time frames. The range of facilities was meeting the interests of different users (head teachers, teachers, subject leaders, administrators, learners, parents, and governors), although factors such as changes of staff (including head teachers) impacted in particular ways.
- Uses of the learning platform by pupils increased over time - the use of facilities offering news, calendars and announcements (see the example in Figure 1) was most commonly developed by June 2009 (in 56 schools in total), with photo libraries almost as commonly found (44 in total). An increasing number of schools at that stage had pupil documents online (28 in total), involved pupils in online discussions (24 in total), and provided opportunities for pupils to see or put up text about visits (24 in total) when compared to figures gathered in November 2008. A number of schools also supported pupils in creating wikis (10 in total) by June 2009.

Figure 1: How a school presents weekly announcements

Key outcomes with management and cost-effectiveness benefits at a school level concerned:

- The central position of the learning platform in school practices – some schools involved in early implementation cohorts established the use of the learning platform as a central core functioning unit within the school. This central position resulted from functionality that was both inward facing (supporting managers and teachers), and outward facing (supporting pupils and parents). Diversification of different applications to support learners, teachers, managers and parents in specific ways was linked through to and worked from this single platform.
- Useful exemplars of practice emerged at early stages - some useful exemplars of management and learning practices emerged from early adopters, and these, put together in case study form, would allow others to benefit from them. Facilities to allow other schools to add to this important portfolio of practices would support the future development of practices more widely.
- Rationalisation of existing facilities was fundamentally important in some schools - it was clear that some schools needed to take decisions about the rationalisation of websites and platforms, and that the roles of setting up a vision and reasonable expectations had been important in leading to positive development. Coupled with this, schools that had been concerned with identifying crucial aspects of long-term planning and short-term actions to drive the implementation forward were seen to be successful.
- Schools structured the site using different features - schools varied in their approaches to structuring aspects of the site to support their needs. However, understanding what facilities were available, and how these could support their needs, were clearly important. Folder structuring, consistent titling of documents, and uses of filters all played their parts in the development of different school systems.
- Schools reported benefits of the platform in terms of management support - schools highlighted ease of access, ease of access to undertaking monitoring processes, and ease of management of multi-agency reviews as examples of recognisable benefits.

Figure 2: Pupils' written reports about books they have read

- Schools could gain cost benefits from specific uses of the learning platform - from practices offering management benefits that were highlighted by schools, it was possible to calculate that a 2-form entry school could accumulate a cost-benefit saving in the region of £38,724 per year from use of this system. It should be noted, however, that as it was a national requirement for a school to have a learning platform, the cost of the platform and its support was not included in this cost balance.

Key outcomes with teaching and learning enhancements and support concerned:
- Schools reported the value of being able to involve pupils in creative practices that could be captured and held on the learning platform - opportunities for pupils to review and reflect on their activities and experiences were seen to benefit some pupils particularly (see the example in Figure 2).
- Schools were beginning to integrate uses of the learning platform with uses of other technologies - for enhancing particular aspects of teaching and learning.
- Some schools were finding that reluctant writers and reluctant communicators were being supported through appropriate uses of the learning platform - more homework completion was being seen in some cases.
- Some pupils were becoming engaged in learning over longer time periods through the appropriate use of online discussions - some teachers reported that online discussions allowed them to gain enhanced perspectives about their pupils.

- Some pupils were gaining greater locality awareness, as well as gaining creative opportunity and wider literacy development - through the use of a project working across the learning platform.
- The youngest children in schools, in nursery classes, were being supported positively through facilities that were being set up in some schools - the focus of this support was often on provision of resources for the parent to support and work with the child, while from Year 1 onwards, learning support tended to be directed more at the child.
- In some schools both teachers and pupils welcomed the opportunities for children to use safe online communications.

Key outcomes with engagement with parents and enhancement of networking within communities concerned:
- Many schools actively considered how to plan to engage parents more through the use of the learning platform at this time.
- Some schools that had focused over many years on enhancing parent involvement and engagement were finding that the learning platform offered them more opportunities to extend their endeavours (see the example in Figure 3).
- The use of video and imagery was seen by some schools to increase engagement with parents, and to increase communication with parents positively.
- Some schools used the learning platform to support aspects of homework - some schools provided access to homework online, and offered parental links to resources that would support them with their children's learning during the following week or term.

Figure 3: How a school presents itself to parents
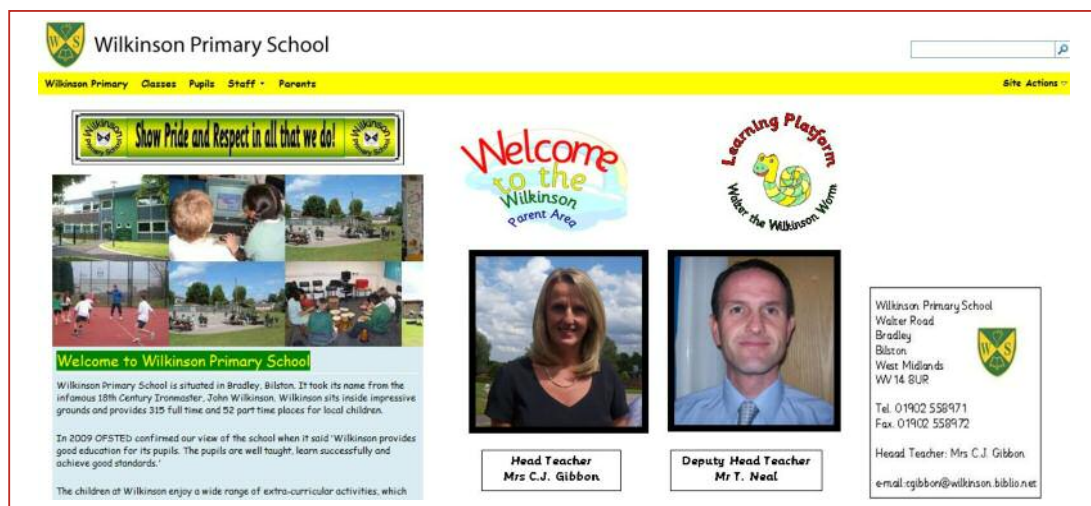
Future recommendations

Future recommendations are listed here within the four main areas explored in the study. Future recommendations with implementation and integration of practice at school and LA levels concerned:

- Liaison with the learning platform provider - this had been crucially important in terms of effecting important changes to support practices more readily, and a future seamless provision is likely to be enhanced through continued links for all parties.
- Each school involved is likely to be able to provide useful practice and support ideas, which must be integrated into the entire picture to ensure overall ownership and sharing across the entire community of practitioners.
- Support from the LA consultant and the LA technical consultant will be needed in the foreseeable future, and is likely to warrant time commitment over at least the next 2 years.
- Successive practices developed across schools will not necessarily be uniform. This learning platform offers a very wide range of opportunities for teachers, managers, learners, parents and governors to develop alternative practices. It will be important that these alternatives are identified, showcased, and distributed for all to see and review.
- Experiences of implementation to date have been gained largely in primary or smaller schools. Exemplars of implementation in larger secondary schools may well be of benefit to those secondary schools wishing to move forward with a learning platform.
- The publication of the recent ADOPT framework (Armstrong, Hawkins and Whyley, 2010) provides a useful means to identify school uses of their learning platforms at specific points in time, to monitor their progress, and to identify areas of challenge where support would be beneficial.

Future recommendations with management and cost-effectiveness benefits at a school level concerned:

- At this time some school practices are already highlighting potential cost benefits. Future practices may well lead to further cost benefit savings, and these should be identified and shared with all schools.

Future recommendations concerned with teaching and learning enhancements and support:

- Uses of the platform facilities are moving in some schools from those involving textual recording and sharing, to imagery recording and sharing.
- It will be important that the social networking facilities of the medium and the platform are offered prominently in the future. In this way users will be able to access facilities from a social networking viewpoint (such as ease of use and access to web-cam or video, for example).
- It will be important that the facilities enabling self-expression are highlighted prominently in the future (such as ease of use and access by pupils to creating and sharing presentations in the forms of video, animations and slideshows). These forms of facilities need to be readily accessible by users (whether they be parents, learners or teachers).

Future recommendations with engagement with parents and enhancement of networking within communities concerned:

- Many schools are highlighting engagement with parents as a focus for their implementation concern, either imminently, or at the next stages of development. It will be important that schools have guidance and advice in this area to support their needs positively.

2. The evaluation study

The development of the learning platform (*LP+*) across schools in Wolverhampton LA has developed from and taken forward previous procurement experience and practices that have focused more on software and hardware access by the LA (detailed previously in the report by Passey, 2006). The evaluation study reported in this document details aspects of the implementation of a learning platform within a longer-term development and procurement context. The report details implementation practices, as well as delivery outcomes arising at the stage the report was written, and identifies some possible future actions.

This study has gathered evidence about the implementation of the LP+ learning platform from a number of perspectives, and reports on its implementation patterns and delivery outcomes. Evidence has been gathered through:
- Reviews of relevant LA documents, and a range of resources held on the learning platform.
- Completion by LA consultants of a grid of features, to provide implementation details at a school level for all schools involved on two occasions, in November 2008 and in June 2009.
- A review of all self-review frameworks for schools involved at the outset of the implementation.
- Identification of key features for the implementation through discussions with 5 key personnel in the LA on a number of occasions.
- Identification of key features for the implementation through discussions with key personnel in 22 schools, and observation in classrooms of a number of learning platform activities.

3. A background context from the wider research literature

Government education policy in England highlights the need for schools and local authorities to focus on effective implementation of certain specific learning and teaching practices. These practices include the personalisation of learning, the harnessing of technologies to enhance learning opportunity and effectiveness, the eliciting and integration of student voice, and the widening of home access and support. To this end, schools are encouraged to implement e-learning practices, involving approaches that use learning platforms, virtual learning environments and e-mentoring systems. To support learning and teaching in focused or effective ways, schools are keen to know how they might implement technological systems where multiple approaches can lead to different potential outcomes. The *Becta Harnessing Technology Review 2009* reported that 40% of primary schools surveyed in England in 2008 to 2009 had a learning platform, with 13% of primary teachers using their learning platform 'a few times a month or more', but only 10% providing parents with information online about their children.

The learning platform that is the focus of this study (called *LP+*) was intended by those who conceived and implemented it to offer opportunities to support both e-learning and the personalisation of learning. It was designed to address a number of educational policy needs highlighted over a number of years by the government department in England. In 2005, in a Department for Education and Skills (DfES) report on e-learning, the then Secretary of State for Education (Ruth Kelly) stated that: "Technology is the key to personalised learning. And imaginative use of [information and communication technology] ICT should help engage more learners in the excitement of learning". The report indicated that systems nationally should be introduced that would: "Transform teaching, learning and help improve outcomes for children and young people, through shared ideas, more exciting lessons and online help for professionals. Engage 'hard to reach' learners, with special needs support, more motivating ways of learning, and more

choice about how and where to learn". The report offered examples of how some schools were achieving outcomes with existing facilities, and indicated intentions for the creation of wider systems, offering learners:

- "More ways to learn: Along with listening and reading, you will be spending more time learning in groups, working with other learners, …
- "More flexible study: You will have more choice about where, when and how you study, making it easier for you to create your own mix between studying in a place with other learners, learning at work, learning at home, and learning online.
- "A personal online learning space: Where you can store electronically everything related to your learning and achievements, course resources, assignments, research, and where you can plan your next steps, and build links for professional advice and support".

In their report on approaches to the personalisation of learning, Green *et al.* (2005) highlighted virtual learning environments (VLEs) as technologies that could support aspects of personalised learning. Within the same report, the authors presented a charter recommending features of appropriate learning environments to learners:

- "To have access to different teaching and learning approaches and resources that meet my needs.
- "To have access to people who are able to extend and develop my understanding in my chosen areas.
- "To have access to learning environments and resources that enable me to develop my understanding and experience in authentic and appropriate contexts."

To enable such systems to be implemented in schools with use beyond schools, the DfES report (2005) stated that teaching staff needed to be confident with the technology, and to have skills to bring about transformations in outcomes as a result of using the technologies. The provision of tutors to support such systems was highlighted, as was the need for leaders to be: "free to decide which equipment they want for their institution, as well as where to buy it, and which managed services to employ. Because they are accountable for those

decisions, they need to be sure they are getting the best value for their investment". However, it is clear that choice needs to be considered not just in financial terms, but also in terms of security and safety. As the Green Paper entitled *Every Child Matters* (2003) stated: "The five outcomes which mattered most to children and young people were: being healthy; staying safe; enjoying and achieving; making a positive contribution; economic well-being".

The review of the learning platform undertaken through this study indicates that many of the facilities described in the DfES report (2005) have been offered through uses made of *LP+*, and that a range of learners (and teachers) are already, even at these early stages, gaining positively in terms of their reports of enhanced learning (and teaching) potential. Significantly perhaps, a number of key implementation features of the *LP+* system have enabled engagement and support with social and collaborative aspects of learning. Downes (2007) argued that these aspects had been focused on to a greater extent in recent educational technology developments: "Beginning in 2005 and continuing through 2006, discussion at the forefront of the educational technology community centred not around instructional design and the learning management system, but rather on approaches that dramatically shift the centre of e-learning; things like social networking applications …". He went on to argue that: "Learning, in other words, occurs in communities, where the practice of learning is the participation in the community. A learning activity is, in essence, a conversation undertaken between the learner and other members of the community".

LP+ was set up as a system to support access by teachers, pupils and parents, to provide a key web presence, and to offer social networking across communities. Although developed as a school-focused (or led) learning environment, it has also been the integration with LA support, implementation guidance and development advice that has secured its current position. To date, much of the evidence of benefit and outcomes arising from such environments has been identified from uses within the higher education (HE) and further education (FE) sectors. As Condie *et al*. (2007) stated: "Specific

benefits observed in the HE/FE sector … included improved motivation and engagement, flexibility of access, learning gains in ICT, in writing, understanding and presentation, enhanced communication and interaction, plus the adoption of new approaches to learning". Since 2005, research findings have increasingly pointed to learning benefits arising where learning environments have been adopted in some schools. Condie *et al*. (2007) stated that Becta found that: "… learners benefited from them in that they could extend their learning experiences beyond the confines of the classroom, submit and track electronic activities for assessment and manage aspects of their personalised learning".

The developing range of learning platform and e-mentoring systems has not been limited to those in England; indeed, there has been a strong history of such developments in the United States (US), reported through the research review of Single and Single (2005), for example. Their review indicated that e-mentoring: "facilitates the benefits of mentoring opportunities". They identified three areas of benefit for users: provision of information; psychosocial interactions and outcomes; and instrumental outcomes. They indicated the importance of certain features that were afforded through e-mentoring facilities, particularly impartiality and links across institutions, but they also highlighted the influences that training and coaching could have in this respect. Levels and qualities of interactions arising when e-mentoring facilities have been used have been debated in the literature. For example, Harrington (1999) argued that: "Email is frequently challenged as being incapable of supporting as deep a social contact as face-to-face communication. And it may well be that email needs to be used in combination with other media for best results. However, it should also be noted that there is a wealth of evidence of strong interpersonal relationships being built through email. For example, anecdotal and television documentary evidence, along with some interesting cases looking at the use of email to build intimate relationships, all of which demonstrate that social penetration processes (getting to know one's communication partners more closely, leading to relationship formation) occur with

sustained email interactions as they do in face-to-face interactions (Van Gelder 1991; Walther and Burgoon 1992)."

Harrington (1999) concluded that: "those who argue about the 'leanness' of email are focusing not on the variety of its possibilities but on the rather limited use of addressing routine work-based tasks". In terms of the challenges posed when introducing e-mentoring, she drew attention to the need to consider that:
- "Many people, possibly influenced by media richness theory, see email as a poor choice for complex exchanges.
- "E-mentoring has to be introduced thoughtfully and within an appropriate context.
- "It may take time to introduce e-mentoring.
- "Email is seen as a medium low in richness because it is text-based.
- "Concerns about the confidentiality of email."

