



**A cross-cluster study focussed on
the organisation of content and resources**

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Executive summary

- Teachers reported that it was initially very hard work to establish and find useful resources to deliver the planned curriculum. However, retrospectively they felt that this was very worthwhile in terms of the resources that they now had available and could readily modify for re-use.
- All the ICT Test Bed schools, by virtue of their sudden common needs, established significant professional sharing of resources and planning from the start of ICT Test Bed. This has continued to epitomise the working atmosphere in the schools. The availability of electronic resources has led to much greater sharing of resources than previously.
- All schools have an efficient storage and retrieval system, with which teachers were familiar and fully conversant.
- The volume of resources developed or acquired is such that almost all the schools have had to increase the capacity of their servers. Storage space for images and other media was a particular, and increasing, problem and was rapidly filling up the servers.
- The gradual introduction of display resources which most non ICT Test Bed schools have to employ tends to create a division between 'those who have/those who know' experts and their other colleagues and a greater dependency on ICT co-ordinators. This is no longer true in ICT Test Bed schools, where all primary teachers and almost all secondary teachers are competent and regular users of ICT.
- In all schools a significant proportion of resources were designed and created by teachers, often using ideas and elements downloaded from the internet.
- Teachers commented that the internet has given them access to information so quickly and easily that finding lesson content is no longer a problem; their main focus is now on presentation and organisation of the information.
- Existing digital resources provided significant support when teachers moved year groups, because they scaffold the development of new resources.
- Ownership and familiarity seem to be essential features of preferred resources, which makes externally provided materials problematic.
- Resources created by other teachers were found useful for stimulating ideas, but were rarely used directly.
- External content creation teams were thought to be useful, though the precision needed in the planning was sometimes a difficult or onerous task. Their resources tended to be too specific.

- The provision of templates for a variety of resources was found to be a useful product of content creation teams.
- The availability of learners to 'free range' the resources they wanted from the internet was seen as an important skill, which opened up sources of information outside the necessarily limited classroom provision. Secondary schools invested in online encyclopaedias and reference works. Staff felt these extended the resources available to students and were more likely to be kept up to date than the paper versions.
- The National Strategies were not seen as being in the forefront of ICT development in their respective subjects.
- In primary schools, all the staff tended to develop their broad portfolio of skills with relatively little reliance on individuals developing specialisms, except for specific applications such as digital video and animations.
- Teacher scaffolding resources, which provided clip-art and video clips as well as short lesson activities for primary teachers to manage, were found particularly valuable.
- Most primary schools made a limited scheme of work for the term or week available to parents. These included spellings and other homework tasks.
- In the primary schools, one teacher controls a whole class folder. This leads to a fairly simple structure which makes the need for more complex learning platforms seem less relevant. However, a learning platform has greatly increased functionality and may help increase the limited sharing of resources between schools.
- Within secondary school departments resources were often developed by individuals, though there was also collaboration between teachers, such that some resources were developed by groups of staff working together.
- In secondary schools students are presented with various interfaces to the resources but appear to manage this without major problems.
- In secondary schools, teachers and learners accessed resources from outside the school. Some homework was submitted and returned electronically.
- In secondary schools, quality assuring the resources proved to be an impossible task.
- A learning platform would present a standard interface for all subjects. To be effective and accepted a learning platform has to be easy for teachers to fill and furnish.

Introduction

This small research enquiry was designed to explore the current provision of digital resources and content used in ICT Test Bed schools, independent of any learning platform or virtual learning environment. At this stage in the ICT Test Bed project, ICT was fully embedded and the schools therefore represented stable state organisations. The research questions posed were:-

- How do teachers organise their filing systems and how much of it is shared between year groups, across year groups, between schools?
- What proportion of the content is derived from the free internet, derived from the commercial internet, purchased resources, custom created resources (content creation teams, cross cluster groups), other teacher created resources, self made resources?

