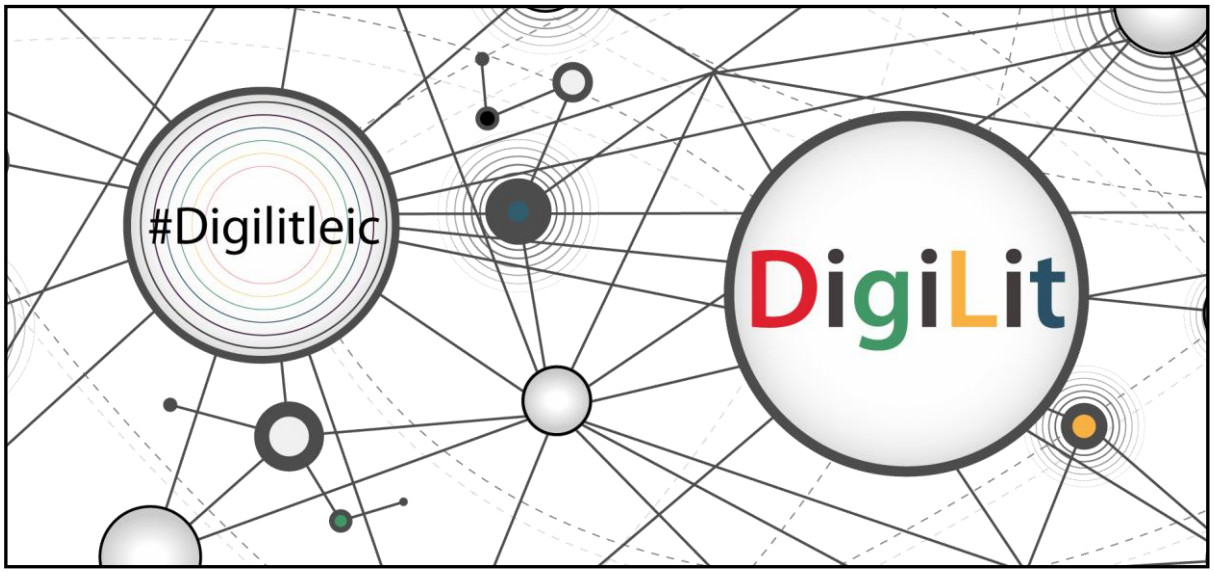


DigiLit Leicester

Supporting teachers, promoting digital literacy, transforming learning

Initial Project Report

Josie Fraser, Lucy Atkins, and Richard Hall

June 2013

Leicester City Council

DigiLit Leicester

Supporting teachers, promoting digital literacy, transforming learning

Contents

Introduction

Josie Fraser, ICT Strategy Lead (Children's Capital), Leicester City Council

How do we ensure every learner has access to the knowledge and skills necessary to make the most of technology in terms of educational, social and economic opportunities? One of the key ways is by ensuring school staff – leadership teams, teachers, learner support and library staff - have the skills and confidence to support learners. The recently published *Survey of Schools: ICT in Education* (European Commission and Directorate General for Communications Networks, Content and Technology, 2013) notes:

> *Teachers' confidence and opinions about ICT use for Teaching and Learning affect the frequency of students' ICT use for learning: boosting teacher professional development makes a difference, and appears to be a condition for an effective and efficient use of the available infrastructure.* (p.14)

The Council has been working in partnership with De Montfort University and 23 secondary schools, who support learners from 11 to 18 years old, on the *DigiLit Leicester* project. The project is run in the context of Leicester City Council's Building Schools for the Future (BSF) Programme - the largest capital investment Programme in Leicester for 50 years. 24 secondary school sites across the city will be rebuilt or refurbished by 2015. The Council and schools recognise investment in the effective, creative and critical use of technologies is essential to realising the opportunity BSF offers the city, and to get the most out of the investment in ICT infrastructure, systems and devices we are making for school communities.

The *DigiLit Leicester* project runs from September 2012 to September 2014, and focuses on improving learner outcomes and raising standards in secondary level (11-16 year old) educational provision. As well as ensuring schools can make the most of technologies to support their learners, digital literacy confidence and skills provide staff with huge opportunities to continue to creatively develop their own effective practice.

There are three key project stages:

- Investigate and define digital literacy, in the context of secondary school based practice
- Identify current school staff confidence levels, and what the strengths and gaps across city schools are, in relation to this definition
- Support staff in developing their digital literacy skills and knowledge - raising baseline skills and confidence levels across the city, and promoting existing effective and innovative practice

The project is designed to benefit schools both prior to and after the opening of their new school, and to be of relevance to staff working in secondary schools both old and new. It will help all school staff supporting learning and learners to develop their skills and confidence in using technology – from absolute beginner to advanced practitioner. It recognises that staff work in different environments and have different strengths and interests.

The project team are pleased to share our first project outputs here – the development of a digital literacy framework situated in secondary school practice, and the creation of a survey tool designed to identify staff confidence levels in relation to the framework. We are releasing this report under an Open Licence, which means that others are free to share, adapt and use our work non-commercially – for the benefit of other secondary schools or other sectors. Please do get in touch if you make use of our work – we would be delighted to hear from you!

I want to thank all of the schools and school staff who are taking part in the survey and contributing to the DigiLit Leicester project, and very much look forward to feeding back on the city-wide results and the project's continued progress in our next project report.

Josie Fraser

What is Digital Literacy?

> *"Digital literacy defines those capabilities which fit an individual for living, learning and working in a digital society."*
>
> (JISC, 2011a)

> *"To be digitally literate, educators must be able to utilise technology to enhance and transform classroom practices, and to enrich their own professional development and identity. The digitally literate educator will be able to think critically about why, how and when technology supplements learning and teaching."*
>
> DigiLit Leicester Project (working definition)

In the context of school practice, Digital Literacy is about equipping staff and learners with the skills and confidence to take advantage of the information and opportunities offered by technologies, particularly for learning, and to take an active role in shaping and creating those opportunities - social, educational, political, civic, and economic.

Web-based, mobile and gaming technologies are integrated into UK social life, and form a significant part of mainstream culture. The divide between 'real life' and online is in many senses a false one – real life is lived across both physical and electronic environments. However, whilst many young people are confident and creative users of technologies, many still lack basic skills when it comes to evaluating online content, using technology to create and present, and managing their online identity (Ofcom, 2012; Livingstone, 2011; Bartlett, 2011). A significant minority of young people have limited or no access outside of their school setting to what the majority of people in the UK now take for granted - access to devices and to the internet that enable us to stay connected to our friends and family, buy and sell goods and services, develop relationships, find information, and share and create content (National Office of Statistics, 2012).

The assertion that all young people can be regarded as 'digital natives' nevertheless persists (Prensky, 2001). However confident and creative many young people might be, many lack the skills and knowledge to critically engage with technology in ways that benefit them both inside and outside of formal education.

Development of the Framework

The project aims were from the outset practical ones – to contribute to the strategic aims of Leicester City Council, and to the key BSF ICT priorities (Leicester City Council, 2012), and to ensure that the significant investment being made through the BSF Programme on ICT systems, infrastructure and devices is fully realised as a catalyst for improving the educational experience and outcomes for young people across the city.