That social interactions have a role in learning and learning processes is beyond doubt. From a perspective concerned with how social interactions influence and impact learning, there are at least three particular aspects of note to consider: the ways in which e-mentoring might stimulate forms of 'inner discussion or thought' (as discussed by Vygotsky, 1986); the ways in which group or collaborative structure or endeavour might lead to the development of 'communities of practice' (as discussed by Lave and Wenger, 1991); and the ways that text might relate to verbal or discussive forms of interaction (as discussed by Pask, 1975). The study of the *LP+* implementation to date, reported in this document, has pointed to some specific instances where benefits have been reported, as well as exploring some of the nature of the interactions where those have existed.

Published research on the implementation (rather than outcomes of uses) of VLEs has focused to date much more on instances within the higher education sector than on those in the school sector. Barajas and Owen (2000) highlighted a number of key issues and questions that, from a higher education perspective, should be considered when implementing VLEs. These questions were grouped into three phases of implementation (and here they have been selected or modified so that they apply to school sector issues):

- First phase: teaching and learning issues
  - What are the new strategies and methods that apply to teaching with VLEs?
  - What are the new "soft" and "hard" skills that teachers need in multidimensional and intercultural VLEs?
  - What are the best assessment methods using VLEs?
  - How do we manage teacher overload on VLEs?
  - Is there an emergence of new learning materials on VLEs?
- Second phase: institutional issues
  - Is there a need for additional valid research to establish the issues for teachers or learners avoiding using VLEs, concerned perhaps with the nature and type of learning context, or on the other hand, whether avoidance behaviour is based on erratic perception or beliefs and reasons that could easily be overcome?
  - Should relevant national bodies engage in efforts to overcome and lessen resistance?
  - What are the institutional perspectives to consider when undertaking VLE implementation?
  - What are the factors that lead institutions to consider using VLEs?
  - Do all institutions regard VLEs as the best approach to meet social and in some cases market needs?
  - What type of institutional change is being sought?
  - What is the management approach to institutional change?
- Third phase: cross-cultural issues
  - Which methodologies should be used to overcome any language barrier problems?
  - Which methodologies should be used to enhance intercultural communication among teachers and learners?
  - Which methodologies should be used for the most cost-effective design and production of learning materials to be used on a VLE?

Different institutions have considered these questions in different ways, but a pattern that is emerging is the finding of the need to consider the development of skills and techniques by having resources embedded within the VLEs themselves. At this stage, some institutions of higher education have found the need to develop resource banks on their VLEs, which support users with the development of appropriate skills and techniques of practice. For example, in conjunction with departments and schools in the University of Leeds, the library have: "produced a range of new online resources and tutorials designed to support the needs of our different users: new students, students, researchers, personal tutors and lecturers. The resources cover a wide range of academic skills including reading, writing and finding and managing information" (2009).

Some practitioners who have reported their findings about implementation of VLEs have pointed to the need to consider and accommodate certain change factors. Chowcat (2006), describing findings about implementation of a VLE across the South Yorkshire e-Learning Project, stated that: "the process of implementing and embedding e-learning in education and training is more than just a technical matter. It is a project of cultural change. However, in order to bring about such change the availability of technology is insufficient in itself. There must be drivers for change that lead teachers and trainers to look to an e-learning solution, and training and support processes in place that help them work with online resources in appropriate ways". The roles of the Wolverhampton LA consultants have clearly intended to address this highlighted need. Harris (2006), reviewing experience from a secondary school implementation of a VLE, indicated that the implementation process could be long: "In 2000 we started piloting *digitalbrain* as a VLE to encourage continuity of work and resources and to start to change the culture of learning. This was based upon clear strategic planning for the use of ICT in the school and a clear idea of how ICT could improve learning. We have worked to remove barriers to the use of the VLE, but we are still on a journey to embed its use in teaching and

learning across the school". Wolverhampton LA consultants are finding similar needs; it is important to maintain support over a fairly long period of time in order to bring about change through a number of steps rather than through a single stride. Walker (2006) indicated a particular strategy to implement a VLE that his secondary school had chosen to take: "We have decided that, in order to develop our use of the platform and fully capitalise upon its potential to improve teaching and learning, it would be helpful to establish a model department, showcasing exemplar practice and to become a focus for continuing staff training across the whole College". This is an approach that has been paralleled in the work of the Wolverhampton LA consultants. Aubrey-Smith (2007), implementing a VLE within a primary school, reported using a range of phased, successive implementation approaches: "…to generate a clear picture of the interest and capability of families to use a VLE at home, I undertook a survey of home Internet provision of the children ... We invited eight children who were particularly IT-literate and who had particularly supportive families to undertake a pilot homework example which was designed to be as similar as possible to the paper-based homework given to the rest of the cohort ... we began to provide homework of this nature for all children in the Year 1 cohort ... a large proportion of these children were accessing the VLE more than once a week for their homework ... it became apparent that children were carrying out the same task a number of times, which simply did not happen with paper versions of the same task ... children were provided with time during the day where they could work independently, with a friend, or with me, to carry out their online homework activity ... we have been embedding our VLE into classroom activities in the same way that any other tool; pencil, book or paint, might be used ... we set up 'Topic Rooms' within which resources and activities were housed to complement traditional classroom activities ... We have also been sharing our collaborative projects for the past year, uploading interactive images, talking books, short videos and other outcomes which have been created by children as part of their classwork so that we can share these with families ... As more of the school

staff are becoming involved with our VLE, we are increasingly keeping our school diary online, creating resource centres for teaching teams to collaborate with increasing ease, and we have begun to share our work with other schools through inter-school projects". Although the pattern of phases described by this author is not identical to those used by Wolverhampton LA consultants, nevertheless, the principle of successive steps linked to widening access and pedagogy has been accommodated within the implementation plan and process.

Aubrey-Smith (2007), in her account of implementation, goes on to make recommendations to those concerned with implementation: "I would recommend that Local Authorities allow sufficient time (whether this be funded, or within training provision) to consider how best they can use VLE tools to support the learning in their classroom; this is not a one-size-fits-all approach; each teacher must decide for themselves in order that best use of the VLE is made. A second recommendation to Local Authorities is to provide the means by which schools can work together, sharing ideas and where appropriate sharing a VLE". She goes further and recommends a route for teachers in schools:
- "Begin by simply inviting children to access the VLE to view messages or pictures;
- "Continue by inviting children to use simple tools which equate to an answer and response, for example a quiz, sending a message or posting to a forum;
- "Expand children's usage by providing opportunities to contribute more freely; providing an open forum task or web links;
- "Encourage children to respond to peer's contributions; replying to other children's forum entries;
- "Empower children to choose their own activities by providing a range of activities and tools from which children can choose in order to work towards self-directed activities".

It is clear that the pattern of support provided by the Wolverhampton LA consultants is in line with the process outlined above (although the Wolverhampton LA approach has focused initially to a greater extent on supporting and encouraging teacher access). What is clear from

the entire range of implementations discussed here, in institutions ranging across higher education to primary schools, is that forms of phasing have been used to accommodate and address aspects and issues where there is a need to consider change appropriately. The implementation of the *Virtual Workspace* VLE across Worcestershire and Wolverhampton LAs in secondary schools involving the 14 to 19 year-old student age group (reported in Passey, 2007), was undertaken in ways where phasing was not used in the same way, and where support for managers, teachers and students was far more ad hoc (although it should be recognised that this was an early example of VLE implementation, and practices were being developed and explored without the benefit of existing practice to fall on). Although the implementation of *LP+* has taken more time than some schools (as will be seen later in the report) would have liked, the success in certain schools to date can be seen to parallel the successes of other reported instances where phased approaches, both to the introduction of technological devices, and to the emergence of pedagogical approaches, have been taken.

4. Background to the implementation

In the first half of 2007, Wolverhampton LA gave schools the opportunity to opt into a citywide learning platform development (*LP+*). The learning platform that was procured used underlying *SharePoint* technology, and had an overlying *LP+* interface.

Following commitment of the time necessary for negotiating and liaising with school staff, an initial pilot was run, begun in May 2007, with three Key Stage 2 schools, three Key Stage 1 and nursery schools, and one special school. The schools were selected on the basis of their being considered to be sufficiently e-mature for them to think about uses of a learning platform. In this respect, some had been involved in the *Learning2Go* or other information and communication technology (ICT) initiatives, and two were *ICT Mark* schools. Initial meetings with the schools focused on talking about separate uses, by teachers, by pupils, and by parents. Each school selected one of these user groups as a focus for implementation. Initially only one school focused on uses with teachers, a nursery school focused on use with parents, and the remainder chose to focus on uses with pupils. However, in all cases, it was found that a focus on teacher uses was necessary for effective implementation to be developed with the other groups, and the identification of this 'new' focus for many of the schools arose after only a short period of time had elapsed. To support teacher and pupil uses, resources were developed to run on *LP+* (including, more recently, *2Simple* resources to support infant pupil uses, similar to the standard resources available from *2Simple* in that there are drawing and text-based packages available, although the current facility within the learning platform has not yet been developed as fully accessible *2Simple online* as this latter facility requires a Single-Sign-On, which is not yet available).

Following the pilot, there was a rollout of the learning platform across schools widely. Schools were supported in cohorts of about 15, and two full-time members of staff were seconded specifically for this purpose (one focusing on providing pedagogical support, and the other on technical support). By December 2008, five cohorts of primary schools subsequent to the pilot cohort had worked on implementation of the learning platform. Schools across the LA who were not involved in the pilot cohort were able to choose a specific pupil cohort for their implementation, and they filled in a self-review framework to identify their levels of e-maturity at the outset. Schools will in the future be able to complete further self-review frameworks, to identify their progress in terms of e-maturity.

5. Implementation and integration of practice at school and LA levels

Implementation cohorts and patterns of use

By November 2008, the implementation involved seven successive cohorts:

- A Pilot Cohort started in May 2007.
- Cohort 1 started in October 2007.
- Cohort 2 started in January 2008.
- An Early Years Cohort started in April 2008.
- Cohort 3 started in June 2008.
- Cohort 4 started in September 2008.
- Cohort 5 started in November 2008.

An advantage of using this form of cohort implementation model was the fact that early cohort experience could be used throughout the implementation to enable subsequent school cohorts to use the learning platform effectively but more quickly. Within the implementation of this initiative, a number of lead teachers (at least one lead teacher in each school involved) were taken to the point where they had seen opportunity and had wanted to develop their expertise. It was recognised that this had been a different implementation pattern from that used for the introduction of *Virtual Workspace* (the learning platform designed for use by the 14 to 19 year-old age group), where access to the learning platform was provided for all users (managers, teachers and learners) from the outset of the initiative (described in the report by Passey, 2007).

Schools across Wolverhampton LA involved in the implementation of the *LP+* learning platform were able to elect the cohort they wished to join. Each school involved identified a number of key people to support the initiative: a strategic lead; an implementation lead; and an administrative lead person. Schools were asked to select and identify three goals for using *LP+*, and some completed a self-review framework (SRF). An example of a school SRF is shown in Table 1. This indicates that the average position of this particular school in terms of ICT level was about 3 (so, it would have been assessed as average, rather than embryonic or advanced at the time of

completion of the framework). These SRFs (or review frameworks that are similar) are due for review by schools, and details from these future review documents would allow levels of shift subsequent to schools having a learning platform to be identified more accurately in terms of specific features.

Table 1: An example school SRF completed at the start of the learning platform initiative

ICT feature	Level identified
Institutional readiness – the vision	2
Strategic leadership	2
E-learning development planning	3
Budgetary effectiveness for e-learning	4
Use of MIS	2
Communications	4
Using communication tools	4
Electronic communications (staff)	3
Home school communications	5
Security and safety	3
Application of e-learning capability across curriculum	4
Flexible curriculum	4
Curriculum development – staff attitudes	3
Online access for learning and teaching	3
Pupils' expectations for use of e-learning	3
Digital literacy skills	3
Pupils managing files	4
Teacher use of e-learning	3
Self- and peer-assessment	4
Using ICT to support assessment	3
Identifying individual staff skills and needs	3
Coaching, mentoring and individual support	4
Understanding	3
Pupils and families	4
Leadership for extending learning	2
Quality of use of e-learning for learning and teaching	3
Pupils	4
Families	4
Learning beyond the classroom	5
Development of pupils' e-learning capability	3
Evaluation	5
Sufficiency of resources	2
Access to resources	5
Technical support	2
Attitudes to learning	3
35 features	**Total 118 (average 3.37)**

In terms of development practices involved in this implementation, when looking across schools involved, LA consultants found that there was a general pattern of progressive use that emerged:

- Staff access and staff communication were generally first priorities.
- These were followed by the creation of class sites (including photographs of pupils, for example).
- Individual pupil use followed, where pupils accessed their own sites as well as using a class site for:
  - Personal documents.
  - Discussions of what was happening.
  - Texts about visits.
  - News, calendars and announcements.
  - Creating wikis.
  - Photo libraries.
- Individual parent use followed, but across schools this had reached varying stages of development by September 2009.

Implementation after eighteen months

LA consultants provided implementation details about individual schools in each of the cohorts (up to and including Cohort 4) in early November 2008. Table 2 following shows details of estimated stages reached and numbers of users at that time.

The numbers of schools indicated in the totals above did not include a secondary school involved in the initiative (which was felt to be 'very well on', particularly in terms of staff use). The nursery schools involved were felt to be at an 'embryonic' stage, due largely to the lack of an e-portfolio system that was needed to share work with parents for developing learning journeys. Online resources from *2Simple* were also not widely accessible at that time, and this had limited some involvement with nursery schools and those schools with Key Stage 1 pupils.

Table 2: Details of involvement with *LP+* by cohort (November 2008)

Cohort (pilot, 1, 2, etc.)	Sector (primary, nursery, etc.)	Estimation of stage reached currently (very well on, well on, embryonic, failing)	Numbers of teachers involved and using the learning platform	Year groups involved	Rough numbers of pupils using the learning platform	Whether parents are using the learning platform
Pilot	Primary (3)	Very well on (1), Well on (2)	65	R (1), 1 (1), 2 (1), 3 (2), 4 (2), 5 (3), 6 (3)	526	Just started (1), None (2)
Cohort 1	Primary (9), Special (2), Infants (1)	Very well on (1), Well on (9), Embryonic (2)	188	3 (1), 4 (1), 5 (1), 6 (1), Awaiting accounts (11)*	120	None (12)
Cohort 2	Primary (13), Junior (1)	Very well on (1), Well on (8), Embryonic (5)	160	Awaiting accounts (12)*, None (2)	None	None (14)
Early Years	Nursery (6), Infants (4)	Very well on (0), Well on (3), Embryonic (7)	41	Need to develop strategy for Early Years access (9), Awaiting accounts (1)	None	None (10)
Cohort 3	Primary (14)	Very well on (0), Well on (8), Embryonic (5), Not yet started (1)	148	Next term (14)	None	None (14)
Cohort 4	Primary (12), Special (2), Junior (1), Infants (1)	Very well on (0), Well on (1), Embryonic (15)	91	Summer term 2009 (16)	None	None (16)
Totals	*Primary (51), Special (4), Junior (2), Infants (6)*	*Very well on (3), Well on (29), Embryonic (34), Not yet started (1)*	*693*	*R (1), 1 (1), 2 (1), 3 (3), 4 (3), 5 (4), 6 (4)*	*636*	*Just started (1)*

(* It should be noted that although these highlighted schools did not have pupil accounts when the data was collected, that these were set up by the end of November 2008, and accounts were issued to all Cohort 1 and 2 schools during the week beginning Monday 24th November 2008, with the option of receiving training for staff in school on the development of class sites.)

In early November 2008 there were 63 schools involved across 6 cohorts. Many of these schools were judged by LA consultants to be 'very well on' or 'well on' in terms of development (32 in total). Across all of the schools, there were 693 teacher users, 636 pupil users (mainly in Years 3 to 6), and one school was exploring remote parental access.

The LA consultants provided details in November 2008 to indicate how pupils were accessing and using the learning platform. These details are shown in Table 3 following.

