

School use of learning platforms and associated technologies – Case Study: Secondary School 2

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Secondary School 2

This case study is part of a suite of 12 case studies which inform the benefits identified in the main report and should therefore not be read as a stand-alone.

1. The school and the school community

The school is a mixed gender community secondary school in the North of England. It is located in a socially and economically advantaged area with around 1400 learners and a sixth form. Attainment on entry is above the national average, the percentage of learners entitled to a free school meal is very low and fewer than average learners have learning difficulties and/or disabilities. Most learners are White British and English is the first language of the majority of the learner population. The school has been awarded the Artsmark Gold, the Sportsmark Extension Award, the Information and Communication Technology (ICT) Quality Mark, the Healthy Schools Gold Award and the Investors in People award. Recent Ofsted results describe the school as outstanding and highlight learners' positive attitudes to the school and to each other.

Years 10 and 11, Year 9, and Year 7 and 8 are accommodated in different buildings and separately from sixth form. A house based system runs separately for Years 7 to 9, 10 and 11 and the sixth form and ensures learners' well-being. There is close collaboration between pastoral support tutors and heads of year. The Senior Management Team suggests that both tutors and the house system play a significant role in bonding and binding the school community.

"The pastoral system within the school is set up in such a way as to allow contact between parents and the school to work as efficiently as possible. The house system that we've got in the Lower School, with three Heads of House, and each House Block has a Year 7 and 8 and 9, so it's a little school within a school. This allows for lots of opportunities for detailed discussion with parents, because you've got a small team of Tutors led by your Head of House, who really get to know these pupils very, very well, and that's a strength of the school." (Senior Management Team)

Not all classrooms are equipped with interactive whiteboards. The Senior Management Team describes the approach to technology use and adoption as 'organic'. The school has adopted an approach independent of the local authority and there are no uniform expectations about technology use, including use of the learning platform. Staff have laptops available for use in different classes. Access to ICT suites is difficult. There is no open access to the internet at the school, and this aspect of technology use is controlled throughout the school, from Year 7 to Year 13.

2. How the learning platform is used

General observations

An Open-Source system forms the basis of the school's learning platform and this is customised to fit the school's needs. The school's MIS is licensed from a third-party provider. The rationale for the commercial solution for MIS was the view that:

"There's so much stuff in the management information system that is missioncritical for the school, that we're better off, as it were, outsourcing the risk and responsibility." (ICT Coordinator)

The choice of the Management Information System was based on the fact that the chosen system is compatible with any web browser and provides a facility for access from home. Initially, the school used an alternative commercial MIS which did not offer these features, and data was subsequently transferred to the current MIS.

The school has used an Open Source learning platform solution for more than five years and has progressed through various versions of it. Around 18 months ago the current solution was re-customised with subject icons, to make it more user friendly.

Although the local authority had procured an area-wide learning platform, the school opted for an Open Source model to save money and to be able to develop a bespoke learning platform built on various systems, rather than being constrained by a commercial system.

An Open Source mailing program with calendar and other features similar to common commercial packages is used as the main email system. Another Open Source web-based groupware system, which can be populated with learners' timetables, is also currently being trialled.

A current school project aims to tie together all of these available systems and a web designer is working on designing a common theme across a range of interfaces. The school website is also being revamped for further clarity and user-friendliness. The ICT Head gathers feedback on the redesign through consultations with the Senior Management Team and other staff members, which he then transfers to the web designer. This is in keeping with the bespoke ICT system within the school and an ethos of involving staff in decision-making.

The school removes access to the learning platform for learners one year after they leave the school, although this period can be extended if learners request it.

Management and administration

One of the main areas where the learning platform has made a difference in the school is in tracking and monitoring data.