The framework has been designed through an iterative process, which included desk-based research as well as consultation with school practitioners and academics, practitioners and organisations with specific expertise relating to digital literacy.

The initial review of existing frameworks relating to digital literacy was carried out in order to identify significant themes, and importantly, to review the use and success of existing frameworks in practice. The educational policy landscape was also accounted for – for example, the Teachers' Standards (Department for Education, 2012), the JISC further and higher education level Developing Digital Literacies Programme (JISC, 2011b), EU level work on Digital Competencies (Ferrari, 2012), and the US National Educational Technology Plan (U.S. Department of Education, 2010).

The survey statements were developed in parallel with the framework, taking into account practical issues. Given the number of schools, spread of geographic location, and team capacity, the survey was always envisaged as being hosted online. Feedback from staff members discouraged us from producing a paper based survey, although we did extend this offer to schools. The length of time needed to complete the survey had to be reasonable in order to support completion rates. The number and scope of individual themes needed to be manageable and directly support key areas of practice.

Consultation with school staff shaped the final framework themes, the survey questions which link these themes to practice, the ordering of those themes, the levels that define staff confidence and practices, and the method of and approach to implementation.

In addition the survey was piloted with a small sample of secondary school staff (11 participants from five schools) working in different types of schools (mainstream and special educational needs), and with a range of confidence levels in their current use of technology to support learners. The pilot study consisted of survey completion, followed by qualitative interviews to understand user experience, including clarity of instructions and statements and overall relevance of content. The responses from the pilot further refined the final version of the framework and survey.

The Framework

The DigiLit Leicester project focuses on what digital literacy means in practice for secondary school staff. The framework identifies six key areas:

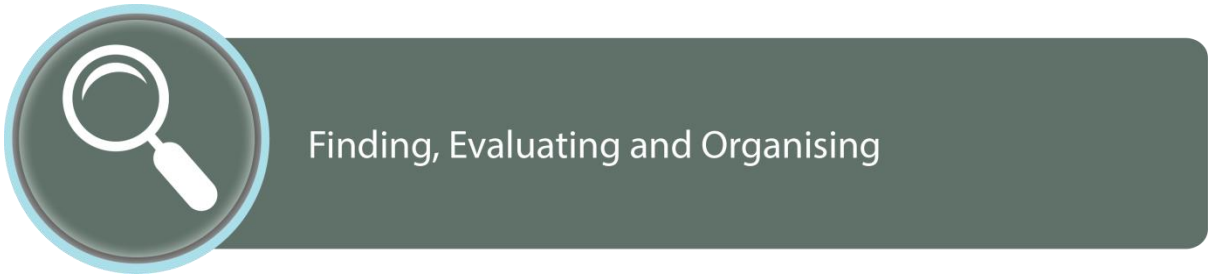
- Finding, Evaluating and Organising
- Creating and Sharing
- Assessment and Feedback
- Communication, Collaboration and Participation
- E-Safety and Online Identity
- Technology supported Professional Development

The content of the framework and survey are brought together here. This consists of descriptors of the six strands, the survey statements, the survey reports staff receive depending on their answers to the statements, and additional related resources, curated by the project team, that staff can use to learn more about particular areas and develop their practice.

		Framework levels								Online resources
		Entry		Core		Developer		Pioneer		
Framework Strand definitions	Finding, Evaluating and Organising	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources
	Creating and Sharing	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources
	Assessment and Feedback	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources
	Communication, Collaboration and Participation	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources
	E-Safety and Online Identity	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources
	Technology supported Professional Development	Survey	Report	Survey	Report	Survey	Report	Survey	Report	Additional Resources

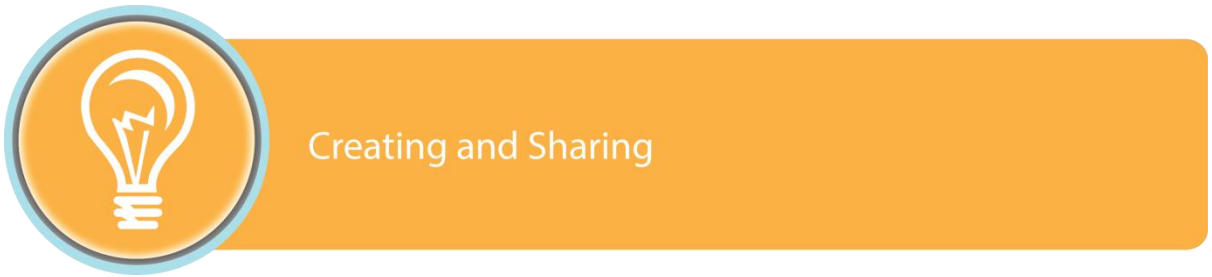
DigiLit Leicester – linked map of project content

Framework Strand Definitions



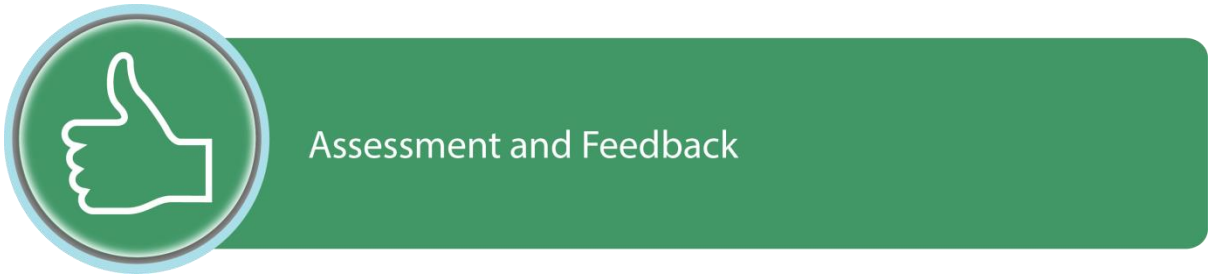
Finding, Evaluating and Organising

The internet is home to a huge range of information, resources and research that can be used to support and develop learning and teaching. The *Finding, Evaluating and Organising* strand includes the skills required to successfully search for information and resources online, the knowhow needed to identify reliable sources of information and to be able to apply a range of approaches for organising online content.