Of the forms of uses of the learning platform that might have been introduced by schools, it can be seen that use of news, calendars and announcements was most commonly encountered (in 44 schools in total), with photo libraries almost as commonly found (32 in total). Few schools at that stage involved pupil online discussions (3 in total), or pupils having documents online (3 in total).

It was recognised by LA consultants that there were a number of additional features of implementation that were at that time of interest, and under discussion by schools, rather than these being fully implemented. At that point in time:

- No particular inter-school uses had been seen, but it was felt that the learning platform tended to pull a great deal of use together within one area, and that this itself had impacts for staff and pupils.
- Videos had been produced in some schools, but had not yet been published on the platform. This aspect was felt to be important, as it was felt likely that parents would be likely to access the showcasing of television or video broadcasts from schools. In this respect, there was at that time some discussion about access rights and data security.
- The LA was engaged in discussions with Capita SIMS, looking at implementation of *Webparts* to support data access remotely.
- There was no e-portfolio system in place at that time, so reflection about pupil work with parents could not happen.
- *Espresso* resources were at that time accessible through the learning platform by teachers, but not by pupils.

Table 3: Levels of forms of involvement by cohort (November 2008)

Cohort (pilot, 1, 2, etc.)	Whether pupils have individual documents on the platform	Whether pupils are involved in online discussion	Whether pupils see or put up text about visits	Whether news, calendars or announcements are on the platform	Whether pupils have created wikis	Whether there are photo libraries on the platform
Pilot	2	2	2	3	0	3
Cohort 1	1	1	1	11	1	10
Cohort 2	0	0	0	13	0	7
Early Years	0	0	0	3	0	2
Cohort 3	0	0	0	9	0	9
Cohort 4	0	0	0	5	0	1
Totals	*3*	*3*	*3*	*44*	*1*	*32*

Implementation after two years

LA consultants provided similar implementation details about each school in each of the cohorts in June 2009. Table 4 following shows details of estimated stages reached and numbers of users at that time.

Table 4: Details of involvement with *LP+* by cohort (June 2009)

Cohort (pilot, 1, 2, etc.)	Sector (primary, nursery, etc.)	Estimation of stage reached currently (very well on, well on, embryonic, failing)	Numbers of teachers involved and using the learning platform	Year groups involved	Rough numbers of pupils using the learning platform	Whether parents are using the learning platform
Pilot	Primary (3)	Very well on (1), Well on (2)	All staff (3)	N (1), R (1), 1 (2), 2 (2), 3 (2), 4 (2), 5 (3), 6 (3)	600	Yes (1), None (2)
Cohort 1	Primary (9), Special (2), Infants (1)	Very well on (2), Well on (7), Embryonic (3)	All staff (10), 3 to 5 (2)	N (2), R (3), 1 (4), 2 (4), 3 (7), 4 (7), 5 (7), 6 (7), mixed classes (1)	1,410	Yes (1), None (12)
Cohort 2	Primary (14), Junior (1)	Very well on (3), Well on (6), Embryonic (5), Notice of closure (1)	All staff (11), 1 to 5 (2)	N (4), R (4), 1 (9), 2 (9), 3 (10), 4 (10), 5 (10), 6 (10)	1,890	Yes (3), None (10)
Early Years	Nursery (6), Infants (3)	Very well on (0), Well on (2), Embryonic (7)	All staff (2), 1 to 5 (1)	Need to develop strategy for Early Years access (6), R (1), 1 (1), 2 (1)	180	Yes (1), None (2)
Cohort 3	Primary (14)	Very well on (2), Well on (7), Embryonic (5)	All staff (11)	N (1), R (3), 1 (7), 2 (7), 3 (7), 4 (7), 5 (7), 6 (7)	1,300	None (10)
Cohort 4	Primary (12), Special (2), Junior (1), Infants (1)	Very well on (0), Well on (4), Embryonic (12)	All staff (12), 1 to 5 (1)	N (0), R (0), 1 (1), 2 (1), 3 (1), 4 (1), 5 (1), 6 (1)	150	None (13)
Secondary	Secondary (3)	Very well on (0), Well on (1), Embryonic (2)	All staff (3)	7 (1), 8 (1), 9 (1), 10 (1), 11 (0)	500	None (3)
Totals	*Primary (52), Special (4), Junior (2), Infants (5), Nursery (6), Secondary (3)*	*Very well on (8), Well on (29), Embryonic (37), Notice of closure (1)*	*All staff (52), 1 to 5 (6)*	*N (8), R (12), 1 (23), 2 (24), 3 (27), 4 (27), 5 (28), 6 (28), 7 (1), 8 (1), 9 (1), 10 (1), 11 (0)*	*6,030*	*Yes (6); None (52), Yet to start (14)*

By June 2009 there were 72 schools involved across 6 cohorts (with 14 of them yet to embark on their implementation). Many of these schools were judged by LA consultants to be 'very well on' or 'well on' in terms of development (37 in total). Across all of the schools, there were 52 where all teachers used the learning platform, there were 6,030 pupil users (increasingly involving pupils in Years N and R when compared to figures for November 2008), and 6 schools provided parent access. Comparing these numbers of schools with the total numbers across the LA, 52 primary schools out of a total of 62 (84%) had a learning platform, and 69 nursery, infant, junior, primary and special schools out of a total of 90 (77%) had a learning platform.

There were high levels of shifts in terms of reported access and usage between November 2008 and June 2009. These levels of shift are shown in Table 5 following.

Table 5: Shifts in involvement with *LP+* (between November 2008 and June 2009)

When levels were identified	Sector (primary, nursery, etc.)	Estimation of stage reached currently (very well on, well on, embryonic, failing)	Numbers of teachers involved and using the learning platform	Year groups involved	Rough numbers of pupils using the learning platform	Whether parents are using the learning platform
November 2008	Primary (51), Special (4), Junior (2), Infants (6)	Very well on (3), Well on (29), Embryonic (34), Not yet started (1)	693	R (1), 1 (1), 2 (1), 3 (3), 4 (3), 5 (4), 6 (4)	636	Just started (1)
June 2009	Primary (52), Special (4), Junior (2), Infants (5), Nursery (6), Secondary (3)	Very well on (8), Well on (29), Embryonic (37), Notice of closure (1)	All staff (52), 1 to 5 (6)	N (8), R (12), 1 (23), 2 (24), 3 (27), 4 (27), 5 (28), 6 (28), 7 (1), 8 (1), 9 (1), 10 (1), 11 (0)	6,030	Yes (6); None (52), Yet to start (14)
Differences	*Primary (1), Infants (-1), Secondary (3)*	*Very well on (5), Embryonic (3), Notice of closure (1)*	*Increases of numbers of schools where all staff were involved, but not quantified*	*N (8), R (11), 1 (22), 2 (23), 3 (24), 4 (24), 5 (24), 6 (24), 7 (1), 8 (1), 9 (1), 10 (1)*	*5,394*	*Yes (6)*

Overall, the major shifts reported across the six-month period were:
• More secondary schools becoming involved.
• Increased numbers of schools judged to be 'very well on', but also 'embryonic'.
• Increased numbers of schools where all staff used the learning platform.
• Increased access for all pupil year groups.
• Increased numbers of pupils involved.
• Some schools providing parental access.

Although it should be noted that pupil logons were introduced for many schools only at the end of November 2008, these shifts nevertheless suggested (and were supported by evidence gathered during visits to schools) that the learning platform:

• Could be implemented and used fairly easily within reasonable time frames.
• Offered a range of facilities to meet interests of different users.
• Was affected by factors such as changes of staff, including head teachers.

In June 2009, the LA consultants provided details of how pupils were accessing and using the learning platform. These details are shown in Table 6 following.

Table 6: Levels of forms of involvement by cohort (June 2009)

Cohort (pilot, 1, 2, etc.)	Whether pupils have individual documents on the platform	Whether pupils are involved in online discussion	Whether pupils see or put up text about visits	Whether news, calendars or announce-ments are on the platform	Whether pupils have created wikis	Whether there are photo libraries on the platform
Pilot	3	2	3	3	0	3
Cohort 1	8	8	7	12	4	11
Cohort 2	9	6	7	12	3	10
Early Years	1	1	0	3	0	1
Cohort 3	5	5	5	10	2	9
Cohort 4	1	1	1	13	0	9
Secondary	1	1	1	3	1	1
Totals	*28*	*24*	*24*	*56*	*10*	*44*

Of the forms of uses of the learning platform that might have been introduced by schools, it can be seen that use of news, calendars and announcements was still most commonly encountered (in 56 schools in total), with photo libraries also commonly found (44 in total). An increasing number of schools at that stage supported pupils with documents online (28 in total), pupil online discussions (24 in total), and pupils seeing or putting up text about visits (24 in total). A number of schools also supported pupils in creating wikis (10 in total).

With increased pupil logons being accessible from the end of November 2008, it was clear that schools were enabling pupils to access and use facilities directly on the learning platform. The high levels of shift in terms of forms and levels of use by pupils between November 2008 and June 2009 are shown in Table 7 following.

Table 7: Shifts in levels of forms of involvement (between November 2008 and June 2009)

When levels were identified	Whether pupils have individual documents on the platform	Whether pupils are involved in online discussion	Whether pupils see or put up text about visits	Whether news, calendars or announce-ments are on the platform	Whether pupils have created wikis	Whether there are photo libraries on the platform
June 2008	28	24	24	56	10	44
November 2008	3	3	3	44	1	32
Differences	*25*	*21*	*21*	*12*	*9*	*12*

It is clear that within a six-month period, pupil access and uses had shifted in a strong proportion of schools. Indeed, an increase of 20 schools constitutes over a quarter of the total number involved. Wolverhampton LA has worked closely with *LP+* in this development initiative, and this has enabled progress with important additional features to support schools in using the learning platform easily. When the status of additional features that would be of value to schools and recognised by LA consultants under discussion in November 2008 are considered, shifts in terms of three of these facilities by June 2009 were evident:

- Some inter-school uses had been seen (and these are evidenced in the Vignettes in Section 7).
- Videos had been produced in some schools, and had been published on the platform (evidenced in Sections 6 and 7). The LA consultants produced a video site that could be added onto all school platforms for the showcasing of media.
- *Espresso* resources in November 2009 were still accessible through the learning platform by teachers, but not by pupils, but by January 2010, *Espresso* resources had become available to pupils in schools through the *Primary Broadband* route, and *Espresso* video could also be embedded into a class site for use beyond the school.

Shifts in the case of two other facilities had not progressed by January 2010:

- The LA was still engaged in discussions with Capita SIMS, looking at implementation of *Webparts* to support data access remotely.
- The LA was in discussions with *LP+* regarding the implementation of an appropriate e-portfolio system.

Features of the implementation
The implementation undertaken to date has clearly accounted for:

- Incremental development (the LA were convinced that an approach which gave immediate full access to *LP+* for any teachers and schools would not be effective).
- Vision (developing this as a part of the process of involvement).
- Sharing (to enable ideas and experiences from previous cohorts to enable implementation to move on more quickly and effectively).
- Learning from successes and issues equally.

A number of specific key issues highlighted by LA consultants as being important in enabling schools to move on effectively with uses of the learning platform were evidenced during the evaluation, and these are highlighted in the Vignettes in Sections 6, 7 and 8. In particular, the LA consultants highlighted leadership, school improvement focus, and continuing professional development as important factors. More recently, the importance of systemic approaches to the implementation has been highlighted, and the need for 'common messages' through advice and guidance has become more apparent. Those personnel supporting schools through inspection or advice have more recently been reported to be recognising the potential benefits of the learning platform; it was reported that LA inspectors felt that the learning platform was likely to be important in terms of helping to address pupil mobility issues that were faced by some schools, for example.

When schools embarked on this development, LA consultants provided them with ongoing advice and support. A starting page for a school about to embark on using *LP+* was provided, which had a standard build. The school could put on its logo, name, and select a colour scheme. A photomontage was created to make it more school-specific. Initially, the head teacher and 2 or 3 teachers within the school were given full control of the site, and they were shown how to edit in *SharePoint*. The front page could be produced so that it was public facing. When this was complete, the focus was shifted to the staff area. Staff were encouraged to create a document library, and the page offered links to a range of other sites and resources including the *Espresso* home access resources, and *Grid Club*. A link to e-learning support provided access to interactive animation guides, and a large number of animated support files. Free software was linked to the page, such as *Flash* software. Frequently asked questions (FAQs) were provided, courses were listed, and these could be booked online. The classes' site was the next area of focus. This had buttons to allow access to specific years, classes, or groups such as the school council, for example. The parents' site was the last focus. Additionally, there was a pilot in place in 4 schools (an infant, a primary, a special and a secondary school), to offer *SIMS Learning Gateway* (*SLG*) via *LP+*.

Although a number of schools embarked at the same time on a pilot implementation, evidence from these schools suggested that one primary school had taken an initial lead in many respects, and had been most actively involved. It was not clear from evidence how far the developments led by this school would represent the needs of others, but some of the key issues being raised by other schools appeared to have been addressed already within the developments reported in this lead school. One major area of early frustration, the lack of access to pupil accounts, was resolved satisfactorily by the end of November 2008, so that schools implementing the learning platform from that time did not at a later stage need to wait for pupil accounts. However, with regard to pupil accounts, some schools would have liked to have had access to facilities to set these up themselves (and perhaps more importantly to amend them when pupils left and joined the school at short notice). By January 2010 this issue had been resolved, through the creation of a Learning Platform Administration site that could be used to generate new accounts or instantly re-set passwords. A named member of staff in each school was designated as the administrator for this facility.

Additional to the standard provision offered at the outset of the implementation, some schools developed specific facilities, and integrated these in advance of wider integration across all schools:
- *2simple* was linked to one school initially.
- Videos produced in one school were integrated in *LP*+ ahead of other schools (created in partnership with *Espresso* in a Creative Partnership school).
- There was a '*Worrybox*' offered on the site of one school, so that pupils involved in serious incidents could send an emergency email, which was received by 5 designated members of staff on a rota system. By January 2010 this feature had become a part of the standard build for any school adopting the learning platform.
- Some schools set up discussions with pupils, with contributions outside as well as inside school.

It was clear from visits to schools that different schools had taken different approaches to the integration of the learning platform across areas of school use. These differences were exemplified by the alternative approaches taken by the three lead schools in the pilot cohort:
- In one school, the lead teacher was released for a period of time weekly to work on the development. The learning platform was taken on as the central element of the school's e-learning strategy, and the school's development plan was written around it. By June 2008, all staff used *LP*+.
- In a second school, access to the learning platform on mobile devices had been a major focus. In this school, pupil accounts were set up before staff had access, which was rather different from the practice that had happened elsewhere.
- In a third school, a parallel platform had been run and used (the school's intranet), and it took some time for the school to take the decision to move to the use of *LP*+ as its central facility.

Beyond the pilot cohort stage, schools selected the cohort they would join. Different cohorts were seen to be working at different stages of implementation, and certain lessons had clearly been learned at different cohort stages:
- Schools in Cohort 1 had a rather false start, and needed to re-implement *LP*+ after the interface was redesigned (it was made more 'web-like').
- Many head teachers were involved as lead teachers in Cohort 1, and time issues were sometimes identified. Advice for subsequent cohorts encouraged lead teacher involvement, with head teacher support.
- Schools in Cohort 2 were felt to be all roughly at the same stage of development in June 2008.
- By November 2008, only 12 primary schools from across the LA were not involved, and one secondary school was involved also. By September 2009, the number of schools not involved had fallen, and the number of secondary schools involved had increased.

In terms of providing ongoing implementation support, since March 2009 it has been recognised that although the cohort system

initially used at the outset of implementation was a useful structure to put in place, that its use had become increasingly redundant. The LA consultants explored ways to regroup schools, in order to increase the effectiveness of the support and advice that they could provide. By January 2010 new clusters had been created, which more accurately reflected the stage of implementation that a school had reached.