In order to explore these issues, visits were paid to six primary schools in two of the clusters and all secondary schools, although a considerable amount of information was already available from earlier visits and discussions with teachers. One cluster was in the process of developing and installing a learning platform and this particular experience was the subject of a separate case study. It should be noted that this report is related to the *organisation* of resources, rather than providing a critique of the use of particular digital resources. Other reports in this series give occasional commentary on this latter issue, though this has not been a particular focus.

Creating and finding resources

There was a wide variety of types of resources at all levels of schooling, including subject specialist software, class handouts, presentations, tests and assignments. Many teachers were making use of digital images. There was some use of audio and video and a few teachers were making their own instructional videos using digital editing software.

In primary schools surveyed, ICT co-ordinators reported that a significant proportion of resources were designed and created by teachers. Teachers were using ideas and elements downloaded from the internet or provided by a number of teacher scaffolding packages designed to support resource making, which were found to be valuable. In some schools it was estimated that about 80 per cent of their resources were constructed in-house; in others, the proportion was nearer 50 per cent. A typical comment was:

I think you got a mixture, probably 70 per cent of the content is teacher generated. Twenty per cent comes from the internet and 10 per cent is bought. We do have subscriptions. I am aware that staff are not aware of it. So there are issues there of raising awareness. I think I will be cautious getting involved into subscriptions based services. There is always a budget issue. If down the line you get staff dependent on it and for some

reason you have to cut the budget and can't afford it, so you are left high and dry. (Primary ICT co-ordinator)

Resources created by other teachers were found to be useful for stimulating ideas, but were rarely used directly. As one primary ICT co-ordinator commented about a collection of science activities '*We use it but it is a guide and reference to create your own stuff as opposed to using it directly.*' This has relevance for the establishment of content creation groups, whether they be outside providers, such as the local FE college, or particular groups of teachers drawn together to produce materials. The value of such resources as a catalyst/stimulus/scaffold for self adapted or created classroom materials should not be underestimated, even though they are rarely used directly.

External content creation teams were thought to be useful, though the precision needed in the planning to achieve the desired result was sometimes found to be a difficult or onerous task for the requesting teacher. The resulting resources tended to be too specific to be used outside of the context for which they were designed. The provision of templates from which a variety of resources could be easily produced was found to be much more useful.

Teachers valued personalisation of resources for the school, perhaps by using the school uniform in the video clips and animations. One cluster brought together subject leaders from different schools to create a bank of resources, but even here, it was found that the resources were rarely used in their original form, except where a teacher was directly involved in the construction.

Although there is some cooperation between ICT Test Bed primary schools, they do not freely give access to resources. One cluster shared an impressive amount of inset training and many ideas, but this did not result in significant amounts of content sharing. This highlights an issue for establishing a functioning learning platform. It is often difficult to 'fill' a learning platform with appropriate materials in the initial stages, and it is tempting to utilise bought in resources or separately created items. Ownership and familiarity seem to be essential and familiarity comes from creation and regular usage, which renders externally provided materials problematic. Externally provided materials, and especially commercial resources, are often difficult to tweak and rarely give an ideal fit with the learning objectives.

Internet resources were popular, but they were often downloaded into lesson plans rather accessed on a web site during a lesson. Most schools used standard search engines, however one or two felt this was too risky, and downloaded web pages for their learners to use. For other schools, the availability of learners to 'free range' the resources they wanted from the internet was seen as an important skill, which opened up sources of information outside the necessarily limited classroom provision. One or two schools used child focussed search engines in the earlier years. All had good filtering and experiences of inappropriate browsing were very rare. Nearly all schools have

increased their server capacity and teachers can now download the web pages they want to use for a lesson.

Teachers commented that the internet has given them access to information so much more quickly and easily that finding lesson content is no longer a problem; their main focus is now on presentation and organisation of the information. For example one teacher commented how easily she had made a presentation to introduce a poet.

