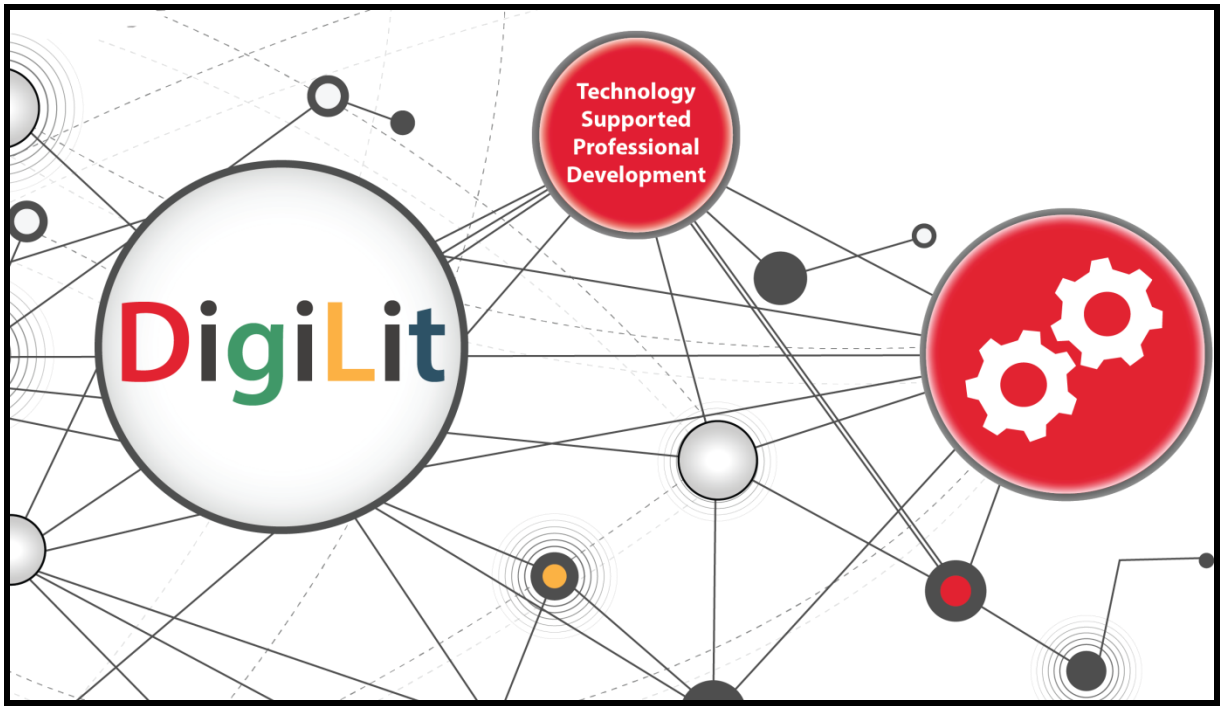

DigiLit Leicester

Supporting school staff, promoting digital literacy, transforming learning

Project Activities Report

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May 2014

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Leicester City Council

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DigiLit Leicester

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Introduction

The *DigiLit Leicester* project is a two year collaboration between Leicester City Council, De Montfort University and 23 of the city's secondary schools[1]. The project focuses on supporting secondary school teaching and teaching support staff in developing their digital literacy knowledge, skills and practice, and their effective use of digital tools, environments and approaches in their work with learners.

The project is run in the context of Leicester City Council's Building Schools for the Future Programme (BSF), in which 23 of the city's secondary schools will be rebuilt or refurbished by 2015. Our work focuses on those members of staff who work with learners; senior leadership with a teaching role, teachers, classroom assistants, specialist provision and library staff.

The project has three key objectives:

- To investigate and define digital literacy, in the context of secondary school based practice;
- To identify current school staff confidence levels, and what the strengths and gaps across city schools are, in relation to this definition;
- To 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 team began by working alongside the 23 schools, to develop the *DigiLit Leicester Framework*. This framework defines six key strands of digital literacy for secondary school staff: *Finding, Evaluating and Organising*; *Creating and Sharing*; *Assessment and Feedback*; *Communication, Collaboration and Participation*; *E-Safety and Online Identity*; *Technology supported Professional Development* (Fraser *et al*, 2013). Practices within these six strands were assigned to four level descriptors: Entry, Core, Developer or Pioneer. A summary of the initial phase of the project, including the content of the *DigiLit Leicester* framework and survey, can be found in the Initial Project Report (Fraser *et al*, 2013).