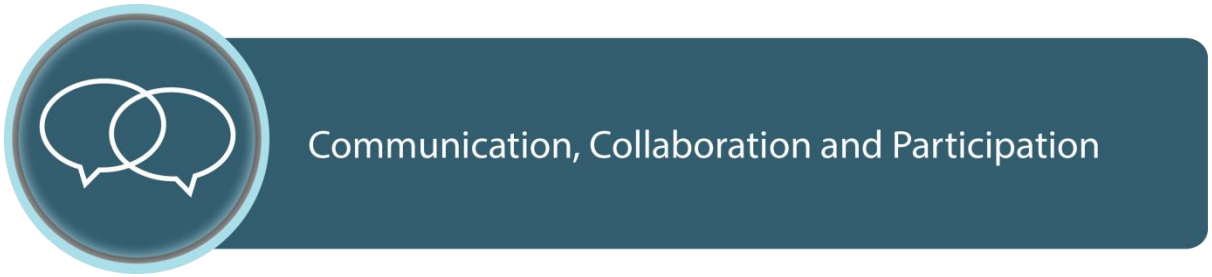
Creating and Sharing

As an educator you will need to be able to manage a wide range of digital information and resources, including those that you create yourself. The *Creating and Sharing* strand covers using online tools to create original materials, and building on or repurposing existing resources, for the classroom. You should know how to identify resources that you have permission to use and remix, and also how to openly share your own materials. You should be able to support learners in creating their own resources and portfolios of work. As an educator you need to be aware of the legal requirements relating to the use of online and digital resources, for example copyright law, and the range of open licenses available, for example Creative Commons licensing.



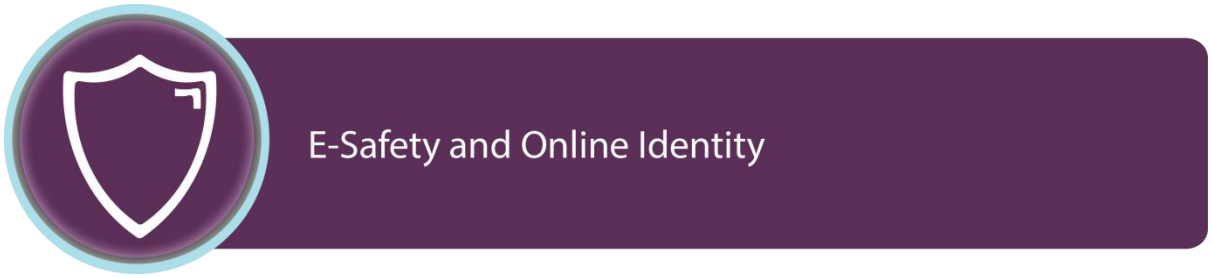
Assessment and Feedback

Web-based and mobile technologies provide a range of opportunities for educators and learners to assess attainment and track progress, to identify where students are having difficulties and to provide feedback, including peer assessment. The *Assessment and Feedback* strand also includes how staff make use of technologies to support learners in monitoring and managing their own learning and to ensure teaching approaches are effective, and adjusting these to suit learners' pace and needs.



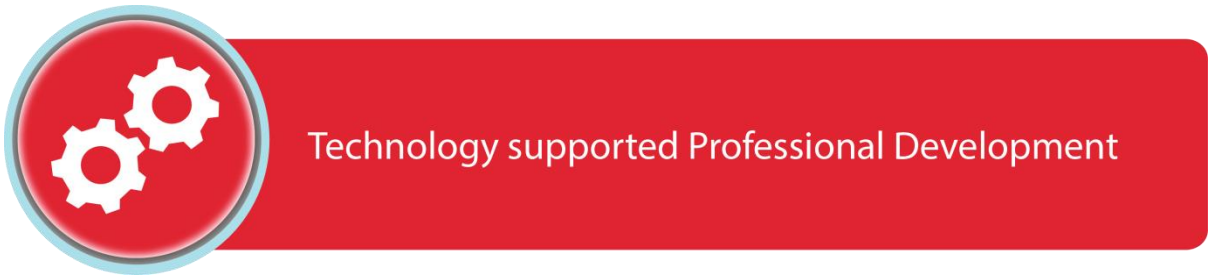
Communication, Collaboration and Participation

Digital tools and environments offer staff and learners a range of collaborative opportunities, supporting the co-design and co-production of resources, providing new approaches to participation and supporting learner voice. Staff and students can use technologies to connect and learn both with and from other learners and experts from around the world. The *Communication, Collaboration and Participation* strand involves the use of communication technologies, for example types of social media including, wikis, blogs and social networking sites, to support learning activities and enhance school communications, planning and management.



E-Safety and Online Identity

The use of technology is increasingly integrated into everyday life, and the value of using both private and public digital environments to support learning, teaching and communications is well recognised by educators. Schools and school staff support learners in understanding the negative effects of inappropriate online behaviour, and in ensuring learners understand what responsibilities they have as members and representatives of a school community. The *E-Safety and Online Identity* strand underpins educators' and learners' use of digital environments for formal and informal learning, including – understanding how to keep both yourself and your learners safe online, and how appropriate and positive online behaviours can be modelled in classroom practice.



Technology supported Professional Development

All school staff benefit from engagement with Continuous Professional Development (CPD) – keeping up to date in their subject and curriculum area, and in teaching approaches and methods. Web and mobile based technologies have changed the landscape for school staff in terms of how they can connect to other educators both locally and across the globe. Personal Learning Networks (PLN), developed and managed by educators allow school staff to discover, discuss and share relevant ideas, resources and approaches. The *Technology supported Professional Development* strand focuses on how educators can and are making use of technology to take their practice forward.

Framework Levels

Four levels were introduced to support differentiation and to structure survey feedback to practitioners and schools[1] - Entry, Core, Developer and Pioneer. In order to identify current confidence levels and evidence progress more accurately, these sit on top of a more granular seven scale score (1-7) within each survey strand, giving an overall score range of 6-42. The survey asks staff to focus on their knowledge, skills and confidence within the context of their practice – recognising while some school staff may be adept users of technology for personal use, or in the context of activity outside of their school employment, it does not necessarily follow that they are applying these skills to their school based practice, or that they currently have the specialist knowledge that would enable them to manage risk effectively (for example, a robust understanding of the requirements of data protection laws in relation to a range of different uses of technology to support learners and learning, or an understanding of organisational identity management in online environments).

The named levels can be characterised as:

Entry

Staff who fall at this level are unlikely to have had many opportunities to experiment or engage with technology in the school context. They can carry out a range of basic activities (sending email, entering data into the schools MIS, setting up web-based accounts, creating and sharing simple documents for example) across the framework strands, although there may be gaps in these skills.

Core

At the Core level, a member of staff can make use of commonly available school technologies and resources and understands a range of ways that these can be used to support learning and teaching. 'Core' levels in the context of the framework relates to the projects baseline of knowledge, skills and practice in the context of schools, i.e. represents a reasonable expectation of the skills and confidence level of staff supporting young people in a typical secondary school setting.

1 Helen Beetham deserves a particular note of thanks for supporting the team in deciding on the final four descriptors.

Developer

Staff working at the Developer level of the framework will have an active interest in the development of their digital literacy. Their professional development will be characteristically self-directed and they will be capable of thinking critically about the technology that they use (or choose not to use). They will have the ability to make use of and develop their use of a wide range of tools, including the advanced features of commonly available technologies and programmes. They understand how their learners use technology and can identify opportunities and risks.