... like this morning, I am reading their lesson about giving the children some information about a poet. I look in [search engine] and look at the biography and put a couple of lines in there and a photo in there for her in [presentation software] and save it. Then (XXX) opens it in her room as well and she used it. So we share. (KS1 primary ICT co-ordinator)

Another teacher highlighted the ease with which presentations could be created and shared.

There was a need to do assembly on Monday and two minutes later whack together a quick (presentation). That was with the lower school. Walking in on Wednesday I saw my (presentation) up on the screen being used by the teachers in the upper school. I thought that is fantastic. We've got a location; people know that is where assembly resources should be saved. She's obviously done that, she's seen the title, she realised that it was relevant, she adapted it for her own needs. I saw that she made it slightly more higher ability. I thought that is pretty perfect. I haven't spoken to her, she hasn't spoken to me. But it just happens. I thought that is wonderful. (Primary assistant head and ICT co-ordinator)

In another school they used a presentation to prepare for a visit to the Tower of London so that the children would have an idea of what to expect. The children would then say 'I remember that' when they saw it in reality. It was also useful as it was easy to provide a hard copy of the presentation to the parents who were accompanying the trip, to aid them in helping the children.

Planning in these schools was almost universally digitally stored and usually placed in the staff area, as it was felt not to be relevant for learners and parents to consider. However, most schools made available to parents a limited scheme of work for the term or week including spellings and often, but not universally, homework tasks. This facility was often managed through the school's website, and involved a weekly update of that site, sometimes accomplished by a teaching assistant. Some teachers still liked to use paper for the initial planning, especially when 'brainstorming' as a group, and only transcribed the end results into a digital format. All teachers, however, found it very useful to be able to retrieve and amend last year's plans, especially when many schools maintained a clear record of their week by week plans. The ability to link resources into their planning made this even more detailed and valuable.

As we reported in an earlier report,¹ some schools initially invested in Individual Learning Systems. However, we found that there was limited enthusiasm for these ILS products, which teachers found to be difficult in terms of maintaining and accessing knowledge. Where there were used, it tended to be for skill practice. The systems were, however, found to be useful in making provision for learners with special educational needs in both primary and secondary schools.

Teacher scaffolding resources, which provided clip-art, video clips and short lesson activities for teachers to manage, were found to be particularly valuable. The sense of control and the act of decision making in regards to lessons and their content seem to be important factors in teachers feeling they are managing the learning and able to understand the learners' actions well enough to support them.

In secondary schools, there was a varying mixture of resources created by teachers, commercial resources and resources derived from websites. Teachers frequently commented that they used resources and ideas from websites to create materials for their lessons. The proportion of resources created in-house was generally around 50 per cent. Websites were providing sophisticated facilities that were seen as very valuable in maintaining the currency of the learning content. Facilities such as weather radar, GPS, maps and satellite pictures were commonly used by geography teachers and students. Poetry and biography sites were used in English. However, several teachers commented on the time needed to locate materials among the ever increasing number of websites, "*the sheer volume of stuff; it's very easy to get swamped by it as well*" (Secondary geography teacher).

There are some absolutely superb websites, some of them run by local teachers as well, we use those every week. It might not necessarily be going on and using it on the board when the students are in there, it might be taking a worksheet from them and adjusting it to suit our needs. That's weekly events. Even though we've built up a good resource over the last two or three years and before I came as well, it's constantly changing. (Secondary history teacher)

Some secondary departments, mainly the more technical areas such as ICT and design technology, had established websites that contained materials for their students.

There's loads of revision stuff on there, and we've got tutorials, so the CAD work that we do, the students can log on and go to that area and there's tutorials, like a little video clip. So they can watch the video clip of screen shots taking place. They can minimise that and load the desktop and work through and scroll backwards and forwards, they can rewind it and see what they've done. It's video clips of the screenshots. With CAD some of them just sail through it and they're doing amazing pieces of

¹ The report 'The role of ICT in enhancing learning and assessment' in this series.

work, some of them are just ... you have that variety of ability, so having that independent learning is a real bonus. (Secondary DT teacher)

Within secondary school departments resources were often developed by individuals, though there was also collaboration between teachers, such that some resources were developed by groups of staff working together. Aims and objectives for the materials were often identified in department meetings and development work shared by the staff.