An online survey was developed, linked to the framework, designed to support staff in reflecting on their use of technology to support teaching and learning, and to provide schools and the Council with information to inform future planning around professional development.

The survey was first open between April and July 2013, during which time 450 members of teaching and teaching support staff participated; approximately 24 per cent of all eligible staff. More information about this phase of the project, including the survey methodology and findings, can be found in the 2013 Survey Report (Atkins *et al*, 2013).

This report focuses on activities undertaken by the DigiLit project team and the BSF schools between January 2013 and April 2014. Recommendations for areas of focus and activity were developed in line with the strengths and gaps indicated by the 2013 survey findings. These recommendations were used to drive and frame a range of opportunities for staff and

[1] See Appendix A for a list of the schools involved in the project.

schools. In keeping with the project team's commitment both to working in partnership with schools, and to supporting access to opportunity as widely as possible, activities were organised in two key ways.

1. **Activities designed and managed by the DigiLit Leicester team**. Centrally supported activities provided opportunities across all schools, allowing individual staff members to participate. Activities were either promoted openly to all BSF school staff members, or targeted at specific groups – either to staff role (for example, school leadership) or to survey area or area and level (for example, the centrally run e-safety expert briefing, which was designed to support staff who scored at pioneer level in *e-safety and online identity*). The majority of activities took place within BSF Programme schools, allowing colleagues from across the city to visit other, often newly built, teaching spaces, and increase accessibility for staff working at the host school.

2. **Activities which were proposed and designed by the schools**. These projects were supported through calls that were open to individuals and schools. Individual projects were designed to support members of staff in carrying out small scale projects which help them to take their practice forward in one or more of the *DigiLit Framework* strands. School level projects may have been led by an individual or team of staff, e.g. a department, and focused on developing practice across the school in one or more of the *DigiLit Framework* strands.

The project team have taken an iterative approach to their work with the schools, in order to support engagement in a way that best suits the schools and their community needs. This phase has enabled us and the schools to evaluate which approaches have been successful and where we need to further refine our approach. All 23 schools have actively engaged with one or more of the project activities.

This report collates activities that have taken place across Leicester between January 2013 and April 2014, some of which are currently ongoing. During this period, the DigiLit team led on six events and projects, and 21 school-led projects were undertaken. It is designed to share the processes, outcomes and benefits of the work that has been undertaken, and concludes with recommendations for the next round of activity and planning, drawing on lessons learnt.

All reports, and resources created by activities associated with the *DigiLit Leicester* project are released under an open license so that others can use and build on them.

2013 Survey Findings

The 2013 survey findings[2] led to a range of project recommendations:

Sharing and promoting Pioneer practice

The survey findings highlighted a wealth of confidence across the city, with 52 per cent of all staff who completed the survey classifying their skills and confidence at the highest level – Pioneer - in one or more of the six key digital literacy areas. Practitioners at this level self-

[2] An overview of the city-wide data can found in Appendix B

identified as having a high level of confidence in their use of a wide range of devices, software and services, to support a wide range of approaches to using technology to enhance learning. They were also currently supporting their colleagues. Supporting these staff members and making their work visible is important in raising awareness of the types and level of work being carried out in Leicester's BSF schools, in order to share practice across the city and further afield, and enable staff across the school to make productive connections with one another.

Supporting entry-level staff

The findings also drew attention to a significant minority (26 per cent) of practitioners who placed themselves at the Entry level across one or more of the six strands. The Core levels in the framework relate to the project's baseline of knowledge, skills and practice in the context of secondary education.

The project team have provided opportunities for Entry level staff to develop their skills and confidence. These include; collating entry-level resources on the project website, creating Entry level mailing lists to ensure they are aware of information relating to the staff development events and opportunities we organise and highlighting a particular interest in funding projects which focus on supporting less confident members of staff.