In the regrouping of cohorts, the LA consultants placed schools into 5 primary school clusters (based on a fairly informal view of the stage that schools had reached), and a secondary school cluster. Using this approach, the LA consultants felt they were able to offer support more appropriate to the stage a group of schools had reached, rather than trying to work with them all individually, or in rather arbitrary groupings that were based only according to the date their implementations started. The

groupings were based on a perspective across seven different criteria:

1. The use of the learning platform by schools to communicate with staff.
2. Pupil use of the learning platform.
3. Attendance on training sessions delivered by the LA consultants.
4. Levels of sharing of expertise with other schools.
5. The extent to which all staff were engaging with the learning platform.
6. The extent to which parents had become engaged.
7. The extent to which other stakeholders including governors were involved.

The regrouping of cohorts led to cluster grouping that were roughly equal in terms of numbers of schools. The numbers of schools in each cluster are shown in Table 8 following.

Table 8: Numbers of schools in new cluster groups in January 2010

Cluster	1 (those who had developed most use by January 2010)	2	3	4	5 (those who had developed least use by January 2010)	Secondary
Number of schools in the cluster	15	17	16	17	15	5

6. Management and cost-effectiveness benefits at a school level

Managing implementation in the school

The implementation of uses of the learning platform has clearly depended upon a number of factors. It has been clear from visits to schools, and discussions with teachers and lead teachers, that these factors have included:

- The status of existing intranet facilities and their roles in providing access to resources.
- Opportunities to engage with teachers across a school.
- Head teacher and senior leadership support.
- Interests in engaging with the wider community, including the parental community.

- Lead teacher approaches.
- LA consultant support at both a pedagogical and technical level.

In a number of schools, *LP+* has become 'the' central core facility to enable access at a real and virtual school level, allowing a seamless provision whether teachers are present or not within the buildings. This central provision has been seen as necessary for curriculum planning as well as for school policy needs. A number of examples of management concerns, actions, approaches and initiatives undertaken in schools during the implementation of the learning platform are offered here, gathered from discussions with lead teachers and head teachers across the 22 schools visited, which illustrate the key factors listed above.

Vignette 1 – Taking decisions about rationalising platforms

In primary school A, a great deal of resource had been placed onto the existing school server and intranet prior to their having access to *LP+*, so a decision had to be taken by the school regarding when these resources would be taken across to the *LP+* platform. For some time, the school used their existing intranet in parallel with *LP+*. They selected LP+ as the platform to host certain resources. The school diary and calendar was developed on *LP+*, and this provided a useful point of access for staff widely, including lunchtime supervisors, who were encouraged to access the site at home, some of them using ICT for the first time when doing so. Finding aspects that would be of interest to teaching staff was key in helping the school to move forward at the point when they decided to use a single platform.

Vignette 2 – Setting up a vision and reasonable expectations

In primary school B, the head teacher had had experience with developing a learning platform in her previous school, and saw the platform as being 'the hub of the school', offering more than a website, as it provided management tools for the school. *LP+* was found to be very easy to use, and it was considered that the tools had been well developed. That parents and pupils were not able to access the system initially was felt to be an issue, as it was felt that prospective parents should see a front page sitting above *LP+*, so that they could gain limited access to the site. All 24 staff logged on to the platform (9 were teaching staff and 15 were support staff). Staff found that it informed them about what was happening with other classes. The platform was used for access to all assessment information; all staff used it for that purpose and for planning. A noticeboard on *LP+* was used by the head teacher and staff routinely, and the caretaker would have liked to be able to place items on a notice board also. The school felt that it would be helpful to have administration rights to put pupils on and to change their details on the site. The lead teacher felt that parents should have logins that were the same as their children so that access to work was transparent. To make the entire

---

facility safer, it was felt that teachers needed to see what children had done, and to be able to easily see what had happened that was 'new'. It was felt that aspects of the discussion facilities used by pupils had weaknesses, as there was no facility for threading, and it was necessary to read old documents to see the originating thread. The school was to run an ICT course for parents on Monday mornings and afternoons in the near future, and intended to use these sessions as a pilot to develop parent and children use of *LP+*. It was felt that there was a leadership issue to address - to ensure the quality of material and information on the platform, although it was recognised that it was easier to monitor the quality of pupil planning and provision as a consequence of having the learning platform in place. The head teacher found it was possible to provide immediate feedback to bring about rapid change, but that it needed to be used to monitor and raise standards. She felt that there was a need for the whole community to use it to ensure feedback brought about change in quality. To address home access issues, the school planned to run a cyber café in morning and lunch clubs, for those who could not access internet at home.

Vignette 3 – Long-term planning and short-term actions

In primary school C, ICT had been a focus for development for some 7 years. The implementation and development of uses of *LP+* had been mapped into a 4-year school development plan. The school had used a portfolio system for 2 years prior to the introduction of *LP+*, and had been involved in digital communication across the school. For the first 4 months of the project, the lead teacher worked with *LP+* on personal development and interface design, afterwards introducing the leadership team to *LP+* through a number of dedicated meetings. The lead teacher trained them on use of *LP+*, and the transfer from the previous *SchoolMaster* facility. The first staff meeting on *LP+* was run in September 2007, and a system was put in place to provide buddy support, with a teacher linked to a member of the leadership team. Additional features of *LP+* were introduced to staff in the last 10 minutes of each staff meeting, and this pattern was used for the whole of the 2007 to 2008 school year. The facilities introduced included email, my documents, pictures, calendars, and my classes. By November 2008, there was a public interface for the school on *LP+*, and a governors' area. The staff area included:

- Head teacher notices.
- Teacher news, including a weekly diary put up on a Friday, which could be viewed over the weekend (and it was possible to access older as well as new news items).
- Weekly plans were placed into a documents area (and were always reviewed as part of the head teacher's monitoring system).
- Planning items were put in term folders, organised by year, and could be selected by using filters. Teachers could read feedback about these items from the head teacher (and comments were able to be made by the head teacher even if she was away from the school).
- Other documents were included within *LP+* also (such as those concerned with Creative Partnerships).
- A calendar, and teacher events.
- An area to report technical faults (including faults concerned with laptops used in each classroom as well as mobiles in use).
- Discussion areas, such as one on Culture Day or on the discipline policy.
- Surveys for staff to see how *LP+* was being used or to gather ideas for future use.

- A subject area for each subject, including one for each leader. Leaders maintained leader folders and subject main pages. Subject folders were titled and held specific documents. The science leader, for example, created a video that played on the science homepage. Each subject could identify 'rising stars' on its pages.

The use of *LP+* developed to the point where access rates were indicating an average level of access of 1 logon per day for each pupil and staff member. Facilities on the platform to support pupils included a '*Worrybox*', which could be used when pupils felt they were in dangerous situations. Messages from this box were sent to 5 designated members of staff. Pupils had their own *MySite*, which was like *Facebook (see Figure 4)*. They could access *Grid Club* (and homework was set for pupils through this facility). Top users were identified each term to receive top teacher and top pupil awards. At home, access to *LP+* was via the internet, but at school access to the internet was via *LP+*. All pupils from Year 1 used logons and passwords.

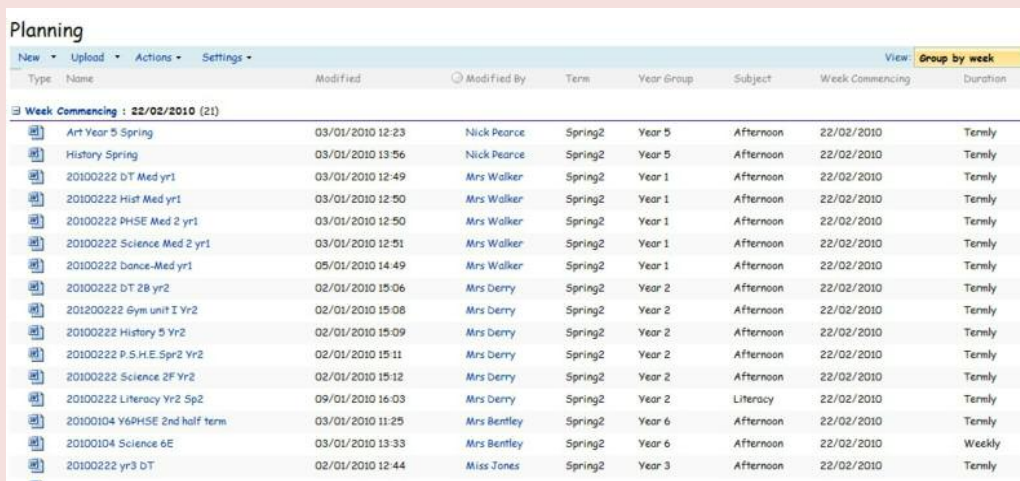**Figure 4: Easy links to facilities on a pupil *MySite***
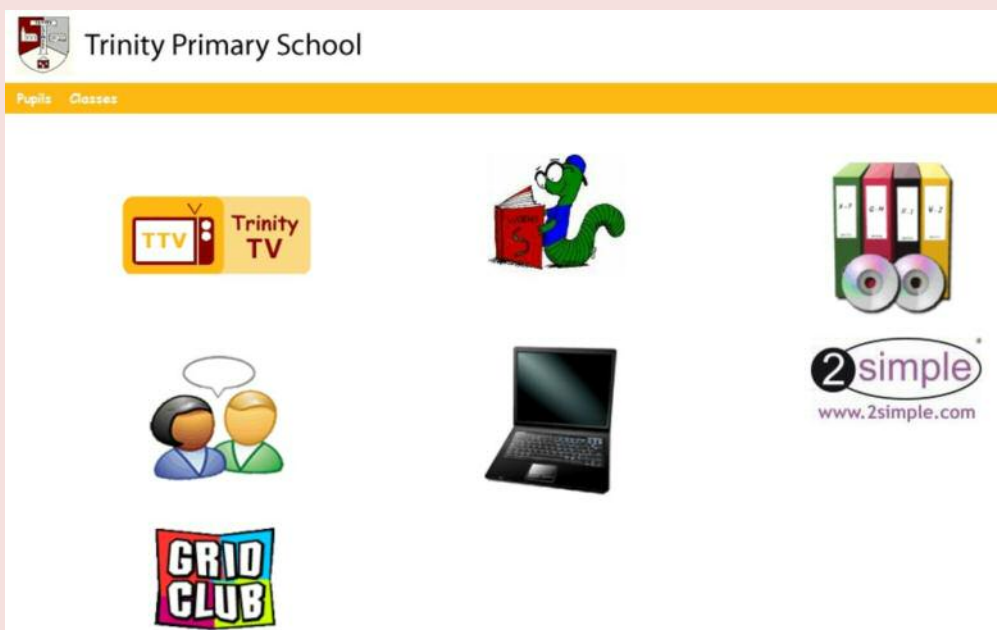
In November 2008 the school moved to using class sites, introduced through an in-service training day. Class pages were updated by staff, and teachers provided surveys for pupils. Staff used the facilities, and after 18 months it was reported that they could use them easily. Pupils could put additional work onto the site, such as videos, or animations. Parents were being introduced to the system by November 2008, and 19 selected parents were involved in 2 meetings to explore use of the site. Surveys were put on the site for parents to complete. It was anticipated that access to *SIMS* would be trialled within *LP+* by the school, and the school had already started to use online reporting. Governors had received usernames and passwords, and they were being introduced to the site. The school recognised that it had 'built it for our needs', so there was a need for other schools to view their needs in terms of the level of flexibility afforded to this school.

Vignette 4 – Structuring the handling of and access to documents and resources
In primary school D, the staff site hosts all assessment documents, all monitoring documents
and all policy documents. The school found that planning the structuring for handling
documents and their titling had been a critical need. Teachers now use the site and the
resources for their planning; the structure put in place allows for this. It involves use of
consistent titling of documents, consistent descriptions of each document so that filtering can
be used easily (see Figure 5), having agreed categories so that there is no confusion, and using
multiple filtering to the point where access to documents is easy and useful. There are rules in
place so that the senior management can see the things that are agreed. On the staff site,
clear categories on the left-hand menu take teachers to known sections. Agreed colours are
used to describe year groups and terms, for example. All teachers now use this system, and it
is found that it is easy to extend it when other documents and sections are needed. Although
not all staff were driven to use ICT, they do now all use the facilities on the learning platform.

Figure 5: Example of how documents are consistently titled to support handling

Type	Name	Modified	Modified By	Term	Year Group	Subject	Week Commencing	Duration
	Week Commencing : 22/02/2010 (21)							
	Art Year 5 Spring	03/01/2010 12:23	Nick Pearce	Spring2	Year 5	Afternoon	22/02/2010	Termly
	History Spring	03/01/2010 13:56	Nick Pearce	Spring2	Year 5	Afternoon	22/02/2010	Termly
	20100222 DT Med yr1	03/01/2010 12:49	Mrs Walker	Spring2	Year 1	Afternoon	22/02/2010	Termly
	20100222 Hist Med yr1	03/01/2010 12:50	Mrs Walker	Spring2	Year 1	Afternoon	22/02/2010	Termly
	20100222 PHSE Med 2 yr1	03/01/2010 12:50	Mrs Walker	Spring2	Year 1	Afternoon	22/02/2010	Termly
	20100222 Science Med 2 yr1	03/01/2010 12:51	Mrs Walker	Spring2	Year 1	Afternoon	22/02/2010	Termly
	20100222 Dance-Med yr1	05/01/2010 14:49	Mrs Walker	Spring2	Year 1	Afternoon	22/02/2010	Termly
	20100222 DT 2B yr2	02/01/2010 15:06	Mrs Derry	Spring2	Year 2	Afternoon	22/02/2010	Termly
	201200222 Gym unit 1 Yr2	02/01/2010 15:08	Mrs Derry	Spring2	Year 2	Afternoon	22/02/2010	Termly
	20100222 History 5 Yr2	02/01/2010 15:09	Mrs Derry	Spring2	Year 2	Afternoon	22/02/2010	Termly
	20100222 P.S.H.E.Spr2 Yr2	02/01/2010 15:11	Mrs Derry	Spring2	Year 2	Afternoon	22/02/2010	Termly
	20100222 Science 2F Yr2	02/01/2010 15:12	Mrs Derry	Spring2	Year 2	Afternoon	22/02/2010	Termly
	20100222 Literacy Yr2 Sp2	09/01/2010 16:03	Mrs Derry	Spring2	Year 2	Literacy	22/02/2010	Termly
	20100104 Y6PHSE 2nd half term	03/01/2010 11:25	Mrs Bentley	Spring2	Year 6	Afternoon	22/02/2010	Termly
	20100104 Science 6E	03/01/2010 13:33	Mrs Bentley	Spring2	Year 6	Afternoon	22/02/2010	Weekly
	20100222 yr3 DT	02/01/2010 12:44	Miss Jones	Spring2	Year 3	Afternoon	22/02/2010	Termly

Teachers now use planning and assessment areas, and the document library, widely. Staff can
use the facilities at weekends if they choose to do so, but there is no requirement for them to
do so. Consistent menus and layout have helped, as well as taking staff ideas and
incorporating their ideas into the overall structure. To structure the handling of documents, it
was found that folder systems did not work efficiently, so columns were set up to handle
these. However, it was necessary to know about underlying features, such as filtering to select
documents, so that the structure could be set up to use the facilities that existed.

Staff training was provided so that teachers could extend their use to class sites. All classes
now have a presence on the site - all class sites have documents, pictures, links, messages,
and calendar items. Homework is on the website for parents to see, and homework tasks are
updated regularly. Announcements are on the site, and pupils respond to these. In Year 5
pupils have sent messages to other pupils to ask questions via the site such as: 'Do I need to
take trainers?' It means that pupils are now sometimes better prepared than they were
previously. Staff put resources together, and a governor (also a parent) who is employed to
support the platform, puts these onto the site, so staff are not limited by any inadequacies
they might feel they have.
The school has launched a governors' site, and documents have been put onto the site.
Although not all governors had ICT access, some have now gained access (and training in
school), and governors are using the site. It is felt that the governors need to take ownership

of their facilities as far as is possible. One way the school is achieving this is to employ a governor for 2 afternoons, in order to support the site, and the development of the parents' site. Parents' pages have been set up with images and headlines, Family Learning has been used as a mechanism to launch the facility to parents, and parents are encouraged to produce photographs, text and documents to go onto the site. The governor who is employed was previously a parent in the school, so she is felt to be aware of the facilities that parents would want to see.