"We've got better at tracking data and using it more efficiently. We've now got different tracking mechanisms that we follow in terms of learners' attainment. We track different aspects at Key Stage 3, 4 and 5 and that's all tied in with resources from the previous key stage, predictions and targets." (MIS Support Officer)

The MIS is used to monitor assessment at whole-school level but individual teachers use mark books on the learning platform (e-portal) to track the progress of their learners. Data is recorded into these mark books once a term assessment and this can be done through any web browser so it can be completed outside school. Targets and predicted grades are also included. When writing reports, teachers can look at other teachers' comments or reports about a learner on these system (MIS and mark books) and they can also access learners' assessment data from previous years. A teacher can see what work has been completed and when it was uploaded by a learner and grade it with 'no grade/outstanding/satisfactory/not satisfactory' grades. An email notification tool allows teachers to send their comments to learners via email. Using these systems to monitor assessment, teachers, heads of department and the SMT can identify patterns in learners' work and provide appropriate support.

Attendance data is tracked by teachers on the e-portal through online registration including lesson-by-lesson registration.

Behaviour events are also logged on the e-portal. These tend to relate to bad behaviour or attendance issues. Data can be organised by types of incidents, producing a general picture of incidents related to specific behaviour aspects. Good behaviour is rewarded via merit stamps and certificates. This information is shared by all staff, including heads of houses as real-time data. Data about attendance, behaviour and attainment can be cross-referenced and therefore provides a holistic image of a learner's profile.

"There's one girl, in particular, who hasn't been attending the class registrations but I can also view her lesson attendance as well as her registration attendance. I can also see, perhaps, a problem where she's not completing work. I can spot a pattern where she's not completing homework and can look back and spot the pattern in the lessons she's missing." (Teacher) Some learners however, raised issues about this way of recording behaviour:

"I don't really like it, because some teachers you don't get on with and they'll post things on it, like, 'He's immature' and things, but then other teachers... You've got the right to know, but it's like too far, doing it on like e-portal so everyone can see it. Yes, all the teachers can see it. So, they should be able to send it to like a specific person." (Year 10 learner)

The catalyst for introducing the learning platform arose in response to a teacher's prolonged absence as a result of which a need was generated for remote monitoring of learner activity and to allow learners to access the VLE and do assessments during the teacher's absence.

"The start of it, when we first did it, was because somebody was on long-term sick and we didn't have a supply teacher that could do it, so the nature of the absence was such that they could monitor students from home, so that's what they were doing. That's how it started. The idea was that they could do assessments... because it was an ICT course, most of it was word-processed and stuff and so it lent itself to an online platform and that was a good step in, to be honest." (ICT Head)

The Head of the ICT department and another member of staff played a key role, implementing the installations for the Open Source learning platform six years ago. A committee of volunteers, members of staff, was involved in decision-making regarding the direction the learning platform should take around the same time. Implementation has generally been a bottom-up process, although some coercion was exercised for specific aspects of implementation such as online reporting:

"We never really turned round to staff and said you have to do anything. We did once or twice, when we still had one or two members of staff who were not word processing reports when we used to word process them. We had to lean on them and once our school... our lesson... our reporting went completely into a web browser, we turned to our staff and said, 'You have to use the web browser; you've got no choice. You can write them in Word and copy and paste them in but, you know, you have to use it'." (ICT Head)

Time was provided for teachers to be trained, initially with speakers from outside the school and subsequently through in-house training.

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The teachers' view of the e-portal home page (calendar, class groups, teaching groups, timetables)

Curriculum and teaching

The learning platform is a space for gathering resources for both teachers (including cover teachers) and learners to access either in class or remotely. Some departments use the learning platform more extensively than others, depending on the head of each department and the willingness of staff.

"In the geography department, because there's always a push; at department meetings, for the first 20 minutes, we agree that we will put all news, or things we have created ourselves, onto that system." (Teacher)

Some teachers perceive the learning platform as being more applicable to their subject and some as less so (art and maths teachers in particular say that it is difficult to set tasks that children can do on the learning platform because of the drawing and painting or equations and symbols required.) The learning platform is used mostly in the ICT, design and technology, languages and geography departments during class time. The language department has a computer room of its own. Teachers populate the learning platform with resources they use in lessons, with teaching notes, and homework for learners to access.