Encouraging contextual e-safety guidance

The data collected showed that staff felt the most confident in *E-Safety and Online Identity*, with the highest number of Pioneers (43 per cent), and the least confident in *Communication, Collaboration and Participation*, with the highest number of Entry level staff (12 per cent). Given the close relationship between competencies and practices within these areas it was surprising that the corresponding scores for these two strands were not in alignment, as might be expected. This suggests that e-safety education is managed within a context of restriction and limits on access to certain technologies and digital environments. This approach can be characterised as *protected by restrictions* and, whilst effective, has been identified as potentially limiting to online opportunities, including the development of digital literacy (Helsper et al. 2013).

These findings indicated that schools would benefit from support in understanding ways in which social and collaborative technologies can be used to effectively support learners and school communities, in e-safety resources specifically linked to social and collaborative tools and environments, and in expanding existing practice in this area.

Increasing knowledge and use of Open Educational Resources (OERs)

Forty-three per cent of staff rated their skills and confidence in the lower levels of the framework (Entry and Core) in *Creating and Sharing*. Comments submitted in the survey's free text forms flagged a lack of familiarity with Open Educational Resources (OERs). These findings are in line with European Commission concerns that education and training providers are currently not taking advantage of the use and creation of Open Educational Resources.

This runs the risk of 'losing the opportunity to innovate the teaching and learning practices, to increase the efficiency and equity of the education and training provision and to raise the

digital skills of learners necessary for a more competitive and knowledge-based economy' (European Commission 2013). In order to raise awareness and provide accessible information for school staff across the city in understanding and making use of Open Licensing, and creating and sharing their own OERs, work has begun with external expertise to create guidance specifically for secondary school staff. The guidance will provide information for staff on: open education and the schools sector; understanding open licensing; how to openly license resources, and finding and sharing openly licensed resources.

Promoting Connected Learning

The sixth framework strand, *Technology supported Professional Development*, supports staff in taking ownership of their own digital literacy and wider professional development. Online opportunities support staff in raising the profile of and sharing the outstanding practice going on across the city, supporting less confident staff members, and developing staff skills in collaborative technologies and the creation and sharing of resources. For example, Personal Learning Networks (PLN) developed and managed by educators, allow school staff to discover, discuss and share relevant ideas, resources and approaches.

In some cases this could be seen as a shift from more traditional models of professional development; where training is something that is delivered to staff, with less agency on the part of the individual. The skills developed by staff through engagement with PLNs can support professional development in other areas, not just in their use of technology to support learning, and will also enable them to model practice for their learners.

Central Activity

This section of the report focuses on those activities organised and implemented centrally, by the DigiLit Leicester project team. As well as working with reference to the recommendations of the 2013 survey data, the team collaborated with external experts and organisations where appropriate, to increase capacity and ensure quality of outputs. The project has aimed, wherever possible, to produce resources that respond to needs of the project community, and will be of benefit to the wider teaching community.

e-Safety Pioneer Event

20 November 2013

The *E-Safety and Online Identity* strand came out as the strongest area for the city BSF schools. This event was designed to provide staff with an opportunity to network with other *E-Safety and Online Identity* Pioneers from across the city, to begin plans for Safer Internet Day 2014 and to receive a briefing on the latest e-safety issues, research and resources. The project worked in partnership with Childnet International, a leading e-safety organisation, who delivered the briefing and provided a briefing resource.

The event began with an overview of the 2013 survey findings, focusing specifically on the *E-Safety and Online Identity* strand and what Pioneer practice looks like in this area, which is characterised within the survey as:

> *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.*

This was followed by a short activity which asked staff to work in groups and share their practice around four main areas of e-safety guidance:

- *Discussion, definition and prevention* - how communities are developing a shared understanding of e-safety and cyberbullying issues and the range of prevention activities being carried out
- *Reporting* - what schools are doing to encourage young people to report incidents, and the different routes to reporting they are offering
- *Responding* - what schools do to ensure that response to incidences is timely, effective, consistent and proportionate

- *Modelling positive practice* - how staff and schools are ensuring pupils see and experience the positive, constructive and creative use of technology to support learning

This exercise allowed staff to share their practice and gather ideas from colleagues, and helped the DigiLit Leicester project team gain a better understanding of e-safety practice and staff development within the schools. The session indicated that most school based activity is taking place in the area of *discussion, definition and prevention*. *Modelling positive practice* was the area in which staff were able to identify fewer examples of practice.