Vignette 5 – Structuring access through folders

In primary school E, implementation started from a staff perspective. The front page of the site was created to include a video of the building of the new school, and parents have access to this public area and to relevant policy documents. The staff page features announcements, links to class resources (that are used a lot), and links to other sites such as *Grid Club*. The lead co-ordinator ran INSET for teaching assistants and teachers, but she set up an extensive folder system beforehand (as many folders as possible), and she part-populated this structure to show staff how the system would work. It was found that staff took the platform on board readily, without a lot of ICT background (although most staff had used interactive whiteboards fairly extensively for the previous five years, and had their own laptops). All staff like the staff site; the system has been found to be useful, and is used for moderating planning and for finding resources for lessons. Specific topics are included in the folder system, such as e-learning, with some folder areas being more restricted in terms of access than others (such as the leadership team area). The calendar is used widely, and found to be very useful. All dates are put into it on a Friday, in readiness for the following week – it is printed out for the staff room too. Although this aspect of printing has not been saved by use of the learning platform, it is found that the learning platform is likely to be cost-effective, as it saves paper and printing when teachers are doing planning. As previous plans are held on the platform, these can be re-used by refining them as needed. Resources are also accessible by teachers at home, so they can access documents and resources when they want, rather than needing to wait to get to them the following day.

Vignette 6 – Managing implementation across a large school

In secondary school F, they originally used *Biblio* email, and wanted to move to a more sophisticated email provider, so used *ENGAGE* (some staff used email, and wanted to improve their communications). The school had not used *Virtual Workspace* (which had been used by many secondary schools in Wolverhampton LA). In November 2008, the school had some 47 full-time equivalent teachers and over 40 full-time equivalent support staff on its roll, and 780 pupils aged 11 to 18 years. The school is one of three in a consortium, all within walking distance. There are three reporting schemes used across the consortium; this school has taken *MS Excel* exports from *SIMS* and has placed them into *LP+*, a second school has used *SIMS*, and the third school has used *MS Access*. The secondary school involved in the *LP+* initiative will be a pilot for parental access to *SIMS Webparts*. So far, a major use of *LP+* has been to create shared documents and to increase communication. Staff are recognising the benefits, as the calendar is now available on *LP+*, as are bookings (see Figure 6). It is planned that *LP+* will provide the only access to weekly notices in the near future. The school has taken the approach of using cut-off points, bringing features into *LP+* that had been held on other electronic systems, then closing them off from the original source. It was found that support

Figure 6: Front page of a secondary school platform

from the LA had been helpful; *LP+* had fallen over on occasions when all staff were online at the same time, and the LA was working on addressing this problem with *LP+*, to prevent similar problems with pupils. Pupils use mobile devices in school, 134 in Year 7, 133 in Year 10, 40 in Year 11, and 62 staff use mobile devices. *LP+* is seen as a key to a stronger long-term vision. The school want all Key Stage 3 pupils to be on *LP+* by January 2009, and all parents on by March 2009. Use of web parts, e-behaviour, attendance, and *SIMS* assessment monitor will be used for parental access initially. The lead teacher has demonstrated use of *LP+* in faculty areas, with year groups and teaching groups; work has been placed on the system and work has been posted back through the system. Staff have developed their usage of ICT rapidly – over 3 years only. ICT is supported across the school by two technicians. The school is looking to appoint a third technician, and an existing technician will take up support for *SharePoint*. The school has appointed two advanced skills teachers (ASTs) – one for mobile learning, and one for *LP+* initiatives. Even staff who were self-reported technophobes, are reported to be enthusiastic about using aspects of the site, such as loading and accessing videos. By November 2008, homework for Key Stage 3 pupils was project based, and was provided on a half term basis; it was intended that these items would be put onto *LP+*. The school also intends to use e-books on the platform.

Management outcomes when using the learning platform

From early stages, some schools recognised that the learning platform was supporting a range of management needs. The Vignettes in this sub-section highlight ways in which management support has been recognised and gained.

Vignette 7 – Ease of access and monitoring

In primary school D, use of *SchoolMaster* email was already established when *LP+* was introduced, and this included the use by staff of the uploading of documents to personal files. The school needed to take a decision about the use of *LP+*; at this time, the school recognises that *LP+* will be 'the' school portal. The appearance, layout and content of the front page are felt to be important; this currently offers news, shows the school's core values, and pictures of the school that make it more appealing, interesting and engaging. The lead teacher found it was important to use the notion of a cut-off point, so that after a certain date certain parallel facilities would no longer be accessible, and everyone from that point in time had to use the facilities on *LP+* (such as access to the school diary). The document library facility is found to be particularly useful; it is possible for staff to plan from home, they can look at things at home, there is no need to print items off, points can be illustrated for inspectors, and it is possible to look across classes so that teachers can view developmental planning across year groups to accommodate progression. It is recognised that this facility has saved teacher time; the facility gives access to weekly plans, as well as medium term plans, and these can be reviewed at will. Documents accessible include policies, assessment links, statements, and the development plan. Teachers can access cohort achievement plans, can see progress maps (using a traffic light highlighting system), and can review at a particular attainment level, to pick out particular ability groups. The head teacher can check across the data to view progress and achievement. She finds that it aids performance management, as she can log on and look at what has been completed. Use of *LP+* is found to support a range of management activities, so managers use it a lot; they can look at split screens, and can oversee progression and achievement easily. Teaching staff can use it to make folders, to put pictures in, and to email. They log on every day to look at email. They too can easily see what is happening to school achievement, and can identify, consider and learn from exemplary practice. The school would like to develop the pupil aspects of the site more, especially to communicate with their partner school in Beijing. The school is one of a family of schools looking at the learning of the Mandarin language. The school would like to explore ways to access aspects of the Mandarin language using technology, would like to put video onto the site, and to develop partner school access. The school wants to involve parents in accessing the site, to engage them with writing and with mathematics, for example. The school recognises that it needs to try to address certain issues with parents, especially with regard to mathematics, as parents can feel locked out of the subject if their children can do better than they can in the subject. The school would like to explore the use of *LP+* to address such issues.

Vignette 8 – Managing multi-agency reviews

In special school G, the learning platform had been in place for about a year. The school had a vision of how it could be used to support needs, and a number of staff were released to build it. It is now up and running and is used by staff. The school had an existing website, but took the decision to drop this in favour of a single system. The school started the process of implementation with staff training. The staff area was developed first, and this area is now used widely. In this area, records are retained. These include all records of communication with parents, and this area is used to log all contacts with parents and outside agencies that relate to individual pupils. This means that interactions with individual pupils, involving professionals from different agencies, can be retained and records can be easily managed as they are contained in one place. When undertaking a multi-agency review, this means that all evidence and records are already in one area, so that these do not need to be collected from different places, which is a time consuming process. Other professionals also find the facilities useful. A speech therapist in the Outreach Service has commented that 'it is wonderful', as she finds it is easy to get access to targets, and to see what is needed. The facility allows central storage

of contact information, intervention and target information, and provides easy access to those who need it (see Figure 7).

Figure 7: Categories used to retain records for ease of collation at a later time

Discussions
- Record of communication with Parents
- Record of communication with Professionals
- Record of Communication with Transport
- Communication for School Council
- Staff General Discussion
- Software evaluations is it suitable?
- BSF Discussion Board
- Speech and Language Questions for Kirsty Shaw

Cost-effectiveness and benefits

Some schools in discussions have highlighted how uses of the learning platform were benefiting them in terms of cost-effectiveness. To quantify cost-effectiveness and benefits as far as possible, five schools completed a schedule that provided specific details relating to the sorts of gains reported by some schools. Using these five sets of completed details, it was possible to use average or commonly reported details to explore certain specific scenarios of administrative and management practice. The figures used within the scenarios following are: £25 as the hourly cost of an administrator's time; £30 as the hourly cost of a support assistant's time; £60 as the hourly cost of a teacher's time; £75 as the hourly cost of a head teacher's time; double these costs when the person is under stress; and 3p per sheet for a single-page photocopy (rising to some 7p to 10p per sheet for a single-page colour print).

From discussions in schools, there was evidence of cost benefit arising from the use of the learning platform in six distinct areas:
- Communications with parents.
- Communications with staff.
- Communications with governors.
- Teacher curriculum management needs.
- Head teacher or senior management needs.
- Multi-agency reviews.

Communications with parents

Schools use a range of different mechanisms to communicate with parents. Four scenarios are explored here, to show costs associated with traditional forms of communication compared to those using a learning platform.

Scenario 1 - A class teacher gives pupils letters to take home to parents

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
One or two letters are given to pupils each week. For a class, this will involve a school administrator in some 20 to 30 minutes of work, and the cost in producing 60 photocopies	11.80	0.00
Some 3 children do not deliver these letters home. Two parents come into school to complain or ask about something that was included in a letter that was not delivered. This involves the teacher in some 40 minutes of time in addressing this	40.00	0.00
Total	51.80	0.00

Although the cost of creating the letter is not saved, when letters are placed and accessed on the learning platform, the costs associated with creating copies and taking letters home are not involved. The cost saving shown above is per class per week. More importantly perhaps, this saving is also associated with time benefits for the teacher or head teacher – worth perhaps £80 per week, if this time can be devoted to positive endeavour, rather than addressing situations that could involve stress or anxiety.

Scenario 2 - A class teacher gives pupils a newsletter or other documents to take home to parents

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
A newsletter is given to pupils each term. For a class, this will involve a school administrator in some 10 to 15 minutes of work, and the cost in producing 30 photocopies	13.60	0.00
Some 3 children do not deliver these newsletters home. Two parents come into school to complain or ask about something that was included in the newsletter that was not delivered. This involves the teacher in some 40 minutes of time in addressing this	40.00	0.00
Total	53.60	0.00

The cost saving arising is based in a similar way to that in Scenario 1. Although the cost of creating the newsletter is not saved, when newsletters are placed and accessed on the learning platform, the costs associated with creating copies and taking them home are not involved.

Scenario 3 - A class teacher is asked to survey parental opinions

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
A survey is given to pupils for parents to complete once in the year. For a class, this will involve a school administrator in some 20 to 30 minutes of work, and the cost in producing 120 photocopies	13.60	0.00
The teacher is involved in distributing it, which takes 10 to 15 minutes	15.00	0.00
The teacher has to chase up and gather in all the responses, which takes 1 or 2 hours of time	120.00	120.00
The teacher has to collate all the responses, which takes some 3 or 4 hours of time	180.00	0.00
The teacher has to report it at a staff meeting, which takes some 10 to 15 minutes	10.00	0.00
Total	338.60	0.00

In this scenario, the cost of creating the survey is not saved, but costs associated with distribution, collation and reporting are saved, due to the facilities available within the learning platform. However, the teacher is still likely to be involved in chasing up responses, but the forms through which this can be done are more diverse.

Scenario 4 - A parent comes in or phones to ask about homework

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
The teacher or head teacher are involved in homework queries 2 or 3 times a week, and each query takes up 5 to 10 minutes of time	20.00	0.00
Total	20.00	0.00

As homework requirements and tasks are accessible on the learning platform, fewer queries are likely to arise. Due to the rapid access, teachers are also very easily able to point out details to parents. Queries about the content may still occur, of course.

Overall, for these four scenarios, if a learning platform is used, then the cost benefits accrued for a single class of 30 pupils in a 39-week,

3-term year would be:
- For 2 letters home each week, £2,020.20.
- For a newsletter home each term, £160.80.
- For a parental survey once a year, £218.60.
- For parental queries about homework each week, £390.00.

This totals £2,789.60 per class. For a six-class school, this totals £16,737.60.

Communications with staff

Communications with staff (teaching and support staff) often depend on those staff having easy access to details. A scenario is explored here, to show costs associated with traditional forms of communication compared to those using a learning platform.

Scenario 5 - One of the support staff complains to the deputy head teacher about changes in arrangements that they did not know about

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
A complaint is made once a term, and this takes some 15 minutes of time of each member of staff to resolve	25.00	0.00
Total	25.00	0.00

As changes can be posted quickly and are readily accessible on the learning platform, queries are not likely to arise. Due to the rapid and easy access, a deputy head teacher can also very easily point out details to support staff.

With changes posted onto a learning platform that can be regularly reviewed and viewed by all staff, there are likely to be cost savings of at least some £75.00 each year. Additionally, however, as these forms of incident can involve heightened levels of stress, the cost savings could be much more. For one school with a learning platform, they stated that it takes: 'Seconds to point out where the changes can be found!'

Communications with governors

Schools routinely undertake communications with governors. A scenario is explored here, to show costs associated with traditional forms of communication compared to those using a learning platform.

Scenario 6 - The school needs to send out documents to governors for a meeting

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
Twice each term, the 12 governors receive 10 to 15 papers. This involves costs associated with printing of some 600 pages	15.00	0.00
Total	15.00	0.00

Figure 8: How a school offers access for governors
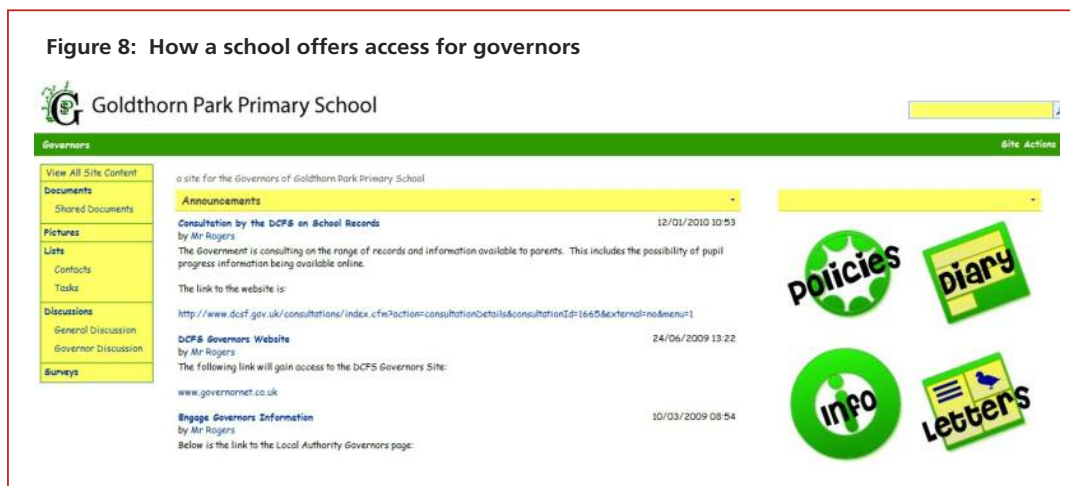
As governor documents of all kinds are easily posted and accessible on the learning platform, these documents do not need to be printed off and delivered in traditional ways (see Figure 8). This saving does not necessarily reduce the time involved in creating the documents, but, across a year, the learning platform can provide a cost saving on the printing of governor papers of some £45.00.

Teacher curriculum management needs
Teachers have a range of curriculum management needs. Two scenarios are explored here, to show costs associated with traditional forms of practice compared to those using a learning platform.

Scenario 7 - A teacher wants to complete a weekly plan. The teacher wants to review the previous week's plan, the term plan, and plans for the previous years' teaching, when putting the weekly plan together

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
Finding all the documents takes up 30 minutes of the teacher's time	30.00	3.00
Total	30.00	3.00

When documents are in paper form it takes time to either file them away systemically, or to find them when they are not filed systematically. When using a learning platform, one school stated that it takes a teacher only 2 or 3 minutes to find the resources or documents – and no paper is involved in an online review. For a single teacher, the cost savings in terms of time across a 39-week year are £1,053. For a school with 12 teachers, the cost savings involved are £12,636.

Scenario 8 - A teacher wants to complete a yearly subject plan. The teacher wants to review the previous year's plan, and all the school documentation that relates to the plan, when putting the subject plan together

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
Finding all the documents takes up an hour of the teacher's time	60.00	6.00
Total	60.00	6.00

The cost saving arising is based in a similar way to that in Scenario 7. If a teacher completes six subject plans in a year, then the cost savings associated with reduced time in finding the documents are £324. For 12 teachers in the school, the cost savings involved are £3,888.