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The teacher's view of a learner profile

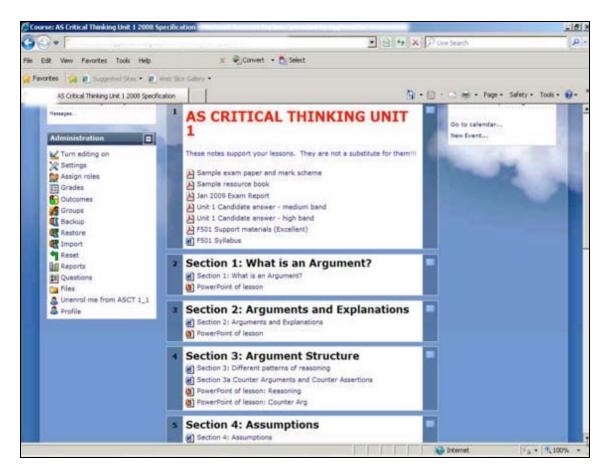
"What I tend to do is I use the VLE as a means, really, of holding all my teaching notes and homeworks so that if learners can't attend lessons, then they can go in and they can, basically, get all the material that we're doing in the class. I've used the VLE to provide as much as I can of what we would be doing in the class anyway." (Teacher)

Teachers also have an overview of lessons on the e-portal, which they can build on from year to year. They can manage submission of assessments and monitor assessment using a traffic-light system for setting targets (green – above target, red – below target). Staff also have a shared space on the school system for accessing resources such as worksheets, which they find time-saving.

Learning and learners

Learners have an induction in using the learning platform in lower years, in ICT lessons. They use the learning platform and the resources within that to do coursework at school (for example, in geography). They can also access school resources and other applications such as image-manipulation software on the school server from home through the home directory (where they can edit/upload/re-upload and zip folders). Some learners mention catching up with homework via the learning platform. They report using the learning platform for much less time than using the

internet (for MSN and Facebook, for example) at home. They are aware that there are other tools they could use (such as blogs) but do not use them. They reported being irritated by the fact that there is a private messaging feature on the learning platform but that it is disabled until 3.30 p.m. each day so that they cannot use it while in school.



Lessons resources on the VLE

Learners find the use of the learning platform helpful in some subjects, for example they can listen to French and German podcasts, play games, make comics and generally be more proactive with learning languages. Younger learners were excited about quizzes and learning games in some classes (science, French, German and geography were mentioned).

"Yes. There's a lot of listening things as well. Voice clips and things of French people." (Year 10 learner)

Year 7 learners mentioned using links to websites for revision through the portal. They think that submitting homework helps teachers check it:

"It's there for the teacher more than us because it shows whether we've done it or not. So it helps the teacher more than the children. It sort of, like, if you accidentally forgot to do your homework and you said to Mr W - well, if you didn't remind him. Or, any homework, and then when he goes on the VLE and he checks, then that's a reminder for you." (Year 7 learner)

Recently, the school integrated an Open Source e-portfolio system with the e-portal, firstly as a pilot (for a year) with ICT staff and, currently, as part of the curriculum for all learners to create e-portfolios. The aim is for learners to be able to showcase their work, and to be able to use it to assess their learning. Learners can choose who within the school can see their e-portfolios.

Learners' access of the e-portal can be monitored by teachers.