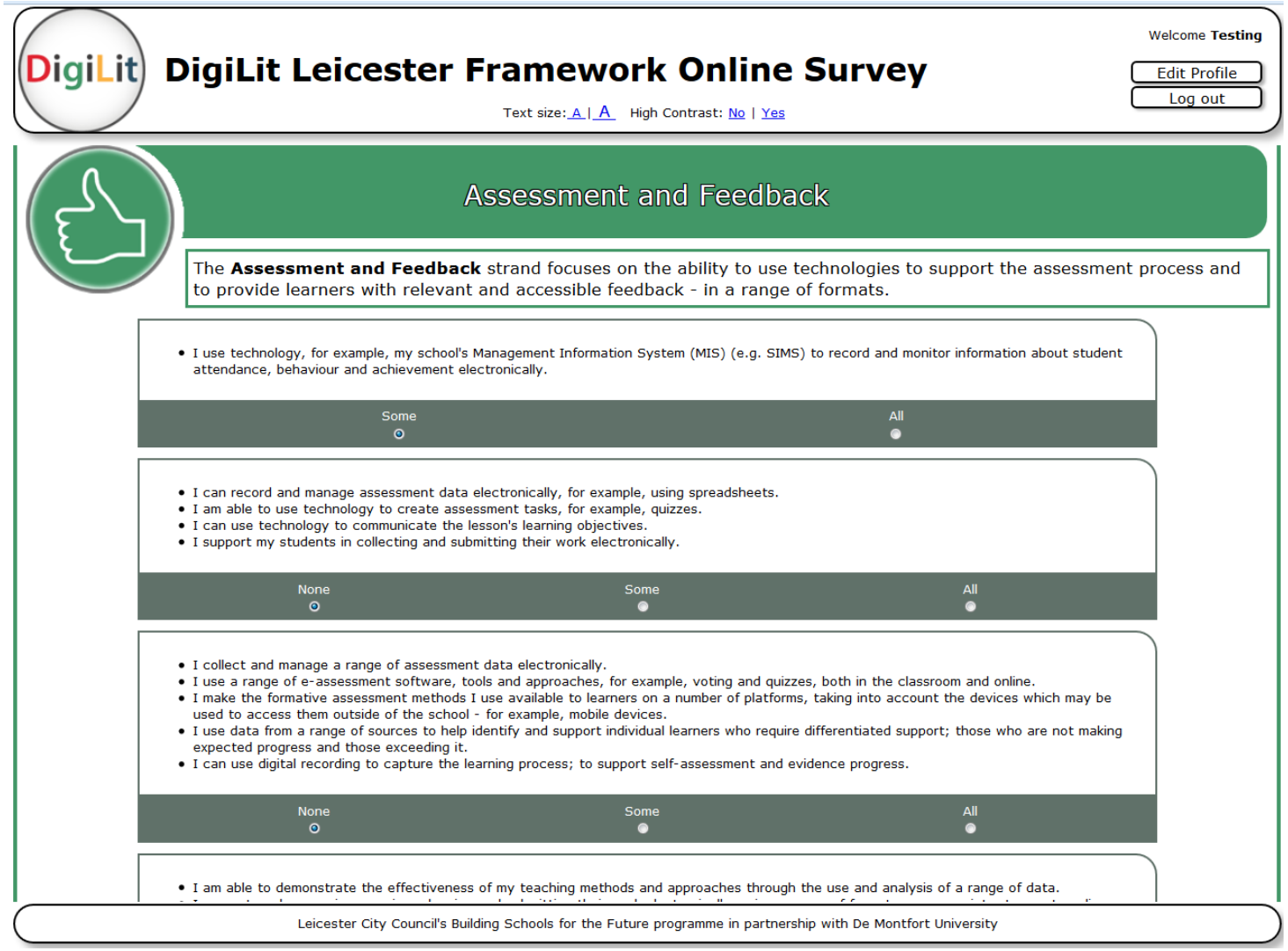
Pioneer

The Pioneer has fully integrated technology into their teaching practice and shares their experiences with colleagues and others. They are confident in their skills and know how to apply them in the classroom to create beneficial learning experiences, as well as how to appropriately monitor effectiveness and measure success. They routinely seek out opportunities to develop their professional understanding, skills and practice, and make use of technology to engage with and develop local, national and global communities and networks. They are reflective about their use of technology and use their knowledge to bring about innovation both within the classroom and for whole school community development.

The Survey

It became clear through discussions that, in light of current national level issues relating to school staff terms and conditions and differences in local school cultures and preference, the implementation would need to offer staff a range of engagement routes – whole school, departmental or individual level completion. The decision was taken to offer all schools the opportunity to participate, rather than focus on a few sample schools and extrapolate their data to other schools.
As well as developing the framework and survey in consultation with the schools, we have communicated the purpose of the survey and the opportunity it represents to a range of staff, in a range of ways, in person and electronically. We also created print materials for school display, and a range of online resources to inform staff about, and support them in taking, the survey.

The framework and the level criteria were used to structure the survey questions. The survey begins with registration and consent and is followed by a Likert scale question regarding overall confidence in the use of technology to support teaching and learning. The survey then focuses on the specific framework strands. Each strand is presented on its own page as a series of four sets of statements, corresponding to the framework levels. For each set, staff are presented with a choice of three options - ‘None’, ‘Some’ or ‘All’ – and are asked to select the option which best represents their current practice and experience.



Screenshot of Online Survey - Assessment and Feedback Strand

The data collected by the survey will also be used to generate anonymised city-wide, school and department level reports, and the data analysis will inform on-going planning and targeted support across the city and at school level. This will be developed in discussion with the participating schools, to ensure it aligns with their own approaches and priorities.

The survey has been designed to support staff in developing their digital literacy skills and confidence levels, in the context of their practice, wherever they currently might be. The survey isn't prescriptive, or designed as a formal appraisal management tool. A range of practices and levels have been included to reflect the skills and knowledge of all staff – from those just getting started with technology to those who have a lot of experience and expertise. The survey is designed to raise awareness of the skills and practices that exist, to provide staff members and schools with a shared understanding of digital literacy in practice, and to support staff in taking their professional development forward whatever their current confidence levels. The survey is not a list of practices which all staff must master – but a tool to enhance understanding of the ways in which digital literacy approaches can support school practice, and to help us as a council understand what professional development opportunities would be most useful to staff.

During the schools consultation, staff requested that particular words and phrases within the survey be defined more explicitly. Although there is a likely correlation between staff members not recognising a word or name and the tool or approach not being part of their practice, we felt that the survey should provide staff with clarification around unfamiliar terms, and the definitions provided are included here in footnotes to the survey statements. Staff may use or be familiar with alternate terms – for example, the word 'weblog' was changed to the more frequently recognised word 'blog'. Staff may not associate particular approaches with particular tools they use – for example, staff who use and are familiar with Skype did not automatically associate this with 'video conferencing'. In order to help staff understand what the generic terms we use relate to, we provided particular examples of named technologies we know that the schools are using, or mainstream platforms.

Survey Statements

Finding, Evaluating and Organising

Entry

- I can find information and resources online using search engines (for example, Google).
- I know how to check the reliability of information online – for example, how to check that information on a web site is accurate.
- I can save resources I find online to my personal drive.
- If my school uses library software (for example, Eclipse), I can use the electronic catalogue to find resources to support my lessons/learners.