Well we develop resources as individuals and as groups and as small clusters all the time. And then, when we are happy with them, we upload them to the intranet site or we use them on the shared areas. (Secondary head of ICT)

In the early days of ICT Test Bed, some staff were given development time and this was often used to create learning materials. Inevitably, this tended to be the 'ICT-expert' staff. One head of department commented

The most expert of us all in the department and what I have asked her to do is to load resources on, find different resources that we could put on and also produce a list of stuff to say where this could be found, like a catalogue really where this could be found. That has been really valuable in putting the resources on. (Secondary head of English)

There was occasional resentment from individual teachers who felt that their colleagues were not contributing to the resource development, but generally teachers found that collaborative developments worked well.

There was much use of digital video within the secondary curriculum. Some examples were videoing exemplar lessons where ICT was used for professional development; filming of trips and other events; and creation of DVDs for publicity purposes. A PE department routinely filmed students doing exercises or playing sport, enabling that to analyse individual performance using a software application.

They've got all these packages as well which are performance analysis packages, where the students will put data in, and it will analyse fitness levels and they can...they use that as a resource for their own coursework. So they're building up their resource bank with each other. So they might have a database where they've got different students and how they're performing. (Secondary deputy head)

Secondary schools have purchased a range of commercial resources and specialist software to support the curriculum. This was common in maths, where various software packages had been acquired to support the delivery of the national numeracy strategy. Several teachers commented that they used material on CD-ROM; frequently extracts from the CD-ROM were blended with other material to create the learning materials for the class.

And in fact that most of the published resources that we buy come with CD-ROMs now anyway and we buy them. (Secondary head of english)

Departments have continued to acquire software and other resources throughout the project. This has been achieved by diverting funding from other resources or by using schemes such as e-learning credits. One deputy head remarked,

A lot of subjects now are not ordering text books anymore, so there's a financial issue that they are changing what they are resourcing and what they are spending their money on resource wise. For geography I can't remember the last time they were talking about using KS3 geography books. They don't because they are out of date too quickly. Kids can research on the internet and they can use the software that they've got and the kids enjoy it. (Secondary deputy head)

This trend was also seen in online encyclopaedias and reference works. Staff felt these extended the resources available to students and were more likely to be kept up to date than the paper versions.

Supporting the creation of resources

On a number of occasions, teachers reported that it was initially very hard work to establish and find useful resources to deliver the planned curriculum. However, at this stage, all said that retrospectively this was worthwhile in terms of the resources that they now had available and could modify for re-use very readily. All the ICT Test Bed schools, by virtue of their sudden common needs, established significant professional sharing of resources and planning from the start of ICT Test Bed. Most realised fairly early on, that there was a need to establish an organised file system. This not only eased what was a large initial burden, but has continued to epitomise the working atmosphere in the schools.² We feel that this medium/longer term gain is very valuable in terms of creating the right co-operative environment and was a positive result of the sudden complete immersion model that ICT Test Bed generated. The gradual introduction of display resources which most non ICT Test Bed schools have had to employ has tended to create a division between 'those who have/those who know' experts and their other colleagues and a greater dependency on ICT co-ordinators. In ICT Test Bed schools almost all the teachers are competent and regular users of ICT.