"Well, they'll often say, 'Oh, I tried and then it failed', and then you go into activity reports and you look at the logs and you say, 'Oh look, that's interesting, you didn't access it actually, because look...'. So on this log I can see that that particular student has accessed from outside the school on these occasions, right, and I can see what they've done. Look, he's done the Cybersmart quiz, which is an e-safety thing; he's accessed the Avatar application..." (IT Head)



A language lesson – independent learning in class



Interactive game during a language lesson

Parents and families

There is a very good relationship between the school and parents, but parents have not yet been engaged in using the e-portal. Parents can access the learning platform only through their children's log-ins but children report this does not happen. Some parents have requested access to data on their children and this is being considered on a case-by-case basis. According to the MIS officer, there are issues of privacy and confidentiality relating to children involved in behaviour incidents that need to be considered.

The school attempted to engage parents of learners who were having difficulties in the school by providing courses on the learning platform and giving them access but they did not use it. The school view was that there may be a particular family ethos in the home that prevents the successful take-up of such initiatives.

Some learners mentioned showing their parents what they are doing on the learning platform. Most say, however, that their parents don't know how to use it.

Around 90 per cent of learners have broadband at home and can access the school server through the virtual private network (VPN), but access to applications for concurrent users can be slow. The local authority provided laptops and internet access (on a dongle) to some learners through the Computers for Pupils scheme, and laptops were managed by an external supplier. The school is meant to receive reports of use by the supplier but this hasn't happened yet and there was some dissatisfaction expressed with the services (or lack of them) provided by the supplier in terms of maintaining the laptops as the school has not received the level of help that was expected.

3. Benefits of using the learning platform

Findings from the case study are described below.

Sharing resources

The learning platform enables teachers to share resources and to avoid re-inventing the wheel in preparing materials.

"What I do know is that every teacher on there benefits in the sense that they would have been making all these resources for themselves anyway, and you always will have some people who take and don't give very much back, but everybody's giving something, so therefore there is something for everybody to take as well." (Teacher)

Access to resources improves consistency across tutorials:

"My tutors all have to use the VLE to access resources for whatever tutorial, and the good thing about that is it's improving consistency across tutorials. Whereas in the past when I was doing six month tutorials, we had to give people things on a disc if we wanted to share. It's just the logistics of it, and the fact is, it could take forever to transfer everything onto a CD, to then pass to somebody, whereas it's literally, you know, a few minutes extra to upload it onto the VLE." (Teacher)

"It's much easier for instructing the tutors because you can say, right, it's on the VLE, and the tutors know exactly what's there, and there's no confusion, or if someone's missing, you've got access to it straight away, that's good." (Teacher)

"As a tutor, really, I have to try and mentor a few pupils and if I'm thinking about which pupils I'm meant to be mentoring, I just call up that information and use it, and that's really helpful." (Teacher)

Improved monitoring and tracking of data

All interviewee groups referred to the impact of having attendance data stored in an accessible form on the MIS. Staff report that there is now easier, faster access to data regarding learners' attendance and as a result, more efficiency in taking action in cases of serious absences. During an Ofsted inspection, the MIS was useful for providing attendance data required. An advantage is that all the information on a child from current and previous years (phone number, address, grade history, absences and behaviour history) is available in one place.

"It's good because you can pick up a kid in, say, Year 9 and have all their data from Year 7; all their grades, assessment, etc." (Teacher)

"Systems have improved and become more and more sophisticated over the years, so there's more opportunity to collect data from schools in a much more compact and efficient way." (Deputy Head)

In terms of monitoring assessment, the school has made great progress following a past Ofsted report. Monitoring allows for quicker responses and planning of interventions.

"Well, I think it helps, it's more evidence for us to identify kids, I think, so then it will benefit the people it needs to. So I can look at the kids' studies and see this chap here is below target, you know. I will think, well, actually, that's someone I really need to work with, and they'll respond to it, so it does help and it's better for me. It's better than keeping paper records because, you know where it is, you can access it any time." (Teacher)

Having easier access to this data has also improved relations between school and home, as more information is available for parents in terms of learners' progress.