Core

- I can find and use resources online to support my teaching practice.
- I provide my learners with links to useful resources that will support their work.
- I can create and organise folders and files on my computer and on the school system.
- I know how to use the bookmarking tool in my internet browser to save and organise resources I locate online.
- I understand the copyright rules that apply to the digital resources (images, text, audio and film) I use for school purposes.

Developer

- I know how to reference a range of different online sources – for example news stories, pictures, videos, research.
- I know how to search for Open Educational Resources (OERs)[2], for example resources released under a Creative Commons Licence[3], and how to correctly attribute these.
- I support my learners in completing successful online searches, including evaluating the reliability of an information source, understanding bias, and knowing how to reference correctly.
- I use social bookmarking and tagging to organise and share online resources and information with my learners and colleagues.

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2 Educational materials and resources shared in the public domain to allow others to use and build upon them.

3 Creative Commons licenses allow people who create resources to retain copyright for their work, while granting copyright permission to others to copy, distribute, and make selected use of the work.

Pioneer

- I use a number of search strategies for finding information and resources, including open educational resources online, for example, searching social media platforms and networks, academic databases, subject repositories and specialist search engines.
- I can curate digital information and resources in a number of ways. I use a wide range of tools to select, organise, annotate and present collections of information (images, text, audio, film, and activities).
- I advise and support colleagues on a range of effective approaches to find, evaluate and organise digital information, resources and activities, including open educational resources.

Creating and Sharing

Entry

- I can use computer software to create information sheets or activity worksheets for my learners.
- I can share information and resources with other staff electronically, for example by using email or saving documents to the school network.

Core

- I have created my own resources to support learners, for example presentations, using images and text.
- I make resources available online for my learners to access or download.
- I am aware of accessibility issues[4] in relation to the creation and use of digital resources.
- I edit digital resources I have created, keeping them up to date.
- I can incorporate online activities and resources into lessons, for example, using online video clips.
- I can use software to access and build upon resources I have found, for example using electronic white board annotation tools, and screen capture tools.

Developer

- I can use a variety of devices, software and digital content to create activities and resources.
- I organise online activities to support learners, for example setting up online learning groups, organising video conferences and collaborative group work to create electronic resources.

4 The range of barriers to access people with disabilities may face when trying to access content, and ways of addressing these.

- I can create resources and presentations using a range of media and interactive elements where appropriate, for example online or mobile quizzes or polls.
- I can use different approaches, tools and sites to create content collaboratively with peers, or to support my learners to create resources collaboratively.
- I share the resources I create online across a range of different sites and services (for example, school website, blog, social media sites[5], subject specialist repositories)

Pioneer

- I create Open Educational Resources (OERs) and share these with school colleagues and externally online.
- I understand and take accessibility issues into account when I create and share digital resources.
- I promote the resources that I create and know how to make my materials discoverable, for example through tagging, or use of specialist repositories.
- I support my learners in creating their own multimedia content and presentations, incorporating openly licensed content where appropriate.
- I support colleagues in creating original and repurposed multimedia resources.

5 Internet based sites and services that support the production and exchange of user created content.

Assessment and Feedback

Entry

- I use my school's Management Information System (MIS) (e.g. SIMS) to record and monitor information about student attendance, behaviour and achievement electronically.

Core

- I can record and manage assessment data electronically, for example, using spread sheets.
- I am able to use technology to create assessment tasks, for example, quizzes.
- I can use technology to communicate the lesson's learning objectives.
- I support my students in collecting and submitting their work electronically.

Developer

- I collect and manage a range of assessment data electronically.
- I use a range of e-assessment software, tools and approaches, for example, voting and quizzes, both in the classroom and online.
- I make the formative assessment methods I use available to learners on a number of platforms, taking into account the devices which may be used to access them outside of the school – for example, mobile devices.
- I use data from a range of sources to help identify and support individual learners who require differentiated support; those who are not making expected progress and those exceeding it.
- I can use digital recording to capture the learning process; to support self-assessment and evidence progress.

Pioneer

- I am able to demonstrate the effectiveness of my teaching methods and approaches through the use and analysis of a range of data.
- I support my learners in managing, planning and submitting their work electronically, using a range of formats as appropriate, to create online collections of their work and monitor their own progress.
- I facilitate peer assessment and feedback, for example, through the use of wikis, blogs or other online collaborative tools.
- I support colleagues in developing their skills and understanding relating to assessment tools and techniques.

Communication, Collaboration and Participation

Entry

- I can manage my school email account effectively.
- I know how to set up an account with an online service (for example, Skype, Twitter or YouTube).

Core

- I am able to use technology to communicate and collaborate with my peers, for example; using email; using track changes[6] in documents.
- I can use web based tools with my learners to support group discussion and collaboration, for example, discussion boards/forums, blogs.I can support my learners to present their group work electronically, for example through a presentation or video.

Developer

- I support my learners in using a range of digital and online collaborative tools and approaches for both small and large group planning, organisation and work.
- I understand data protection issues as they relates to using web based environments and services with my learners.
- I am confident in using video conferencing (for example, Skype), social media or social networking sites to support learning and teaching when appropriate.
- I use collaborative, multi user tools to support planning, discussion and resource development, for example, wikis and collaborative document services.

Pioneer

- I am an active participant in online communities and can manage online learning spaces effectively.
- I am able to manage one-off online activities for groups, as well as on-going collaborative projects.
- I can recognise when elements of the curriculum are best approached by my learners working collaboratively through technology.
- I am familiar with participatory approaches that enable my learners to co-produce and co-design activities and projects.
- I provide advice and support to my colleagues on how to integrate collaborative and participatory practices into their teaching and support of learners.
- I routinely evaluate the effectiveness of collaborative approaches.

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6 A built-in feature of some word processing packages which clearly marks any comments or changes made to a document – by highlighting these, for example, in a different colour. Track changes is a useful way of collaborating on a document, as it allows multiple users to edit, without losing the original piece of work.

E-Safety and Online Identity

Entry

- I have a basic understanding of the definitions of e-safety and cyberbullying.
- I understand basic prevention strategies and safety tips.
- I understand my school's e-safety policies and how these relate to and support safeguarding, and the implications this has for my practice.

Core

- I understand the difference between personal and professional use of online sites and communications technologies.
- I am aware of the importance of looking after my online professional reputation; using privacy settings and 'friending' or connecting to others appropriately.
- I understand my responsibilities under the Data Protection Act with regard to the electronic management and protection of students' information.
- I am able to provide my learners with basic tips about how to stay safe online, including how to deal with online bullying, and how to save evidence.
- I can address cyberbullying disclosures and key e-safety issues (for example, bringing the schools name into disrepute online, accessing inappropriate content in school, sexting) and understand how to report these appropriately.

Developer

- I am aware of what current research tells us about young people's use of technology and the opportunities and risks relating to this.
- I can manage security and privacy settings in a range of platforms and services.
- I understand issues relating to the management of learner data and information and take responsibility for ensuring it is used appropriately, responsibly and with proper permission.
- I support my learners in understanding their rights and responsibilities in online environments, and in developing a positive online presence.