Smaller **primary schools** in the project, with one or two class entry, shared expertise vertically and were usually supported by the ICT co-ordinator. We found that in smaller schools the role of the ICT co-ordinator as catalyst was important and the enhanced out-of-classroom time enabled by ICT Test Bed funding for this purpose was well invested. In these schools all the staff tended

² See for example the workforce study in this same series of reports.

to develop their broad portfolio of skills with relatively little reliance on individuals developing specialisms, except for specific applications such as digital video and animations. As ICT Test Bed has developed, ICT co-ordinators have returned to more of a classroom role and have often tried to move responsibility for developing digital curriculum resources back to the now more ICT-experienced subject co-ordinators, a process which is likely to be aided by the newly established 'planning preparation and assessment time'. At this stage of the ICT Test Bed project, the extensive resources already developed provide a safety net against needs for immediate development. However, as the materials need updating and renewal, a greater reliance will be placed on LAs and other teacher subject networks. It should be noted that the National Strategies were not seen as being in the forefront of ICT development in their respective subjects, though this may change as the impact of their involvement in the SWE project³ stimulates more ICT-based curriculum development.

Larger primary schools, with three or four class entry, have year-based teams who share resources and joint planning. In these schools the subject/year co-ordinators take more responsibility for support and developing resources, with the encouragement of the ICT co-ordinator. Not uncommonly, the different year groups have slightly different structuring to their folders and files, and plan according to the team and their curriculum. The older the year group the more prevalent this variation is, though the all-encompassing subject structure of the primary curriculum imposes a basic common pattern.

Existing digital resources provided significant support when teachers moved year groups, because they scaffold the development of new resources. This was remarked upon by a number of teachers. The ability to tweak planning and resources to meet individual needs with considerable ease was found to be important; this mirrored the dramatic improvement in drafting techniques offered by digital resource in all forms of writing. This same support was also important for supporting supply teachers and classroom assistants.

All **secondary schools** had created a school-wide shared area for resources. School networks provided a basic resource storage pattern, which provided some commonality and in some cases a standard front page to the system. However, contents were generally particular to specific subject areas. Resource development has largely happened through individual teachers or groups of teachers creating resources for their classes and uploading these to the shared areas. In the early stages this was led by staff who already had an interest in using ICT, but schools have found that nearly all staff now make use of the increased availability of ICT equipment to create resources for students. Some schools have established ICT strategy groups where there is a designated teacher with responsibility for developing ICT in each department. Secondary teachers often develop personal expertise in eg the use of data bases or spreadsheets or 'voting systems', which they use to support departmental colleagues. Unlike primary schools, some staff still do not engage with ICT to

³ Schools whiteboard extension project

any great extent, but they are small in number and their number continues to decrease.

In secondary schools resources in the shared areas were usually available to all staff in the school. However, the extent to which they were used by other staff varied from school to school and subject to subject. Sharing of practice generally took place on a departmental basis; in some schools it was a regular item in departmental meetings; in others, it happened in a more informal ad-hoc way.

Primary staff in ICT Test Bed schools can, by and large, be seen as working in a cooperative environment with joint planning and resource construction and a mutual sharing of expertise. Although there are significant differences between teaching Year 1 and Year 6, the teachers still feel they are essentially doing the same job. We found a similar approach among some departments in secondary schools, where teachers planned and created resources together. These were then placed in the shared folders or on the department's web site for students to use. Some departments did not have such a well developed sharing ethos, often because the size of the department meant that teachers were not teaching the same topics or year groups. The approach then tended to be that individual teachers created or found their own resources and made these available to colleagues through the shared area. It may be that teaching different subjects creates different attitudes and styles, and that teachers therefore develop individual expertise and different needs and approaches to resource creation.

Storage and cataloguing

All **primary schools** surveyed during the evaluation of ICT Test Bed have an efficient storage and retrieval system with which teachers were familiar and fully conversant. The ease with which resources can be catalogued, filed and located makes it less urgent for primary schools to acquire learning platforms, even though they offer a much wider range of capabilities.⁴ Familiarity is crucial when working under pressure. In many cases the organisation of resources is good, although it is sometimes a function of a particular group of teachers and could occasionally, if rarely, resemble the organised chaos in which some people prefer to work.