Head teacher or senior management needs
Head teachers have a range of senior management needs. A scenario is explored here, to show costs associated with traditional forms of practice compared to those using a learning platform.

Scenario 9 - A head teacher needs to review planning documents from across the school, to identify any areas that could be rewritten

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
To undertake a single subject or topic review in a year, a head teacher might need to find 3 weekly plans from each of 15 staff, taking up some 1 to 2 hours of time	112.50	12.50
Total	112.50	12.50

The cost saving arising is based in a similar way to that in Scenario 7. If a head teacher completes a single subject or topic review in a year, then the cost savings associated with reduced time in finding the documents are £100.

Multi-agency reviews
Multi-agency reviews require evidence to be collected from a range of sources. A scenario is explored here, to show costs associated with traditional forms of practice compared to those using a learning platform.

Scenario 10 - A pupil is being supported through a multi-agency team. For a review coming up, the school need to pull together an accurate record of the interventions of all those involved across the agencies

Activity	Cost using traditional mechanisms (£)	Cost using a learning platform (£)
For one pupil involved in a multi-agency review in a year group in a year, it may take a teacher or manager 2 to 3 hours of time to collate the necessary details together for a review	187.50	0.00
Total	187.50	0.00

Multi-agency reviews require evidence and details to be collected from a variety of diffuse sources. A school can use a learning platform to record all these details in the same place, so that the time in collecting them together is saved. Although the review still needs to be written, sourcing the evidence takes a much shorter time. Across a school involving 6 separate year groups, the cost savings involved could be £1,125.00 in a year.

Providing a school website
In addition to the cost savings arising from the scenarios presented above, using the learning platform (*LP+*) means that a school does not need to invest in a separate school website. Costs associated with setting up a website can vary widely, but conservative estimates are provided here.

Activity	Cost using traditional	Cost using a learning platform
Setting up a website for the school when there is no technical support available in the school	2,500.00	0.00
Total	2,500.00	0.00

Cost requirements associated with learning platforms

While the scenarios above identify aspects concerned with cost savings, it should be recognised that while some costs associated with a learning platform only replace the costs associated with traditional mechanisms (production of original copies, for example), other costs are incurred specifically. A major 'new' cost that is associated with a learning platform is the time needed to maintain it, and to refresh it so that it has a 'new' presence regularly. Schools indicate that this is done perhaps once every half term, and involves about a day of time each half term (for each member of staff). The cost associated with refreshment activity is some £30,240 for a school with 12 staff, where teachers are involved in this activity. However, this figure is reduced to about half the cost if support staff are involved.

Total cost benefits and economies

From across all the scenarios presented above, total cost benefits associated with moving to use of the learning platform by all staff, parents, and governors, for all the scenarios, for a two-class entry school across a year are:
- For communications to parents involving black and white photocopies only, £33,475.20.
- For communications to staff maintaining high levels of awareness, £75.00.
- For communications to governors involving black and white photocopies only, £45.00.
- For class teachers completing weekly plans and yearly subject plans, £16,524.00.
- For a head teacher reviewing a single subject or topics across the school, £100.00.
- For multi-agency reviews, involving one pupil in each year group, £1,125.00.
- For use of the integrated website, £2,500.00.

This is a total cost saving of £53,844.20. It should be emphasised that these savings are associated with producing savings of time for administrators, teachers, support staff and head teachers – this time saving can then be devoted to more useful endeavour, and the ease of access to information in certain scenarios is likely also to save additional time associated with higher levels of stress or anxiety (which would involve higher costs than the figures quoted here).

Costs associated with refreshing the resources each half term, involving support staff for a similarly sized school would be (and support staff have been involved in a number of schools visited) in the order of £15,120.

The overall cost benefit associated with all scenarios described above (which are the ones that schools have indicated as arising in practice at this time), is £38,724.20. It should be noted that these cost benefits do not account for the actual costs to schools of learning platforms and their support. Because there is a national direction for schools to have these facilities in place, and there is an implied need to spend to purchase these facilities (as well as to accommodate their support and maintenance), these costs have deliberately not been included as they are a common requirement.

7. Teaching and learning enhancements and support

In some schools, key activities involving pupils have been developed, and these are likely to provide a useful set of initial exemplars of practice that could be further built upon at later stages. A number of different examples of practice undertaken in schools are offered here, gathered during discussions with lead teachers, and from practices observed, across the 22 schools visited.

Vignette 9 – Planning future teaching and learning uses

In secondary school F, pupils use mobile devices in school, 134 pupils use them in Year 7, 133 in Year 10, 40 in Year 11, and 62 staff use mobile devices. *LP+* is seen as a key to a stronger long-term vision in terms of taking forward the personalisation of learning. The school would like all Key Stage 3 pupils to be logged on to *LP+* by January 2009, and all parents by March 2009. Use of web parts, e-behaviour, attendance, and *SIMS* assessment monitor will be used for parental access initially. The lead teacher has demonstrated use of *LP+* in faculty areas, with year groups and teaching groups; work has been placed on the system and work has been posted back through the system. Staff have developed their usage of ICT rapidly – over 3 years only. ICT is supported across the school by two technicians. The school is looking to appoint a third technician, and an existing technician will take up support for *SharePoint*. The school has appointed two ASTs – one for mobile learning, and one for *LP+* initiatives. Even staff who were self-reported technophobes are found to be enthusiastic about using aspects of the site, such as loading and accessing videos. By November 2008, homework for Key Stage 3 pupils was project based, and was provided on a half term basis; it was intended that these items would be put onto *LP+*. The school also intends to use e-books on the platform.

Vignette 10 – Revisiting school experiences and sharing them with others

In primary school C, the pupil site (available to pupils since March 2008) includes:
• Discussions, which are used a great deal, and are monitored.
• 'School' TV, which generates videos that children can show their parents (see Figure 9), including some showing a wide range of dance practices in a dance studio (created through Creative Partnerships).

**Figure 9: Videos accessible to pupils, parents and teachers**

• 'School' Radio (also created through Creative Partnerships), which is offered through podcasts, and can be played by parents too (see Figure 10). The E-learning teaching assistant in the school works on transferring humanities topics into podcasts, each of which involves about 3 days of development time. When these are ready, parents are told about them, they can view them with their children, and parents can offer feedback.
• *2Simple online* can now be accessed.

Figure 10: Radio files accessible by pupils, parents and teachers

Book reviews are completed by pupils as podcasts and put onto the pupil site. These are included in a wider range of work created by pupils that can be shared with parents. Parents are able to see their children's work, including digital film animation and digital footage. Teachers take on board projects that will involve pupils, and the end products are then hosted on the site. An example project was an investigation by Year 5 pupils of a mock 'alien crash' on the school playing field. The pupils created a video, and the 'incident' was reported on *BBC Midlands Today*. When pupils created the video, they filmed images, created audio and an audio rap separately, and integrated these together to complete the final video. There are two filmmaking after-school clubs. The school focuses on uses of digital media as a key focus in terms of learning. A key reason for this is that 45% of the school's parents are not in work. There are 431 pupils on roll, 30% take free school meals, there are 12% on the special needs register, and the area has a deprivation index of 0.51. In these circumstances, children tend to stay very locally, so their experiences are limited. Digital media allows experiences to be widened, and the learning platform offers additional features in terms of dissemination (to parents and others), role models (for pupils and parents), and exemplars. Teachers find that pupils will engage more actively if they are involved in a creative focus, and digital media supports this focus. The digital media products, including the videos are all examples of pupil work, and these exemplars can inspire the following years' classes.

Each class group has its own individual class year collaboration site. The pupils determine how this site is to be used. It gives access to *Grid Club* facilities with half-term topics for pupils to work on, it offers photographs and surveys, and some have made their own online games (supported by 2Simple trainers in London). Useful links are organised into topics. These links are those that children have already used, as well as those identified by teachers in their lesson plans.
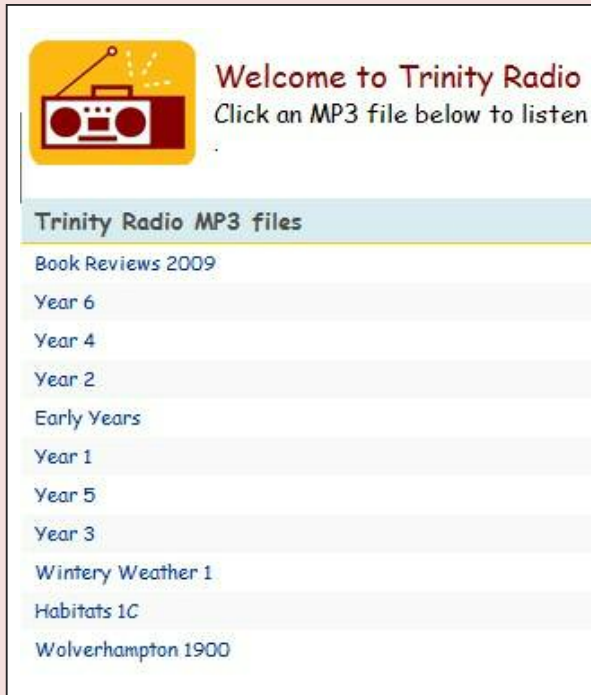

Vignette 11 – Integrating uses of the learning platform with other technologies
In primary school H, the teacher is working with 33 Year 5 pupils (more than usual in the class), who are using handheld mobile devices as well as the learning platform. As a starter activity, they worked on the topic of 'time', adding and subtracting hours and half hours, undertaking a number of tasks on their personal digital assistants (PDAs) and marking them when these were completed.

Figure 11: Pupils and teachers integrate the use of mobile technologies with the learning platform

The main activity for the morning is to look at the number of cars on British roads. They need to find out information and details, and then convert these into a suitable poster using *MS Publisher* or *MS Word*, with appropriate borders and clip art. They need to undertake some research via the internet, save documents onto the computer, and upload these onto the learning platform. The pupils need to work together, and they can choose their partners. When they have finished, pupils upload the poster onto the learning platform with ease – and these items are then instantly accessible. Teachers can clearly access them easily – there is no need for them to be collected in, carried around, and they are not dropped or lost.
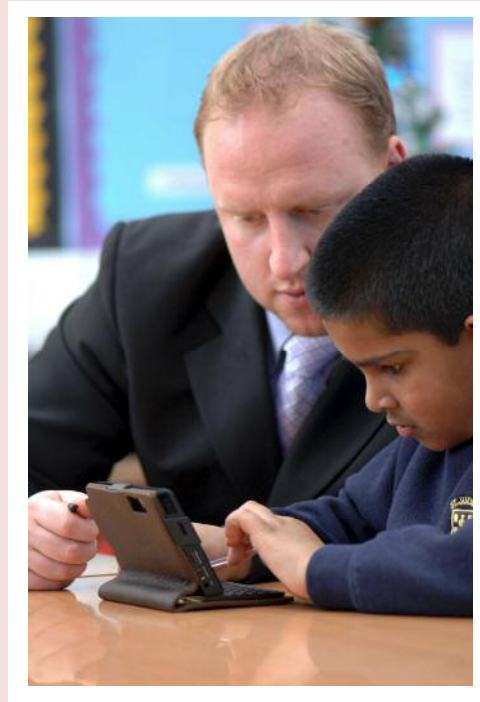
The school is extensively using the learning platform. The staff area contains mental mathematics starters online, which are used every morning. All staff use these in the first 30 minutes of the day – the resources are online and can be accessed via *ENGAGE*, via the learning platform *LP+*, via their interactive whiteboard. Staff need to logon to the learning platform to access documentation – all notices are there and materials are collected into folders. New documents are filed, announcements indicate when and where they are, and that staff should take a look at them. The use of the learning platform is integrated into teaching and learning use across the school.

The staff site offers access to items concerned with the school council, as well as to letters and policies. This site is used to pull things together generally. Within the teacher area there are folders that collect items into topics, such as assessment, continuing professional development, gifted and talented, interactive whiteboard resources, and special educational needs (SEN). It means that teachers can access resources at home. For example, the SEN co-ordinator can access individual action plans (IAPs) at home. In the SEN site area, there are year group folders, each pupil has a folder, and it contains SEN resources as well. In the wider documents section, planning documents are contained in folders titled by school year and term, and all subjects and year groups are represented in these folders. The ICT co-ordinator, for example, can see the ICT plans from all teachers and can see how ICT is being used in each class – whether it is video, interactive whiteboards, digital media, or access to the ICT suite. Frequently, possible useful resources are posted on the staff site – these are visible through 'Staff News'. Staff have also put medium term plans on the staff site (in all cases across Years 1 to 6), as well as weekly plans. The learning platform provides access to planning sheets so that staff can put details directly into them.

Within the pupil site, all pupils use email and upload documents (in Key Stage 2). Resources in folders depend on the work done in class – in Year 6 there are animated *MS PowerPoint* presentations, in Year 5 there are reviews in *MS Word* documents, and products of a project on Buddhism. Some of this work was done at home, and it is recognised that parents appreciate being able to see what their children are doing. Pupils have their own folders. They load items into these. Already pupils have accumulated a great deal of material. They find they

can edit items, and can also use the email safely within this facility. Pupil access and use is being developed, but as pupils use ICT a lot, the learning platform is found to be pulling aspects of use together. In Year 4, pupils have their own folders – they place items into these, and only one lesson was given on how to upload materials. Teachers feel that this form of facility allows pupils to review and refine their work. It also allows items to be extended in certain ways – a book review of a pupil in Year 6 included images and text boxes as well as two sides of text.

Teachers have uploaded resources for pupils to work on at home. It also means that pupils can use the learning platform if they are not in school. This also applies to teachers. A teacher was off school for a term, but was able to provide work, maintain contact with other teachers, and provide resources for other teachers or for cover teachers.

Vignette 12 – Supporting reluctant writers and communicators

In primary school D, parents have managed to gain access to the learning platform by using their children's logons. Homework is on the website for parents to see, and these tasks are updated regularly. Pupils, especially older pupils, go onto the site at home (see Figure 12). Some children send in homework via email – teachers recognise that they would not have done it otherwise (they are pupils who would be classed as 'reluctant writers'). Teachers find that reluctant writers have benefited, as have reluctant communicators. It is felt that the reluctant writers and communicators engage with work on the learning platform because of the 'anonymity of communication'. The pupils can choose where to communicate (outside a classroom where there is greater anonymity possible), they have the freedom of what to communicate about, and then they may well want to share feelings with the family. The lead co-ordinator found that the facilities supported in this category perhaps 6 of the pupils from the class of 30. The teacher finds they tend to be boys, and are often both reluctant writers and communicators. The teacher has, at the same time, given them more responsibility – she finds that this is important in terms of motivation, that as a consequence they take part more, they will model their practice and show others what they can do (in practical ways). These pupils are given responsibility for technology practices (taking and handling pictures, and for uploading onto and handling the website). The facilities are also having impacts on other pupils - pupils are showing levels of reflectiveness, in that they see other things that pupils have done and make changes to their own work.