Pioneer

- I understand the importance of modelling the positive use of technologies for young people and I do this in a range of ways.
- I understand how to identify, manage and address the risks associated with learning and teaching in a range of online environments.
- I keep up to date with the wide range of online, mobile and gaming technologies young people use and the key ways in which they use them.
- I ensure the whole school community (learners, staff, parents and carers, governors) are actively involved in understanding and addressing e-safety issues.

Technology supported Professional Development

Entry

- I can access information relating to Continuing Professional Development (CPD) through emails and newsletters that are sent to me, for example the school's Extranet Bulletin.
- By following links from emails I can access information about upcoming training opportunities and resources on the Extranet and CPD websites.

Core

- I subscribe to or access professional development information on a regular basis, using email or websites, for example electronic newsletters from my subject association or an email list.
- I can carry out online searches and find up to date information on developments, discussions and resources in my area.
- I understand the value of using online resources and information to support CPD.
- I can pass on items of interest or use to colleagues by attaching information or including a link in emails.

Developer

- I use a wide range of online sources, including social media (for example, blogs and wikis), and social networking sites to find up to date information, discussion and resources in my area.
- I use social media or social networking services to find useful resources and information and to develop my professional network.
- I am able to participate in synchronous online CPD opportunities, for example live chats, and online conferences.
- I use technology to help me manage and reflect on projects that support my professional development, and to create resources from what I learn and have achieved.

Pioneer

- I can use social media or networking sites for professional purposes, including engaging in current discussions related to my area, sharing resources with others and fostering a network of professional contacts.
- I use a wide range of tools, platforms, and approaches to share my practice and the resources I create and to discuss and develop my ideas with others..
- I can moderate and support others in using a range of sites, platforms and tools for professional development.
- I am able to help my colleagues when approached about issues relating to CPD online, and advise them of the best approaches to take depending on their needs and interests.

Survey Reports

On completion, staff are provided with an individual summary for each strand; detailing where their responses place them in terms of each of the level descriptors (Entry, Core, Developer or Pioneer), providing brief suggestions for moving their practice forward in the future, and links to resources related to each of the strands. All of the response text is included in this section.

Finding, Evaluating and Organising

Entry

Staff at this level will be able to carry out simple searches using search engines, and make basic checks in order to validate information and facts. They will be able to save files to local drives on their school network, and appropriately label these for future use. They will be able to use their school library software to check what digital and hardcopy resources are available from their school library/learning resource centre to support students.

Staff at the next level of the Framework – Core

- Are able to identify existing resources online
- Have an understanding of how copyright law applies to their role
- Can organise their resources both online, using browser bookmarking, and off.

Core

Staff at this level will be able to use search engines to find a range of different resource types online that are relevant to their school practice, and that are appropriate to the level students are working at. They will be able to organise resources using browser based bookmarking, and understand how to create, organise and manage folders and a range of file types in a range of different locations. They will understand how copyright regulations apply to the digital materials they use in their teaching practice, and understand the licences that their school holds. They will understand what materials they can distribute electronically, and they will know how to reference resources they use.

Staff at the next level of the Framework – Developer

- Are able to use advanced search features
- Can locate openly licensed materials and reference them correctly
- Can incorporate openly licensed materials into their own resources
- Are able to support learners in effectively searching online.

Developer

Staff working at this level will be familiar with a range of different approaches to searching online, and will be able to use advanced features of search engines to refine searches and locate different resource types. They will know how to find and search for open educational resources, for example materials released under a Creative Commons licence. They will take a consistent approach to referencing a range of digital materials appropriately, in line with any open licence conditions, and including date of access where appropriate. They will be able to support learners in understanding and completing checks relating to online resources and information, including checking for the accuracy of information, being able to judge the credibility of sources, understanding plagiarism and identifying bias. They will be able to organise and share webpages and online resources using social bookmarking tools or tools that support the organisation and annotation of collections of resources (for example, Delicious, Pinterest, LiveBinder). They will understand how to effectively use collaborative forms of classification (for example tags, hash tags, categories and keywords) to organise and share information online, and understand how to create unique tags when these are required.

Staff at the next level of the Framework – Pioneer

- Are able to apply search strategies to a range of platforms – search engines, subject repositories, and social media/social networking sites
- Can support colleagues in developing their search, evaluation and organisation strategies.

Pioneer

Staff working at this level are familiar with a wide range search strategies, approaches and search engines. They are able to carry out complex searches across a range of platforms, including subject repositories and social media/social networking sites. They are confident advanced users of mainstream search engines and are aware of the full capacities of these tools. They will be able to support colleagues in developing their search, evaluation and organisational strategies. They will keep up to date and informed about developments in online search, data evaluation and organisation. They may be responsible for creating and updating search, evaluation and organisation support materials and workshops for staff and students. They will be able to support colleagues in the digitalisation and organisation of a range of learning resources. They will be able to support the implementation of digital resource organisation at departmental or whole school level, to facilitate access to and sharing of resources within the school network and online.

Next Steps

Working at this level, you have a huge amount of expertise – why not get in touch with us and tell us what your next steps might be? You might also find some of our resources useful for your future development.

Creating and Sharing

Entry

Staff at this level will be able to use the basic functions of word processing software to create simple documents. They will be able to save documents to their local network shared drives. They will be able to use email. They will know how to copy and paste text, and how to attach a document to an email.

Staff at the next level of the Framework – Core

- Are able to create basic electronic support materials and resources
- Can keep their resources up-to-date
- Can share resources with learners electronically and in print
- Are able to use classroom technologies to build upon the resources they find – i.e. through the use of annotation tools.

Core

Staff working at this level are able to create and share basic electronic support materials and resources, and keep these materials up to date. They will be able to use the key features of presentation software. They will know how to work with image files and include these in documents and presentations. They will know how to change font size, position and colour of text within documents and presentations. They will be able to upload documents to their school website, blog or learning environment, and label these appropriately. They will know how to create links within documents or in their school website, blog or learning environment. They are able to use classroom technologies to build on the resources they find or create - for example through the use of annotation and screen capture tools. They will be aware of basic web and resource accessibility issues in relation to their learners. They understand their responsibilities in relation to the electronic management of student information in relation to the Data Protection Act.

Staff at the next level of the Framework – Developer

- Are able to incorporate interactive elements into the resources they create.
- Can make resources available to learners on a number of platforms and devices.
- Can identify what information is safe to share online and the most appropriate sites to share on.

Developer

Staff working at this level will be confident users able to create content and activities using different types of devices, software programmes and online tools and services. They will be able to create interactive resources, and manage collaborative online activities which support learners. They will be able to identify opportunities and approaches for creating and sharing work, including their students' work, outside of their school online, and know how to do this in line with Data Protection and Safeguarding requirements. They will be able to manage and support online collaboration and will be familiar with several approaches to the use of technology to support collaborative practice. They will be able to create and share resources in a range of different ways, ensuring basic accessibility and inclusion for all their students.