... most teaching contents will go onto shared and within that there is basically a hierarchy folders based on year group and subjects. The year groups are responsible for this. I always viewed it like a big city. If I go into London I know the areas very well. But if I step into areas I don't know well I will need to ask someone. I don't think there is anyone in school who has got the knowledge like a cabby who knows all of it. I think different year groups will know their areas very well. Certainly when I've worked with year groups, they are very aware where the resources are. It is becoming second nature. That is a strength but it can also be a weakness if someone

⁴ See the MIS report

were to blunder in there and change things and move everything and then suddenly nobody doesn't know.....it is a like a messy desk, the person with the messy desk knows exactly where things is, someone comes in and tidies it up, and... (KS2 primary ICT co-ordinator)

As one co-ordinator said

...if we ever decide that pupils need more choice in selecting their own learning materials then we will have to change the system, but at the moment for people who deliver the system it works fine. (Primary ICT co-ordinator)

All teachers were re-using resources that they had already created and were tweaking them to fit their current class needs. Teachers had found that many commercial products could not be tweaked and were therefore too restrictive. However, tweaking in itself has time implications; the fact that it is possible to tweak resources to achieve a better fit with learning objectives or with the interests of the learners means that planning and changing resources can take longer than before.

In some schools, resources were sometimes seen as a teacher province and placed in the staff area; other teachers saw them as a common resource and placed them in the shared area so that they were available to other users, including learners and also parents where access was possible. Not many of these schools, however, made their intranet available to learners or parents outside school, though one infant school did allow open access. One co-ordinator commented '*we used to put resources into the shared area then we learnt better*' and resources in that school were kept on the staff area of the server. There was often a sense that resources were the province of professionals, and that parents would not fully understand the manner of their use, and the context in which they supported the learning. For the same reason planning, policies and assessment were almost always placed in the staff area. Teachers in a number of primary schools do not take advantage of staff access from home. As one co-ordinator indicated '*we have the capability for them to log into the server but we never exploit that because we always felt that there are workload issues.*' In many situations the teachers are often content with transporting their immediate work folders on a memory stick.

The volume of resources developed or acquired is such that almost all the schools in ICT Test Bed have increased the capacity of their servers and learners now have their own 'my documents' area into which they can put their work. Primary teachers usually have a class file into which they put worksheets, information sheets, spelling lists and other resources for the learners. Teachers had found that it was much quicker for them to populate the class documents file and for the learners to then copy this into their own documents file. Learner folders for reception and year one did not generally contain more than one file, but by year two the pupils were able to locate and fill subject folders within their 'my documents' file, and were beginning to learn how to structure their

resources. Schools have tended to develop a positive ‘housekeeping’ system for these learner materials and expect teachers to clear the children’s folders at the end of the year. We found that schools sometimes retained a selection of children’s work for future reference. Such exemplars of appropriate work would seem to provide an excellent method of demonstrating standards to learners and establishing targets (see the companion case study on a learning platform).

All the **secondary schools** had established a shared area for storage of resources. Within the shared areas, the most common method of organisation of materials was to have folders for each subject, and within those, for each year group. In some cases there was only a single teacher teaching that year group, so the opportunities for sharing were quite low. In other subjects, there was a team of teachers and much more sharing took place. The availability of electronic resources has led to much greater sharing of resources than previously.

Well with paper stuff, I don’t think we did so much. You might have handed someone a copy of something and said oh this is what I did but I think the culture now is that if you do something within school, I mean if it is part of the department, you are expected to share it. Nobody’s ever twitched about sharing. (Secondary deputy head)

We found that in some subjects and schools, schemes of work were in the shared areas and were linked to the resource bank. However, this was not yet in place in all areas and there was a good deal of variation in the extent to which this happened. In the most integrated examples, the scheme of work contained hyperlinks to the appropriate resources in the shared area.

Some secondary departments, mainly the more technical areas such as ICT and DT, had established internet areas that contained materials for their students. Online materials would typically include handouts and quizzes so that students could test their own knowledge. Often, these sites had been established before the ICT Test Bed project started and were maintained by the teachers who created them. Teachers felt that these offered superior facilities to students than merely having access to files in a shared area.