Figure 12: Announcements are used as remiders to pupils
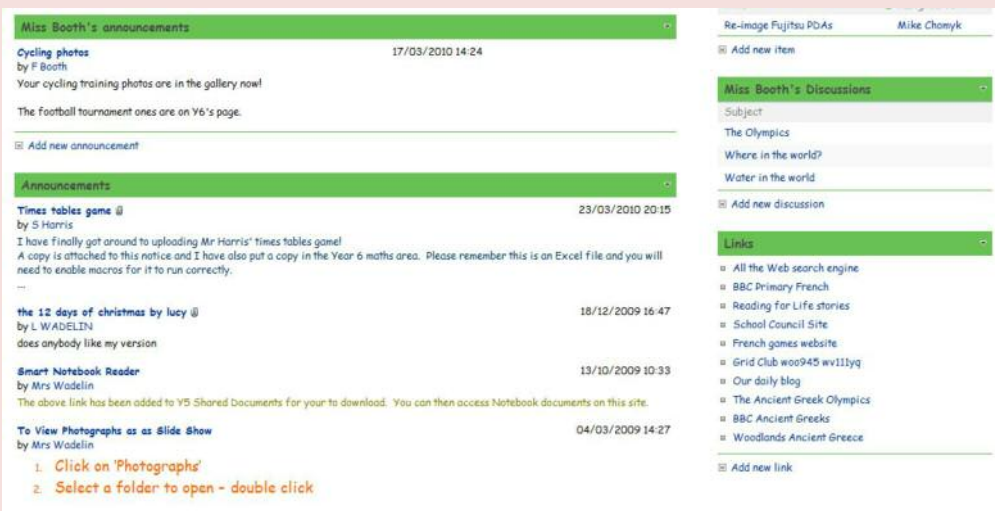
Vignette 13 – Increasing longer-term engagement through online discussions
In primary school I, they started using *LP+* across the school from about September 2007. Pupils in Year 5 had used it since May 2008, and these pupils continued to use it with the lead teacher when they moved to Year 6. The lead teacher found that there was an issue with new pupils to the school; there were 3 new pupils since May, but the lead teacher could not add them onto the system, even though some initial problems with logons had by that time been resolved.

Staff were encouraged to use the platform from the outset of the initiative; they had to use *LP+* as a central email and information access resource. Document handling was done in stages, mainly by indicating in individual staff meetings those specific documents that should be moved, focusing on the important documents to be placed onto the system at the end of each meeting. The facilities were mentioned in staff meetings routinely, initially as well as in subsequent meetings, focusing discussion about use of *LP+* for medium term planning. In total, some 2 full staff meetings were dedicated to discussion on *LP+*, and then elements were mentioned in all subsequent meetings. *LP+* is now seen as the central communication device by all 9 teachers, the head teacher, and the 9 or so support staff. The facility to use the learning platform at home has been found to be particularly useful; support staff check events and notices at home and at the weekend, and as a consequence are kept up-to-date. It is found that in a small school everything on *LP+* is relevant to all staff. The lead teacher started the initiative with the introduction of email, events, announcements, and the calendar, then moved on to planning, documents, and uploading, afterwards introduced timetables and newsletters for each class, and now plans to move to a focus on monthly planning. Prior to a classroom site being set up, the lead teacher did a survey of who had access at home (there were 27 in the class, and 20 had internet access at home). She decided to move forward and to use *LP+* in class and in school, covering use of *LP+* in ICT lessons rather than using the then Qualifications and Curriculum Authority units (these lessons run for 30 minutes per week). Now pupils are able to upload homework onto *LP+*, and the lead teacher puts sheets and homework onto *LP+*. She set up a discussion about a poem, the *Highwayman and Bess*, which was related to a unit of work that had been covered 3 weeks beforehand in class. The online discussion replicated what had been done in class. The lead teacher found that the discussion did engage pupils, and had continued for some 7 months at the time of the visit. Sometimes the response times by pupils were short; pupils were using it as they would a conversation. The lead teacher could see pupil opinions, their interests, and could access opinions in text form, which was particularly valuable, as it is found that assessment of opinions can be rather general when relying on assessment of verbal discussions. She found that she could see the evidence from a textual discussion, and could go to it whenever she wanted in order to gather evidence from the written text. She found that comments came from some pupils who might not have been expected to comment. A deaf child used the facility a lot, and his confidence to respond was supported because he had the opportunity to discuss his ideas with someone at home before responding. The teacher found that pupils could still quote lines from the poem, 7 months after encountering the poem in class. The online discussion appeared to gain their attention and they remembered it and the poem as a consequence. Use of *LP+* appeared to generate home discussion (and indeed some parents requested more homework). The lead teacher offered links to useful websites to support some homework for pupils.

The facilities on *LP+* that were found to be particularly worthwhile for pupils were:
• Discussions (if pupils were enthusiastic about them).
• Surveys (where it was possible to do more in science, to test knowledge).
• Saving things on from class and showing them at home.
• Linking to useful websites (so that parents could encourage extra work).

Discussions were found to be particularly valuable, as pupils could:
- Write an opinion.
- Handle different opinions.
- Reason when challenged.
- Be less aggressive than they might be in face-to-face discussions, which would tend to be taken more personally.
- Respond more easily to written material.
- Accept written comments more objectively and less emotionally.
- Take time in reading, thinking, and then responding.
- Have more time to think about a reference.
- Respond in their own way, rather than backing down as they might in class.

Vignette 14 – Developing locality awareness and sharing experiences with others
In primary school J, pupils have used a product called *WebPlay*. This has involved working with another school, with a whole class of Year 4 or 5 pupils in each school. The company that provides the product (which is project-based), provides training, resources, involvement of key personnel at certain times, and shows how the project can be developed within classroom and wider learning contexts. The product works through the learning platform. It has been easy to access and use, and the project has been supported readily by LA consultants.

The initiative involves pupils in an eight-week project, and the aim is for them to create a local travel brochure in multi-media format. A character (Sinclair St. John), shown in videos that are accessible via the learning platform, is the managing director of a worldwide travel agency, and he recruits agents (spies) to gather details about their localities, to produce local travel brochures, that will be combined to form the world's largest travel brochure. There is an eight-week teaching plan provided. The project involves a teacher and a class in each school for two lessons a week, undertaking cross-curricular activities. A video is provided at the beginning of each week, with a message from Sinclair St. John to describe what needs to be done during that week. Children are involved in undertaking tasks such as researching on the internet, running surveys, conducting interviews, visiting local sites, mapping trails and routes, discussing online, communicating through synchronous and asynchronous email exchanges, creating and using wikis and blogs, capturing and handling still and moving imagery, creating documents that are held and shared online, creating digital postcards, acting in a drama day with their partner and other schools (with the product company providing key actors to run the day), and finally creating a travel brochure in a multimedia format. Throughout the project, teachers and learners play in role, as agents and spies.

This project-based activity has engaged pupils in their communities, enhanced their awareness of their localities, involved them in joint work with other schools, and encouraged collaboration (see Figure 13). The form of final output involved aspects of creativity, developing and integrating different elements of output using different digital media into a travel brochure that was shared with others. Pupils developed specific skills and were involved in specific aspects of learning to suit their interests and needs. Some pupils captured imagery, while others undertook interviews. This allowed strengths of individual pupils to be deployed, it allowed experience to be provided for those who showed interest in particular aspects of learning, and it allowed those who might need to develop skills to be drawn into activities that they might not otherwise undertake (because of the recognised enjoyable nature of the project-based activities). The final travel brochure product was a collaborative

Figure 13: The site allows sharing of resources and ideas, and supports inter-school communication

endeavour, which drew together individual contributions into a single outcome (the class used *Smart Notebook* to produce routes on a map, showing alternative trails, with particular sites described by pupils in audio, with accompanying video). Pupils were centrally involved in all activities; they identified how they would gather information, they went out and gathered the details, they undertook interviews, they wrote scripts, they captured images, and they put together the final travel brochure. Teachers supported and guided this range of activities; they facilitated the flow of activities and lessons, and involved the key company personnel and the LA consultants.

The project contributed positively to learning in a range of areas. It supported creativity; pupils needed to find ways to seek information, to capture it, to record it, and to make it accessible to others. It supported communications skills; pupils needed to interview individuals, to speak and act, to share with pupils in other schools, and to create outputs that were accessible to other audiences. It supported expressiveness; pupils needed to act a part, to express their ideas of their localities, and to 'sell' features of their localities to others. It supported community development; pupils were made aware of their localities through exploration and identification of features, they needed to engage with individuals in the community, and to express their ideas of what their locality was like and what its strengths were. It supported the curriculum in a range of ways: ICT was used throughout the project, but was used for recording, for creative and expressive purposes; different media were used, and the skills needed to use individual media and to integrate them together had to be exercised and developed; and literacy was developed in contexts that focused on locality, community, purpose and audience. Teachers recognised that the project enabled pupils to work on activities where the teachers could guide learning, where awareness and understanding were gained, but within safe environments. The nature of the project, with pupils working as secret agents without others in school knowing about their activities, but exploring the locality, and expressing their findings and ideas, meant that pupils enjoyed the work and the project provided opportunities for them to use skills within this context.

Vignette 15 – Supporting nursery age children
In primary school K, the whole school has taken on use of the learning platform. All teachers wanted all children involved. Every class has a class page to access at home. In the nursery classes parents engage with the learning platform and involve pupils in using resources on it (see Figure 14), while in classes with older children the children are involved directly.

**Figure 14: How a school presents its nursery site**

The success of involving parents of nursery children is clear; when sessions on the learning platform are run at school, proportionately more nursery parents take part. Nursery class teachers have taken the learning platform on board to support pupil and parent activities since nursery children stay in the school for only half a day. So they either leave or arrive at lunchtime, which does not leave a great deal of time to show parents what is happening. Pictures of activities with the children are put onto the learning platform, and parents and children can see these at home. Additionally, the learning platform is populated with words of songs, items that are being learned each week, sets of words that can be printed off, and weblinks to songs so that parents can hear them. Children can find a song on the platform, and can play it. Flashcards are available on the site, in a form that can be printed off, cut up, and used by parents with their children at home. Resources linked to the *Oxford Reading Tree*, and alphabet rainbows are also accessible. Teachers in nursery and Year R classes create links to games, so that children can interact with these directly.

There are helpful hints for parents on reading with their children too. It is found that parents 'love it' – it is found to be a 'real vehicle for communication'. Teachers add to the materials on the site regularly. Homework tasks are put on each week, on a Thursday for the next week's work. Parents can find books in advance of them being used, and can ask for details of what will be done with them. The nursery teacher sends out e-certificates to children. Children are excited to see this type of email; they share the excitement of getting the certificate at home, and can print it off. It is known that items on the site are shared in grandparents' homes too, which opens up communications to an extended family. It is recognised that children find it hard to logon, but parents assist them with this at home. The teacher logons for nursery pupils in class, then the children access the resources on the site.

Announcements are on the site too, which saves sending letters out (see Figure 15). Parents go to the site to see what is happening. They can access letters on the site, which do not go astray.

Figure 15: Announcements and other facilities accessible to parents
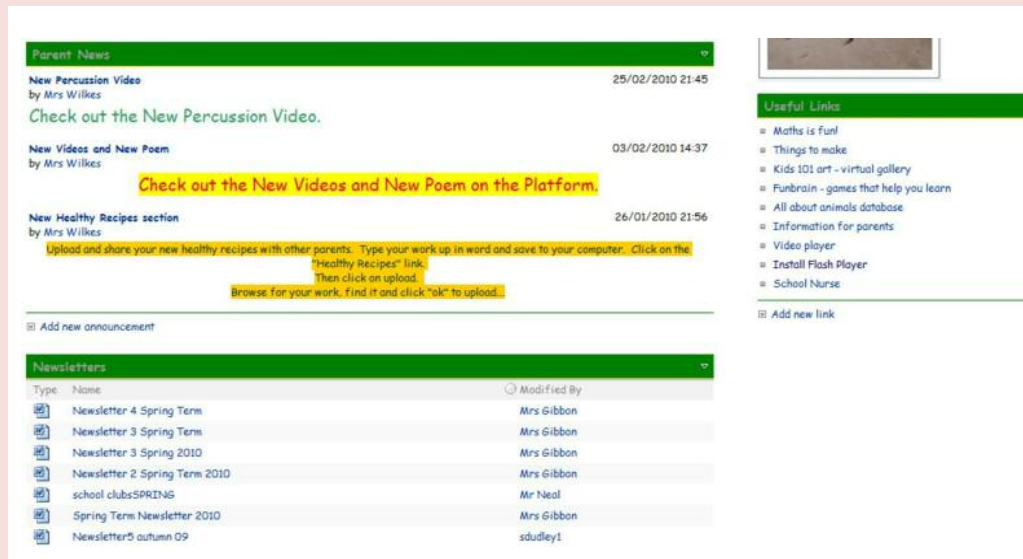
Parents now tend to email if they have a concern, and this means that they can often send a note quickly at times to suit them. It has been found that the learning platform has opened up aspects of parent communication. The nursery teacher now feels safely accessible (without having to give out her mobile number). Children off school can access the site, and the nursery teacher can reply to email at midnight if she wishes, which is appreciated by parents. It is found that email with parents is fairly easily handled. Emails tend to arrive only when things are coming up, and then there are perhaps 3 or 4 emails a day. Otherwise the other communication mechanisms in place mean that there are no emails for a week or more. Email also has a role in maintaining contact with pupils. One child is now living in Cyprus for 2 years, but use of email means that he can maintain contact and the child can send pictures that are shared with children in the nursery. Children can reply, and email the child in Cyprus too. In this way the learning platform is allowing an extension of the 'learning environment', rather than just the 'learning context'.

Vignette 16 – Safe online communications for children

In primary school L, the learning platform is used for planning and access purposes, but also for supporting pupil work. Teachers have used the learning platform to support tasks in teaching sessions, including use of email. Use with pupils was trialled with a Year 6 pupil class. Initially, parents came in and discussed safety and the policies that were being put in place. Use of the learning platform has now been extended to Years 2 and 6, and it is found that parents are now accessing it with their children.

Figure 16: Access to e-safety resources and guidance

Class pages have been developed, and children created a new logo for their site. Email is used a lot by pupils – it is safe and there is no inappropriate email for them to access. Although many pupils used *MSN* previously, they have welcomed the chance to move to use of the *LP+* email system. They like it more, and they feel it is safe. Because the school is conscious of the needs to consider e-safety, parents had to come in to agree to use before children could access the system at home. The school gained 100% commitment from the parents. This was found to be notable, as there is usually less commitment from parents for other events.

8. Engagement with parents and enhancement of networking within communities

In some schools, key activities involving parents have been developed, and these are likely to provide a useful set of initial exemplars of practice that could be further built upon at later stages. A number of examples of approaches undertaken in schools are offered here, gathered during discussions with lead teachers and head teachers across the 22 schools visited.

Vignette 17 – Planning parental access

In primary school C, parents are being introduced to the system, and 19 selected parents are now involved in 2 meetings to explore use of the site. Surveys have been put on the site for parents to complete. It is anticipated that access to *SIMS* will be trialled within *LP+* by the school, and the school has already started to use online reporting. Governors have usernames and passwords, and they are being introduced to the site.

Vignette 18 – Enhancing parental engagement

In primary school K, all children across the school are involved in using the learning platform, and every class has a class page to access at home. One teacher initially set up the system, found the technical issues then shared experiences with other staff. The senior leadership team monitored the site in terms of its readiness, and then Open Days were run for parents and carers (6 open sessions were run, involving a demonstration and hands-on access). The school developed a booklet that went home – to explain how the system worked, and what it could do. The school found that it was up and running across classes very quickly. Feedback from parents has been positive. Teachers update sites weekly. Homework links go onto the site in advance, and parents can access these. Learning links are changed on the site each term. So parents have access to the subject and topics that will be covered in school a term ahead, and they have access to homework a week ahead. It is found that this maintains their interest in the site. It is found that parents 'love it', it is felt to be supportive, and gives them ideas. It extends homework, and they find it easy to use. The school had previously sent out weekly targets for pupils, so this facility provides an extension of this practice.

The school had worked on engaging the school community in learning for some 10 years prior to its adoption of a learning platform – but it has been recognised that the learning platform fits with this endeavour. It is now found that ownership of learning is shared with parents. As the school has achieved much in terms of parent engagement, it is recognised that there is a need to maintain this, so *LP+* provides a way to sustain high levels of parental engagement. It is seen that *LP+* provides opportunities to facilitate informal learning outside school. Staff put links onto the site for children to go to, problems to solve, which they can do on their own, or with their parents.

LP+ allows opportunities for the school to develop learning activities and processes involving parents, and opportunities to enable the learning ethos to happen in the home. *LP+* does not just allow provision of content, or management of content, but allows the school to enhance their approaches to development and their particular focus. *LP+* is not diverting their approach or direction. *LP+* has allowed parents with limited time opportunity in school to see what activities pupils experience, to see what pupils achieve, to access announcements regularly, to access notes that might be otherwise lost, to access guidelines and activities created by teachers, to use materials to share learning with their children, to access detailed notes about the work to be done the following week, and to access links to resources to support the topics to be covered during the following term.