"I think, something that's written down like that, on a computer, is seen, almost, psychologically, as hard evidence, so if you're talking to a parent about a Year 11 or a sixth former, or whoever it might be, it's not just hearsay. You can't just say to a parent, 'Well, your son's been poorly behaved'. They'll say, 'Well, give me examples'. So, you need specifics, don't you, you have to do the specifics." (Teacher)

Teachers can manage assessment more effectively, by setting deadlines for different groups of learners or individuals:

"The fact that they can actually submit assignments on there means that there's an easy access for students but, also, it means that we're able to prioritise students in terms of what order they actually send in whereas in the past everybody hands an assignment in on the same day. Some might have done it a week before, some have done it five minutes before. I guess, day to day, you might just suddenly find that three assignments have come in, you can mark them straight away, it's more continuous. There's quicker feedback, I think. It's also the fact that you can use track changes on the VLE, on the assignments, you can actually indicate to them where they need to improve those things, and it actually flashes up as things they need to improve to the structure or to the content of the work." (Teacher)

Improved behaviour management

Staff members see a benefit in being able to track learners' behaviour, providing reports and comments on the e-portal. Teachers reported using this system extensively alongside traditional note-giving on paper and find that identifying patterns is a useful aspect of having this data. Tracking behaviour has become easier to communicate amongst staff, as tutors as well as heads of houses have access to the events (incidents) live on the e-portal and can get the overall picture:

"The heads of house get feedback on the assessments that we do... and when they log in they get all the behaviour events coming up for the students within their house block... so they get to see the bigger picture ... they get to see the behaviour stuff coming in live." (MIS Support Officer)

Learners are aware of the system in place and in some cases, learners become more careful in regard to their behaviour. Incidents can be informative, and where there are serious incidents requiring action, alongside putting a report on the eportal, the school sends a letter home or makes a phone call to parents.

"They know you are monitoring them. What it does is that it creates a certain structure to it. You can see the patterns. The sixth form know they are being tracked, it modifies their behaviour." (Teacher)

However, learners raise issues of privacy because of this way of managing behaviour:

"It can be quite embarrassing to have a note posted about you on the e-portal. I think it would be better if like other teachers couldn't see what you've done, just your form tutor and the teacher that posted it. Like it gets sent to a specific person so I won't really like them looking at the different ways I've been behaving in other lessons." (Year 10 learner)

One of the identified benefits of having data on learners' attendance, progress and behaviour online is that these constitute evidence that can be presented in communication with parents.

"I think the biggest improvement has got to be the data that is going back to the parents in terms of the assessments and the reports, the two biggest areas that we've improved on." (MIS Support Officer)

Flexibility/remote access – continuity of work

The benefit of being able to access and use the learning platform at home and school – to access resources, homework and particularly revision exercises such as quizzes – was reported by some learners.

"I think it's quite good what you can do inside the school and outside the school, if you start something at school and you don't have time to finish it, you can do it outside the school." (Year 7 learner)

Learners who are absent due to illness, for example, can keep up with work. Also, having the course goals online, as a teacher suggested, enables learners to plan their learning. Learners reported they caught up on homework on the e-portal and also that they enjoy having flexibility to work at their own pace.

Making learning fun and engaging

Learners, especially younger ones, are enthusiastic about the new ways of learning through the e-portal and see these as enriching lessons. Learners mention quizzes on subject content, and also software they use in language lessons (such as a cartoon creator). Some learners mentioned that learning through fun activities and quizzes improves their memory of the subject content. The learning platform also helps them in revising and preparing for exams.