Staff at the next level of the Framework – Pioneer

- Are able to use produce a range of web based and mobile resources
- Can share resources throughout the school and externally
- Are able to support learners in creating their own digital materials
- Can support colleagues in creating and repurposing learning materials.

Pioneer

Staff working at this level will be confident users and producers of a wide range of web based and mobile resources; able to combine tools, approaches and resource types. They will share resources inside and outside of the school. They will be familiar with open licencing options and approaches and support colleagues in understanding the opportunities afforded by open licencing. They will support learners in developing and sharing digital assets, individually and collaboratively, that further learning aims. They will be able to support colleagues in creating and repurposing learning materials, including a range of collaborative approaches to resource creation. They may take

responsibility for producing guidance, information and workshops on a range of approaches to creating, repurposing and sharing digital resources. They will be able to create and share resources in a range of different ways, ensuring accessibility and inclusion for all their students. They will be familiar with relevant issues relating to use of metadata and discoverability.

Next Steps

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Assessment and Feedback

Entry

Staff working at this level will make use of the schools data collection approaches, for example use of a school Management Information System, for basic access to and recording of student data. They will be able to use word processing software to provide information to learners, parents and carers on progress, attendance and behaviour.

Staff at the next level of the Framework – Core

- Are able to use common school based technologies to record and mange student data
- Can support their learners in submitting work electronically
- Are able to use technology to share the lesson's learning objectives.

Core

Staff working at this level will make use of common school based technologies to carry out basic assessment and reporting tasks. They may be familiar with the use of the basic features of spread sheet applications. They will be able to use software and devices to communicate and discuss lesson objectives. They will be able to support their learners in submitting work electronically.

Staff at the next level of the Framework – Developer

- Are able to use a range of e-assessment techniques to support learners
- Can use a greater range of tools to create and collect evidence of learning
- Will actively use data to support learners who require differentiated provision.

Developer

Staff working at this level will evidence creativity in their use of common school based technologies to support learners in terms of assessment and feedback approaches. They will use a range of tools and platforms with learners, including multimedia tools and web based services, to collect evidence and facilitate and provide feedback. They will actively use assessment data to identify and support learners who require

differentiated provision. They will be familiar with some of the ways in which technologies can be used to support self and peer evaluation for learners.

Staff at the next level of the Framework – Pioneer

- Are able to analyse assessment data in order to prove the effectiveness of their practice
- Can support their learners in managing and submitting their work electronically
- Are able to support colleagues in their use of technology to support assessment and feedback practices.

Pioneer

Staff working at this level will use a wide range of digital tools and techniques with learners to produce, present and feedback on work. They will take a consistent approach, refining and customising methods in response to how well they support their students. They will be able to analyse data to evidence the effectiveness of their approaches to learning and teaching. They will support their learners in selecting the best approaches for completing particular tasks and presenting their work digitally. They will be familiar with a wide range of approaches to using technology to support assessment and feedback, including self and peer assessment, and feedback approaches for colleagues and learners. They will be able to provide guidance to colleagues on the use of technology to support a wide range of assessment and feedback techniques and approaches.

Next Steps

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Communication, Collaboration and Participation

Entry

Staff at this level will be able to manage simple communication tools, such as email, and will be able to set up accounts with online services, for example social media or social networking services.

Staff at the next level of the Framework – Core

- Are able to use commonly available tools (such as email) to communicate and collaborate with peers
- Can support learners in collaborating through technology to present their work
- Can use some web-based tools, such as discussion boards, to support teaching and learning activities.

Core

Staff working at this level will be able to make use of commonly available tools (for example email and track changes in word processing applications or collaborative word processing environments) for basic collaborative activities. They will be able to use different technologies to support their learners in completing and presenting group work. They will be familiar with some approaches to using devices, software or online tools to facilitate and capture discussion.

Staff at the next level of the Framework – Developer

- Are able to identify the risks associated with working in online environments with learners
- Can support learners in working collaboratively online to support small and large group planning and presentation of work
- Are able to collaborate with colleagues through technology to support planning and resource development.

Developer

Staff working at this level will be able to make use of a range of devices and environments (for example social media services, blogs, wikis) for basic communication and collaborative activities. They will understand the appropriate use of closed (password protected) and open (viewable to anyone) environments, including Data Protection issues relating to working with learners in online environments. They will be

able to support learners in working together online in both small and large groups. They will engage in collaborative practices to support planning and resource development. They will be able to support their learners in collaboratively creating and presenting work.

Staff at the next level of the Framework – Pioneer

- Can support independent learning through student selection of a range of collaborative tools and approaches to complete work or extra-curricular activities.
- Are able to support learners in working collaboratively with other students at a distance, using a range of web-based tools
- Can provide advice and support for colleagues in the use of collaborative and participatory practices.

Pioneer

Staff working at this level will support independent learning through student selection of collaborative tools and approaches to complete work or extra curricula activities. They will support their learners in working collaboratively with other students, groups or individuals at distance, using a range of web based tools to design, complete and present work synchronously and asynchronously. They will be able to manage activities and events online, as well as on-going web based activities, and support and contribute to web based communities of practice. They will be familiar with Data Protection and Safeguarding issues relating to learner data and the use of online and open environments. They will be knowledgeable about the wide range of ways technology can support participation, inclusion, learner voice and co-design, to enhance learning and teaching. They will be able to provide advice and support for colleagues in the use of collaborative and participatory practices to enhance learning and teaching activities. They will evaluate the impact of their practice, refining and changing approaches in response to what best suits the needs of their learners.

Next Steps

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E-Safety and Online Identity

Entry

Staff working at this level will be familiar with their school e-safety policies, and understand how these relate to their day to day practice and contact with learners. They will have a basic understanding of what is meant by 'e-safety' and 'cyberbullying', and they will be familiar with basic tips and approaches that support e-safety.

Staff at the next level of the Framework – Core

- Are aware of the professional and legal safeguarding responsibilities
- Can manage their online public presence in the context of their professional standing
- Have a clear understanding of basic prevention and reporting strategies.

Core

Staff working at this level will understand how to make use of privacy settings in any online environment they might use, and understand that information they share openly online may be viewed by students, parents, governors and other members of the school staff. They will understand the differences between personal and professional online activity. If they have a public online presence or profiles, they will be able to manage these in the context of their professional standing. Staff working at this level will be aware of professional and legal safeguarding responsibilities relating to their own and their learner's use of web based and mobile technologies. They will have a clear understanding of the basics of preventing and responding to e-safety issues. They will know how to manage any student data they collect or hold in line with Data Protection and Safeguarding requirements. They are able to support learners who disclose e-safety concerns or cyberbullying incidents to them appropriately, including providing basic prevention tips. They are familiar with a range of e-safety, reputation and consent issues and know how to respond appropriately to these.

Staff at the next level of the Framework – Developer

- Understand how learners use technologies and how these platforms and tools can be used to support learning and teaching
- Are aware of issues relating to consent, data management and privacy when working in online environments with learners

- Can support their learners in understanding their rights and responsibilities in online environments.