Vignette 19 – Engaging parents through video and imagery

In primary school M, a 2-form entry school, they have moved quickly to use of the learning platform with all classes. The school has focused for some 5 years on building up high levels of parental engagement. The catchment of the school is generally what would be regarded as white working class, in an area that is low in socio-economic terms, so parental involvement is an important factor for the school.

Class sites now contain photographs of pupils, announcements, calendars, discussions, and surveys (see Figure 17). Year 1 and 2 children have a leaflet that they can take home, to show how to get onto the platform at home. Teachers have run a range of activities with pupils, often enabling access through these activities at home.

Figure 17: Resources that pupils can access through their class site at home
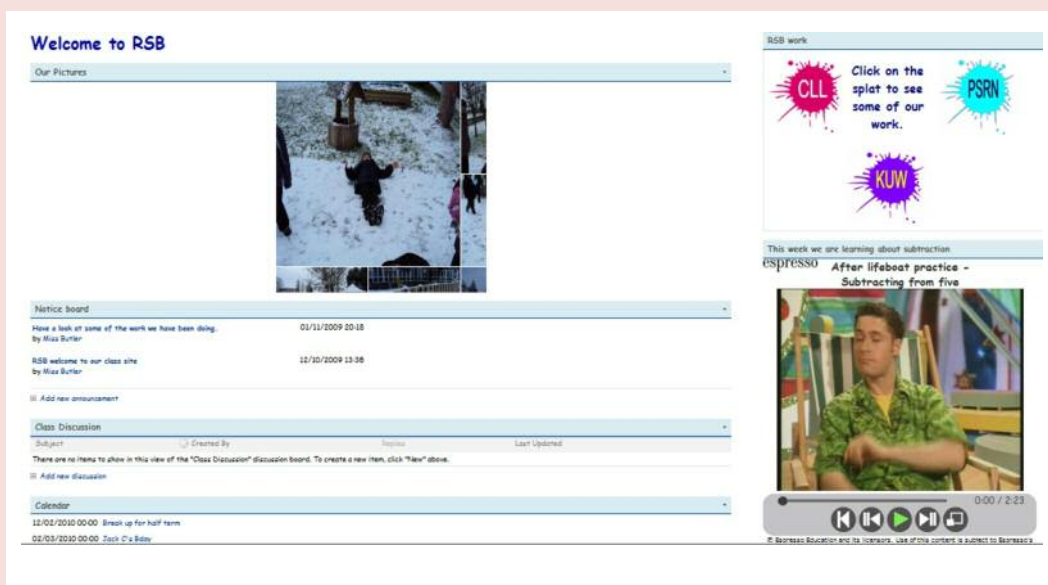
A Year 1 teacher found that a survey worked very well with pupils. She has also created videos, of special events such as a Nativity production and events on 'Ireland Day', which have been put onto the platform. These videos can be shared with parents and others at home. The teacher uses a mini-flip video camera. The children do the recording, which is then put into *MS MovieMaker*, and uploaded onto the site. For the 'Irish Day', a Year 1 pupil did the recording, images and captions were put together, and then music was put on. The teacher created the final form of the video and uploaded it, but found it easy to do (it took about one hour at home). The video clearly provides opportunities for pupils to review activities, to reflect on experiences and to gain ideas. The activity and product clearly demonstrate involvement, ownership and engagement. The teacher also noted that it allowed involvement of pupils of different abilities and attitudes into writing and participating.

Vignette 20 – Parents and homework

In primary school D, the school wants to develop wider parent access and use. Some parents have gone onto the site using their child's logon. A governor, who is also a parent, is employed for 2 afternoons a week to work on the site. Parents' pages have now been set up with images and headlines. Parents have been encouraged to produce photographs, text, and documents to go onto the site. Family Learning sessions will be used to launch the site to parents. Homework is already on the website for parents to see. Music and videos on the site can be viewed at home.

9. Conclusions

The LA has clearly taken a lead role in the introduction of the learning platform into schools. This lead role has involved a great deal of liaison with schools, and the taking of appropriate decisions on aspects of procurement, development approach and approaches to the introduction and integration of the platform into school practices. There are clearly advantages arising from the levels of LA involvement; there has been a positive take-up, and the positioning of the learning platform within the schools visited has resulted in large part from the advice and approaches taken by LA personnel concerned. It is clear that schools are integrating the learning platform positively, albeit the schools being at different stages along an entire path. The stepped and phased approach taken by the LA consultants, to support initial use by a few staff members, then to provide access for all staff, followed by pupils, and lastly by parents, has been largely successful in those schools visited. In the longer term, it will be important that all schools feel able to contribute to a wider picture of integration, and to be able to offer ideas or select choices appropriate to important needs that arise. The continued contribution of LA consultants in this respect will be vital; as schools begin to explore different ranges of learning practices, both pedagogical support and sharing roles, and technical advice and support roles will be likely to need to grow in particular directions.

The relationship with LP+ has appeared to be largely positive and useful. It is clear that the LA have advised LP+ on beneficial approaches to gain school and staff involvement. LP+ have responded to LA advice and requests, and clearly this form of relationship is potentially of benefit to all parties.

It is clear that the *SharePoint* system being used has advantages; it enables ease of integration of other Microsoft software and resources. However, the integration of other elements that schools might wish to use has not always been yet proven. The pilot involving access to *SLG Webparts*, for example, will be an important initiative to monitor in this respect. For many schools, integration of *SLG Webparts* will be critical to their maintaining a 'one-stop shop' in terms of web facility and learning environment that supports their communities of users. Some schools are concerned that certain elements of the platform are too business orientated; there is a clear need to ensure that elements can be developed that are fully learner and learning focused.

Overall, Wolverhampton LA is in a strong position nationally with regard to the implementation of learning platforms. In other local and regional areas, learning platforms have been provided, but support and advice have often been accessible at more limited levels. Less advice has been provided on the approaches to integration across a school, less technological support has been available, and there has been less opportunity for schools to influence the direction of the facilities within the platform. However, it should be recognised that other platforms are now beginning to emerge that are based more on a central social networking functionality (such as imJack, n.d.), and less on an information sharing functionality. There are learning platforms that allow greater ease of use and flexibility of creation of pages also (such as frog, 2009). Both the LA and LP+ should be aware of these forms of developments, and consider them in the longer term. The trials and initiatives that Wolverhampton LA has initiated in terms of podcasting, the *WebPlay* project and *WosCARs* are important in this respect.

It is clear that the learning platform is providing a central core range of functionality for a range of schools already. The core provision of functionality is possible since the platform provides both an inward facing functionality (providing opportunities for internal document sharing, planning, monitoring, and the sharing of events, for example), as well as an outward facing functionality (offering learning links for staff and pupils, the sharing of events with parents, and parental online reporting, for example).

More secondary schools are now looking to develop wider uses of a learning platform. There is likely to be clear benefit for pupils (and teachers) in being able to gain from a continuity of access. Certainly learning platform facilities in secondary schools need to have at least the same levels of functionality as those in primary schools. Anything less will be likely to disadvantage pupils.

10. Next steps

There is a continued need for the LA to direct comments and ideas for appropriate development of the *LP+* platform to support learning. Schools are engaging with the platform quickly and readily. Even so, schools are identifying features that they feel would be better positioned or would aid them. The following list, created from school feedback up to November 2009 notes also those items that were addressed by January 2010. The fact that a number of these items have been addressed indicates that rapid response to feedback issues from schools, handled through the LA, well supports the effectiveness of the facilities offered by the providers. The feedback issues identified by schools by November 2009 were:

- Some features are highly business-oriented, and need to be shifted to a learner focus.
- Discussions and notices show the most recent items at the bottom of the list, so they are difficult to see. By January 2010 this issue had been resolved and schools could determine how best they would want a discussion to display.
- Responses within discussion do not allow threads to emerge; breaks between messages do not allow a discussion to flow or be followed easily. By January 2010 threaded discussions could be created.
- Adding photos is complicated; they cannot be dragged and dropped without conversion.
- Reports on levels of usage are required by some schools to aid their management of the site with teachers, pupils and others; there is a need to consider how these reports are accessed and structured. By January 2010 a site usage report page had been demonstrated to all schools and some schools were using this to identify patterns of usage.
- Some administrative facility at a school level is likely to be advantageous in certain circumstances; a school may need to change a password to urgently stop access, and there may be a need to create a provisional account for a new teacher or for an inspector.
- Login procedures are sometimes arduous; to complete a set of reports for 55 children, one teacher found it necessary to enter 4 login codes for each child (a total of 220 login code entries). It should be noted, however, that while this one school encountered this problem, this has not been recognised widely, so it could be due to specific conditions within a single school.
- A greater control for handling document security would be welcomed; it may be desirable for teachers to determine whether plans they post into folders can be changed with or without permission, for example.
- Some schools and some pupils interact with professionals beyond education, such as speech and language specialists who are in the health profession; account facilities for these professionals would add benefits for many schools.
- Some pupils find logons difficult since they use textual formats only; having symbols available for pupils to choose would add substantially for ranges of pupils.
- Some pupils would benefit from higher levels of auditory access; having facilities to determine these levels and to aid uploading of audio files would be advantageous.
- The role of *ENGAGE* and *LP+* can lead to confusion; rationalisation of the two systems would be clearly advantageous.
- It would be useful for teachers to be able to offer comments on pupil work that is posted in their areas; an 'evaluation area' for comment would support the practice that some teachers want to adopt.

There is a continued need for external support for schools. As one teacher said: "They [the LA consultants] have been the most helpful folk in the LA for 30 years". Face-to-face meetings, sessions in schools, and email access have all been recognised as valuable. Even though support over the first 6 months was felt to be vital, schools still recognise the need for occasional visits (and this is likely to be required as the platform itself continues to develop). At this stage, for example:

- There is a need to account for new staff; and they may need a lot of training to catch up with the stage reached by other staff generally.
- Aspects of uses and resources for Foundation classes will need some focused attention.
- Possible issues with forgotten or missing passwords will need to be resolved.
- More schools would like additional resources, such as a 'governor' section.
- Some schools would like more pages for publicity to prospective parents or the wider community.

- Although cohorts have been useful in terms of implementation actions, the groupings have not really led to networking. There is clearly a need to consider how meetings, particularly to share effective practice, are set up in the immediate future.

The publication of the recent ADOPT framework (Armstrong, Hawkins and Whyley, 2010) provides a potentially useful means to identify school uses of their learning platforms at specific points in time, to monitor their progress, and to identify areas of challenge where support would be beneficial. It is clear that the platform is enhancing important aspects of teaching and learning. There will be a continued need to focus on fundamental aspects of learning and learning support when certain features are used increasingly commonly. It is likely that evidence will be needed to address an increasing range of questions focusing on learning and learning outcomes. The LA is likely to be able to support schools most effectively if it has ways to give advice and guidance relating to questions such as:

- What stages of implementation will be needed as more uses of the platform emerge?
- What would be useful and valuable things for pupils or parents to do outside school?
- What are the really important aspects of learning that could be supported by practices using these facilities?
- How could a balance of learning – speaking, discussing, imagery creation – be created through homework practices?
- How can work that is created in different media be assessed (BBC producers, for example, assess the 'viewability' of items, and the features that allow easier or more focused 'viewability')?
- How can the learning platform be used to gain from uses that could not otherwise be easily undertaken (not using it just to offer more text-based learning)?
- How could schools develop assessors of auditory, video, broadcast, or social communications?
- How can the use of a learning platform support the transfer of learning, rather than just the learning of content?
- What exemplars of practice, in terms of how learners use the learning platform to initiate learning, or choose learning alternatives, or

reflect on learning, will arise in schools?
- How will schools advise learners about the time they should spend on a learning platform, or mediate time involvement?
- How will learning platforms alter a focus on correcting work rather than delivering work?
- How will learning platforms affect a balance for learners concerned with pace of work compared to time for reflection?
- How will creativity be supported effectively?
- How will teachers balance the needs for learning content, with the need for a focus on metacognitive aspects?

It is clear that the implementation of this learning platform has begun to offer important potential for a number of schools. It is also clear that this implementation and stages of use that have been reached are at the start of a longer journey; a journey that concerns blending learning and teaching approaches to support the needs of specific learners (and indeed learners more widely) is likely to be shaped and supported by interactions where experiences and expertise of all users are shared across and through an involved learning community as this development moves forward over the coming years.

References

Armstrong, S., Hawkins, G. and Whyley, D. (2010) (Eds.) *The ADOPT Framework supporting schools to transform using the learning platform*. Learning Possibilities Limited: Borehamwood.

Aubrey-Smith, F. (2007) *A Virtual Learning Environment: Led and Loved by Infants*. Accessed at: http://www.naace.co.uk/178

Barajas, M. and Owen, M. (2000) Implementing Virtual Learning Environments: Looking for Holistic Approach. *Educational Technology and Society*, 3 (3)

Becta (2009) *Harnessing Technology Review 2009: The role of technology in education and skills*. Becta: Coventry

Chowcat, I. (2006) VLE implementation and cultural change. Abstract from the online conference *VLEs: Pedagogy and implementation*. Accessed at: http://www.online-conference.net/vle2006/abstracts.htm

Condie, R. and Munro, B. with Seagraves, L. and Kenesson, S. (2007) *The impact of ICT in schools: a landscape review*. Becta: Coventry

Department for Education and Skills (2005) *Harnessing Technology: Transforming Learning and Children's Services*. DfES: Nottingham

Downes, S. (2007) Learning networks in practice. In Becta, *Emerging Technologies for Learning*. Becta: Coventry

FrogTrade (2009) *frog*. Accessed at: http://www.frogtrade.com/

Green, H., Facer, K. and Rudd, T. with Dillon, P. and Humphreys, P. (2005) *Personalisation and Digital Technologies*. Futurelab: Bristol

Green Paper (2003) *Every Child Matters*. The Stationery Office: Norwich

Harrington, A. (1999) *E-mentoring: The advantages and disadvantages of using e-mail to support distant mentoring*. Hertfordshire TEC: Hertford

Harris, J. (2006) Implementing a VLE in a secondary school - changing the culture of learning. Abstract from the online conference *VLEs: Pedagogy and implementation*. Accessed at: http://www.online-conference.net/vle2006/abstracts.htm

ImJack (n.d.) *imJack*. Accessed at: http://www.imjack.com/

Lave, J. and Wenger. E. (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press: Cambridge

Pask, G. (1975) *Conversation, Cognition, and Learning*. Elsevier: New York

Passey, D. (2006) *Wolverhampton Local Authority Information and Communication Technology Development: Identifying Impacts of the Local Authority Information and Communication Technology Strategy – Final Review Report*. Lancaster University: Lancaster

Passey, D. (2007) *Virtual Workspace: An Independent Evaluative Review*. Wolverhampton City Council and Worcestershire County Council: Wolverhampton

Single, P.B. and Single, R. (2005) E-mentoring for social equity: review of research to inform program development. *Mentoring and Tutoring*, 13 (2), 301-320

University of Leeds (2009) *Skills@Leeds*. Accessed at: http://skills.library.leeds.ac.uk/online_tutorials.php

Van Gelder, L. (1991) The strange case of the electronic lover. In C. Dunlop and R. Kling (Eds.) *Computerization and Controversy: value conflicts and social choices*. Academic Press: Boston

Virtual Workspace website: http://www.virtual-workspace.com/. Retrieved between November 2006 and April 2007

Vygotsky, L. (1986) *Thought and language*. MIT Press: Boston

Walker, T. (2006) Using Moodle in a secondary school - creating an exemplar. Abstract from the online conference *VLEs: Pedagogy and implementation*. Accessed at: http://www.online-conference.net/vle2006/abstracts.htm

Walther, J.B. and Burgoon, J.K. (1992) Relational communication in computer-mediated communication. *Human Communication Research*, 19, 50-88

For queries about this report please contact:

Don Passey
Senior Research Fellow
Department of Educational Research
Lancaster University
Lancaster, LA1 4YL

Tel: 01524 592314
Email: d.passey@lancaster.ac.uk