"And there's quizzes as well, like a lot of quizzes that you have to say what you did and if you learned it and how to explain it and that...It's very fun." (Year 10 learner)

"With computers it makes it a bit more exciting, but that's about it, really. Lessons you're bored in, sometimes you go to the ICT room for the odd lesson, and then it's probably more fun. We normally work because it's quite fun doing the quizzes and that." (Year 10 learner)

"It's more fun, and when something is fun, you remember it, and then it goes, gets into you, your body, and then you remember it." (Year 10 learner)

Enriched lessons and centralisation of resources

For teachers, having access to all documents related to their work in one space is an advantage:

"You know all those documents you can never find, all the documents that you have to fill in as a Head of Department or for assessments... anything you have to do... anything like that... they are all on here." (ICT Head)

Teachers also see a benefit in terms of enrichment of teaching with various forms of media, such as video clips:

"Obviously, it means that there's a range of different media for us to use, whether it's video clips that are helpful." (Teacher)

Resource saving

Teachers mentioned how having data on the e-portal and MIS saves them time and paper. They suggested that having a shared space where they upload worksheets and resources means they all benefit from having access to these resources rather than having to do everything themselves.

"You don't have to rely on someone else to do it. The e-portal, without a doubt, is a massive time saver." (Teacher)

"The information system on the VLE definitely saves tutor time." (Teacher)

"I think that it is a time saver, because otherwise you're re-inventing the wheel all the time. So there's somebody, next door to you, who's just spent three hours, the previous night, planning which he just did himself." (Teacher)

4. Challenges and solutions

One of the challenges the school faces is home access for learners. The local authority runs a Computers for Pupils scheme, where homes are provided with laptops but even then, teachers note, having the equipment does not guarantee access for learners.

"Are we going to work on the basis that we're going to exclude 10 per cent of the school population? But there's a second issue. Students may well have the machinery at home but it's not always operating continually so, frequently, students will say it's broken down, and that could be three, four, five, six weeks before it's fixed. I mean, I've had students and I've had parents who have seen me in my position as sixth form tutor, and they've been really quite angry that for whatever reason they don't have internet access, or their hardware's isn't in working order. I've had comments from students saying, for whatever reason, 'I don't have access at home at the present time, I am unable to get the material that I need', so I think there is an equal opportunities issue." (Teacher)

To resolve this issue, some departments (geography, for example) provide access for learners during lunchtime, break time, or after school. Related to the above challenge is some learners' lack of skills for using the learning platform or lack of confidence with it, and teachers suggested providing support for them in using the learning platform.

"I think we often assume that students are confident with the VLE and often they aren't. So I'm always surprised that there is a significant minority of students who, initially, are very reluctant to use the VLE because, basically, they can't. I thought students would be perfectly competent and confident with using the VLE." (Teacher)

Concurrent use by many learners can slow down processes and make learners frustrated. Parents' lack of skills is also an issue that prevents them from using the learning platform:

"My parents don't know how to use it but I am trying to teach them how to use it. I show them everything that I've done to see if they can do it as well." (Year 7 learner)

For teachers, issues that arise when they use the system have to do with features of the learning platform that they find frustrating:

"I do the sixth form tutoring, and I actually find it quite labour intensive, the learning platform, in terms of editing. I find it incredibly frustrating that if I want to change something I've done on a tutorial from last year, I would have to stop putting dates on because if I want to change a date, I have to go to my original document, change the date, delete the old one off the VLE, re-upload the new one, save that, and I find that quite frustrating. I don't think it's efficient." (Teacher)

Broadband speed at home can also be frustrating for teachers when uploading resources:

"It's also a lot more frustrating from home than it is within school because if you're uploading something within school, then the speed is so quick, you can put in your 20MB video clip on there and it's a 20-second process whereas from home, obviously dependent on your broadband speed, it can be much slower." (Teacher)

The school server memory is an issue when it comes to using some applications:

"One thing I'm using a lot with my colleagues is Google Docs and the thing about Google Docs is if you try to use it in this school at the moment 100MB isn't broad enough to use it seriously across all the kids, but it's still very useful." (ICT Head)

5. Drivers

The ICT Head has been in the school since the implementation of the learning platform, has contributed to its implementation and installation and is responsible for some maintenance. He is self-motivated, enthusiastic and knowledgeable about ICT, which enables him to play the role of a driver for implementation within the school.