Yes, [presentation software], writing frames, PDFs, you name it. There’s interactive software in there for learning support, so the kids with learning support can click on the interactive software, interactive English software where you can work through word jigsaws and all sorts of things there, so again they can just come in and log in and get straight onto it. They don’t need the web address they can just click on an icon and they have instant access. Basically it is an empowerment tool. (Secondary head of ICT)

In these departments, there was consequently less use of shared file areas.

We found that secondary teachers in all five schools were able to access their resources when not in school. The most common way this was achieved was to allow staff to log in from outside school and access files in their areas. In one school, staff had a local copy of the shared areas on the hard drive of their laptop. When they logged in at school, the laptop would be automatically synchronised with the shared areas.

All schools bar one had made it possible for students to access materials from outside the school. Where access was not available, students would take files home on USB sticks or would email the files to themselves at home. Some teachers had set up a group email facility to email files to their student groups.

Students were not able to see all the materials in the shared folders; they had access to specific areas, mainly on a read only basis. In some schools, the technical staff had set up a two way interchange, whereby students could upload work into an area which staff could then access for marking. However, this appeared to be used infrequently. Some teachers were exchanging work but doing this through the use of email, mainly with students in Key Stage 4 and above. Students would email their work and the teacher would mark it and return it by email.

As the shared areas have built up, schools have found they need to manage them; frequent tidying up was needed to manage storage space and prevent duplication. All schools reported that it was difficult to search for specific resources within the shared areas. Storage space for images and other media was a particular, and increasing, problem and servers were rapidly filling up.

Quality assuring the resources had proved an impossible task. There was an assumption that Heads of Departments would do this but also a realisation that they were unlikely to be able to find the time. Schools felt that technical staff or non subject specialists would be unable to do this, as they would not be able to judge the quality of the resources. In practice, this was often done through teachers discussing resources at departmental meetings or informally.

I'm presuming that the HOD would be monitoring it and checking it and saying...but they haven't got time so...it's another thing on top of their huge workload that they have to do so it's difficult. I have to say that a lot of it on there is joint. Like geography, it's all being discussed and it's part of their action plan and their departmental planning, so where they would have, in the past, book such and such and page such and such, it's now an online resource and they would have discussed that and agreed on its use. (Secondary deputy head)

Another issue that was identified with the shared areas was that there was no uniformity of approach from department to department so students were faced with different experiences and different ways of working in their various subjects.

What is not there yet is the overall vision with the, almost the template; the model, the sort of uniform appearance so that a pupil going in is always met with the same sorts of things and doesn't have to negotiate, navigate around a new way of thinking, a different way of doing it. That will come. (Secondary deputy head)

Using a learning platform offers the ability to standardise. One secondary school was already using a learning platform and was starting the process of transferring its resources from the shared areas to the learning platform for the next academic year. The other schools were all expecting to adopt a learning platform within the next year and work was underway to explore the extent to which existing materials could be transferred to it from the shared folders. This expectation was constraining the amount and type of materials being uploaded to shared areas as staff were “*waiting to find out what would happen*” (Secondary deputy head). In one cluster, the problems encountered in finding an easy way of transferring resources have significantly delayed the introduction of a planned integrated learning platform.

There is no doubt that the ICT Test Bed schools have all developed efficient cataloguing and storage systems. In the primary schools one teacher controls a whole class folder and this leads to a fairly simple structure which makes the need for more complex learning platforms seem less relevant. However, a learning platform provides greatly increased functionality and may help increase the sharing of resources between schools. In secondary schools, students are presented with various interfaces to the resources, but appear to manage this without major problems. A learning platform would present a standard interface for all subjects. It should be noted that it has to be easy for teachers to fill and furnish the learning platform if it is to be effective and utilised and that making best use of the collaboration features of a learning platform may require considerable changes in classroom practice.