Developer

Staff working at this level will have an understanding of current research relating to young people's social and educational use of technologies and will be able to identify where these platforms and techniques can be used to support learning and teaching. They will be aware of examples of young people's positive and creative uses of technology, as well as current e-safety research on risk, resilience and harm. They will be able to evaluate Terms of Service, security and privacy settings, and manage these appropriately across a range of services and platforms. They will understand issues relating to consent, data management and privacy, in relation to their use of web based or mobile technologies for creating resources and sharing information. They are familiar with young people's rights and responsibilities in using online, mobile and gaming technologies and can support their students in understanding these. They will be able to support learners in developing a positive online presence, and in using technology safely and effectively for collaboration and creative practices.

Staff at the next level of the Framework – Pioneer

- Understand the importance of modelling positive online behaviours for their learners
- Are able to identify, manage and address the risks associated with working with learners online
- Keep themselves up-to-date on the wide range of technologies used by their learners and the key ways in which they use them
- Are able to support both learners and colleagues in keeping themselves safe online.

Pioneer

Staff working at this level will be confident users of a wide range of web based and mobile technologies. They will be able to model effective online practice and will have a positive digital presence. They will be familiar with using a range of approaches and devices, tools and services for communication and collaboration, including online community development and membership. They will be knowledgeable about the range of technologies their students are familiar with, and the way in which they use web-

based, mobile and gaming technologies. They will keep up to date with research and trends in young people's use of technology and digital environments. Staff working at this level may take an active role in the e-safety education of staff and learners across the school, and will be familiar with how the range of e-safety research relates to their school and learners. They will ensure their own knowledge of e-safety and cyberbullying policy and practice is kept up to date. They take a whole school community approach to the design and development of e-safety activity and education.

Next Steps

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Technology support Professional Development

Entry

Staff at this level will be able to use email, and may be able to identify and sign up to electronic newsletters or mailing lists. They will be able to identify information and organisations that could support their professional development. They will be able to respond to or make inquiries about information they receive electronically.

Staff at the next level of the Framework – Core

- Are able to locate and access 'official' websites, such as subject association webpages
- Can subscribe to professional development information via email or electronic newsletters
- Are able to locate up-to-date information, discussions and resources in their area of work
- Can pass on useful or interesting information to colleagues by attaching or adding a link to emails.

Core

Staff working at this level will actively seek out and subscribe to electronic information and updates relating to their professional development. They will be familiar with the ways in which their school, professional association and newspapers provide information, and additionally seek out information from a range of other sources. They will be aware of the ways in which practitioners and researchers discuss and debate topics of relevance to their practice online. They will be able to find up to date resources and information online that support their professional development. They are able to identify and share resources and information that might be of interest to colleagues.

Staff at the next level of the Framework – Developer

- Can use a range of online sources (including social media) to locate relevant, up-to-date information and resources about their area of work
- Use social networking to expand and develop their personal learning network
- Can participate in synchronous online CPD opportunities, for example live web chats or conferences

- Are able to use technology to manage and reflect on their professional development and practice

Developer

Staff working at this level are able to find and make use of a wide range of online resource and information types, including social media and social networking sites. Staff at this level will take approaches to finding and organising information that give them a wide range of sources to draw upon, including websites, newsletters, blogs and individuals and organisations using social networking. They will be able to use online services and sites to connect to organisations and individuals who can support their professional development. Staff at this level will be able to take an active part in text or video based online discussions. They may have a professional online presence (for example a social networking or forum profile or blog). They will be able to create a range of digital resources that augment and demonstrate their professional development.

Staff at the next level of the Framework – Pioneer

- Actively engage in discussion and the development of ideas and resources online
- Are able to manage their online presence and share their ideas and those of others
- Can provide others with support around using technology to enhance professional development opportunities

Pioneer

Staff working at this level will be actively engaged in the discussion and development of ideas, resources and practices online. They will manage their own web presence, sharing their own and other's resources. They will be able to participate in, as well as organise and facilitate, online discussions, activities and professional development opportunities. They will understand how Personal Learning Networks can be developed and maintained. They will support others, including creating resources, information and online activities and events which support the range of approaches to engaging in and managing professional development using technologies.

Next Steps

Working at this level, you have a huge amount of expertise – why not get in touch with us and tell us what your next steps might be? You might also find some of our resources useful for your future development.

Additional Resources - online

In order to provide participating staff with further information and immediate support in developing their skills in areas of particular interest to them, we are curating, and keeping up to date, curated collections of links to information, case studies and resources to give practitioners a head start. These can be found at the project website, organised into the respective strands:

- Finding, Evaluating and Organising
- Creating and Sharing
- Assessment and Feedback
- Communication, Collaboration and Participation
- E-Safety and Online Identity
- Technology supported Professional Development

Next Steps

The survey is currently open, and will run until the end of the 2012-2013 academic year (which ends in Leicester on 12 July 2013).

Data analysis will take place over the school summer holiday period, including the production of summary reports generated for schools at departmental and whole school level. These will be used to support Senior Leadership in refocusing their existing School Strategy for Change, and in implementing plans around professional development.

From September 2013 until March 2014, the project will focus on developing and supporting a range of approaches and activities that can support staff across the city in raising their confidence and skills, and applying these to their practice in the six key areas identified and defined by the framework.

Throughout this period, case studies will also be undertaken in order to create a more nuanced picture of what practice looks like across the city. In order to generate the case studies, three methods of data collection will be used: semi-structured interviews, classroom observations and document analysis (of teaching resources created by Leicester school staff).

Contributors

Project Team

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The DigiLit Leicester Project has been developed in partnership with the Building Schools for the Future Programme schools in Leicester. In addition to many discussions with schools and colleagues, the project has particularly benefited from the time given by the following individuals and organisations. They have contributed their expertise to help make sure the framework and the survey enable all our school staff, whatever their current skills and confidence levels, to take advantage of the opportunities afforded by the use of technology to transform learning, teaching and school community development in Leicester.

Schools Expert Advisory Panel

Ray Allsop	Babington Community College
Rebecca Aston	Soar Valley College
Tracy Blair	Ash Field Academy
Melissa Brown	West Gate School
Carol Cownley	Soar Valley College
Karan Islania	English Martyrs Catholic School
Darren John	The Lancaster School
Rob Manger	English Martyrs Catholic School
Joanna Messenger	Beaumont Leys Community College
Mark Osborne	Soar Valley College

Louise Robinson	Judgemeadow Community College
Natalie Sheehan	English Martyrs Catholic School
Rob Summers	Judgemeadow Community College
Mark Sutton	Soar Valley College
Christine Turner	English Martyrs Catholic School

Digital Literacy Expert Advisory Panel

Helen Beetham	e-Learning Consultant
Doug Belshaw	Badges and Skills Lead, Mozilla Foundation
Childnet International	
Tim Davies	Director, Practical Participation Ltd
Brian Kelly	UK Web Focus, UKOLN, University of Bath
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Please attribute this work in the following way:

Fraser, J., Atkins, L., Hall, R., 2013. *DigiLit Leicester: Initial Project Report*, Leicester: Leicester City Council (CC BY-NC 3.0)