"Well, I'm saying I can do it – I'm hoping I can do it. I mean, I'm a pretty good Java programmer and Python's pretty much very similar really in terms of its functionality and the way it works." (ICT Head)

As a result of the ICT Head being enthusiastic to implement the learning platform, the ICT department has been leading the way in the school, for example, in trialling new applications with the learning platform such as the e-portfolios and peer assessment. Following that example, other departments have also implemented the learning platform in subjects like geography and languages. Teachers reported that the ICT Head has been encouraging them from the beginning in using the learning platform.

6. Conditions for success

The choice of the system to be used was an important condition for success in this school. It requires low maintenance as it is automatically updated.

"If you take the VLE, that automatically updates itself, it's very, very standard and we don't ever do anything like use Beta code or anything silly like that. So all you need to do to keep that up-to-date is leave it and it will stay up to date, right?" (ICT Head)

The Senior Management Team and teachers referred to the system of tracking attainment as a clear, easy to use and user-friendly system.

"I think, literally, it takes seconds. They've made it really simple so you don't have to say what they did, you can just put on that homework's not been completed, and there's a drop-down menu for you to pick what the instance is, you don't have to put much detail in and it's there for the morning." (Teacher)

"And the system is just very, very good, very clear, very user-friendly. We have to manage a school with a very talented staff in terms of teaching and learning, but a very diverse staff in terms of their ICT skills, or actually their confidence with ICT. So the more user-friendly we can make it look and so on, the better." (Senior Management Team)

"One of the strengths of the e-portal is that we can organise the front end, if you like, in the way that we want to do it, so that we can make it user-friendly." (Senior Management Team)

As a result of having an Open Source system, teachers can get help from outside the school, to find solutions for problems:

"And, also, using this system, the Open Source software, there's some fantastic forums, where a lot of the problems that people are having in other environments are easily answered. Whereas having a big, private firm, you have to then contact them to find out what a particular technical issue is, you're then reliant on that one person getting back to you, and the whole thing can be slowed down, whereas you can just find your own solution." (Teacher)

Staff report that it is important having access to the people who first initiated the installation of the system and its use. A great role was played the ICT Head with another staff member, an ex-Deputy Head (who now has retired) and although practices with the learning platform have become more widespread, the ICT department's role is still important. Having some departments that took the learning platform forward and made it become day-to-day practice allows other members of

staff to see the benefits of using the learning platform around them. Monitoring of teachers' use of the system is supported by administrators:

"We run a list of who hasn't done their report by the deadline and then one of the girls from the admin team go around and chase them up to do it. Initially there were a few that didn't like to being told that they haven't done something but now they are very good." (MIS Support Officer)

Learners appreciate the IT infrastructure that is available at their school:

"It's good because a lot of the equipment that they've brought in is like very good, like having new monitors in the ICT rooms, and all that. I think it's good because I've got friends at other schools, and theirs doesn't have like the facilities that ours does." (Year 10 learner)

Learners report that they feel the learning platform is a safe environment compared to the internet tools they use (MSN and Facebook, for example):

"On the VLE, if you compare the VLE to MSN, there's much more people going on MSN than the VLE and Facebook, and MySpace, and things like that. And I think some of the teachers might be able to see what's happening somehow, they might not be able to, but that's what I think. If they couldn't then I think that's a good thing to do, like teachers will be able to see, not just ruining your privacy, but just be able to see a little bit that you've been doing so nobody can be... If people were like going on your VLE, so they cannot see your address." (Year 7 learner)

The training provided for staff was mentioned as an important aspect of implementation by interviewees. A CPD day and two workshops on the use of interactive whiteboards (one for new staff and another, more advanced), have also addressed staff, with additional workshops on the use of the learning platform. The Senior Management Team is involved in developing this INSET training. The democratic participation of all staff in decision-making regarding the development of the learning platform is the chosen approach by the SMT.

"There's very, very few decisions that are made on a Monday evening in the (Headteacher's) office that don't then go through consultation with Heads of Faculty and so on, because it's the staff in the end that have to use it." (Deputy Head)

Teachers appreciate having flexibility in terms of implementing the learning platform.

"The strength of this school, really, is that there aren't so many rules and regulations, which stop creativity, and it's a delicate balance, isn't it, between

moderating something so that it's being used properly, and ensuring that it's organised, properly, into clear sections?" (Teacher)

More generally, the SMT members in this school follow a distributed leadership model, where flexibility is given to staff to choose the kinds of ICT they would like to use, rather than expecting all to make the same use of ICT.

"It's all to do with consultation; of building capacity and allowing our middle managers to have a say in how they see the best way to develop teaching and learning in their area. When you build capacity like that, it's not top-down... For example, we have a geography department. They wanted the interactive whiteboard – and then you see the maths department and see the development ... actually there aren't that many classrooms in the school without whiteboards, but we never said, 'Right, you are going to come back in September, folks, and you are going to have an interactive whiteboard"." (Deputy Head)

7. Lessons learnt and future plans

Deciding to develop a bespoke platform using Open Source software, although it has proved to fit in with the broader ethos of the school regarding ICT developments, where a bottom-up approach is followed, has also come with some problems. The ICT Head has to deal with maintenance and troubleshooting along with the MIS support staff. For this reason, more time is needed to plan and use new applications. For example, the ICT Head set up peer assessment for some classes as a pilot, but administrative problems have prevented others from implementing it. The ICT Head, however, sees a great potential in this and would like to implement it in the future:

"Right, that's quite good – the peer assessment – quite difficult to set up, but that means that the children see each other's work and that's something you couldn't do so easily on paper. You could in principle, but it would be such a shed load of photocopying, you'd never mark it because it would be so much work. So what they do is they get given some other student's stuff, which is a number you can determine. They give a mark against a half a dozen criteria, you know." (ICT Head)

The Deputy Head has been involved in visiting others schools in the local authority, looking at their MIS and learning gateways to keep doors open for any future move to this or other systems.

Success in attainment (GCSE results) can be linked to the use of ICT including the e-portal, although the Senior Management Team clarified this perspective by highlighting that there are other developments implicated in this process, so that the use of ICT cannot be considered the sole cause of progress:

"There'll be elements of the use of IT in there, but I would say that it's possibly more based on the use of IT to collect data about these pupils to track these pupils, and then okay, the IT has given us that data; now what do we do with that data? And that's not necessarily anything to do with that kind of thing. It's to do with splitting groups up into boys' and girls' groups, getting them to work differently, and so there's all kinds of things." (Senior Management Team)

The school also has some plans for parental engagement. One of the deputy heads, who recently arrived from working in another school, brought with him ideas and experiences of activities for connecting home and school and is expected to play a role in the future plans of the school to enable more communication with parents through the e-portal. Teachers and the MIS Support Officer mentioned that there are parents who expressed interest in having access to information through the e-portal, but the interviewees also suggested there are confidentiality issues involved. The current MIS does not allow for user-defined roles that would be useful in defining parents' access to information.

"Parents at the moment don't have access to the e-portal, but that's another development we are talking about. You know, what information on the VLE or on the school website, or though e-portal, should we start to give over to parents? And we're in discussions about that, and I know that the parental voice is again, well, it's always been there, but now it seems to be getting an increasing push from the DfES and so on." (Senior Management Team)

The school's recent integration of an Open Source e-portfolio system on the e-portal is something the school also wishes to carry forward. The aim is for learners to be able to showcase their work, and to be able to use it to assess their learning. From a student perspective, Year 10 learners would like to have more resources and revision exercises on the VLE (that they now find on the internet instead) and say they would use it more if they had these.