Will Gardner and Gareth Cort of Childnet International provided the group with an update and overview on current e-safety research, policy and practice. Will shared some of the latest research around young people's use of technology and the internet, for example the Top Ten rights and responsibilities secondary school charter - created from young people's responses to the 'Have Your Say' Survey. This was followed by Gareth's review of some of the resources available to schools and parents from Childnet and other organisations, such as the South West Grid for Learning.

The session was attended by a group of Pioneers representing eight of the BSF schools: Babington Community College, The City of Leicester College, English Martyrs' Catholic School, Keyham Lodge School, The Lancaster School, Nether Hall School and New College Leicester. Staff included: senior leadership; subject teaching staff from ICT, Modern Foreign Languages, and Design and Technology; and learning support staff.

Childnet created a briefing document for the session, which includes links to all of the research and resources covered. This can be accessed here:
DigiLit Leicester Childnet e-Safety Briefing November 2013

Leadership Briefings

The Leicester Schools' Leadership Briefings commenced shortly after the release of the 2013 Survey data. Sessions are designed to ensure school leaders are aware of and up to date with current, effective approaches to using technology to support learning, teaching and school community development. Research into professional development around the use of technology has shown that a key factor to the success of new initiatives is backing from leadership (Daly et al. 2009).

Blogging and QuadBlogging Briefing

28 November 2013

David Mitchell, a former head teacher, led the session which focused on Blogging and Quadblogging. Two years ago David created Quadblogging, an approach which has seen more than 400,000 pupils from over 50 countries connected and writing for a global audience.

Quadblogging offers schools an opportunity to sign up and blog together in groups of four. Each school takes it in turn, on a weekly basis, to be the focus school; posting about general class work or an agreed topic shared by all four schools. The remaining three schools then

comment on the focus school's blog. Quadblogging creates an authentic audience for learners, providing the opportunity for discussions with learners from other schools.

Creating Audiences
When David set up his first blog, he was certain that parents and other visitors would flock to read the children's posts and that it would be the children doing the majority of the work in bringing in an audience. In reality, when he built it, no one came. With a lack of engagement from the outside, the children quickly lost enthusiasm for the project and David realised that he would need to be much more proactive about raising awareness of the school's blog. He used a range of channels to drum up interest: Twitter, his own blog, a class twitter account, texts to parents and even the local newspaper. However, not all educators have established networks on line, and audiences captured in this way tend not to be regular visitors and dependable commenters. Quadblogging addresses this issue directly, by ensuring participant schools a sustainable and committed core audience for the duration of the quad – with visitors from outside the group bringing an additional benefit.

Increasing Engagement
David's experience of blogging in the classroom has shown that it can be a great way of enthusing even the most reluctant writers. The knowledge that anyone in the world might read a school blog also encourages learners to think more carefully about their written work and create higher quality pieces. Feedback from visitors can support learners in improving their work and taking their learning forward.

Staff from nine of our BSF Schools attended the event: Beaumont Leys School, The City of Leicester College, Crown Hills Community College, Fullhurst Community College, Judgemeadow Community College, The Lancaster School, New College Leicester, Rushey Mead School and Soar Valley College. BSF staff were also joined by teachers from a number of the city's primary schools.

Student Digital Leaders Briefing

28 January 2014

Chris Sharples, Head of ICT at Lady Lumley's School in North Yorkshire, led the session which focused on school based Student Digital Leaders (SDL) programmes. Chris defines these as "a team of enthusiastic students who work with teachers and students on regular or one-off projects to improve learning with digital technologies."

Student Digital Leaders initiatives represent a creative and effective approach to supporting learners who are enthusiastic about technologies in playing an active role in school ICT development and use. Programmes usually involve one or more students in each class being identified as digital leaders. At Chris's school, there are 25 SDLs, across years 7 to 10, with a decrease in pupil involvement in Year 10 as a result of GCSE commitments.

SDLs were recruited from an open, year based call, with all pupils who wanted to be involved joining the group. Other schools have selected participants by interviews. SDLs are then responsible for supporting the school community in their use of technology. This could be through trialling of devices or techniques, making recommendations about the best technologies and apps to use for specific tasks, providing training to peers or staff members, or being able to provide basic technical support in the classroom.

Chris discussed the range of activities that Lady Lumley's SDLs have been involved in during the last year, including creating resources, developing Open Badges, attending conferences, writing reviews, providing training and leading assemblies. Below are some of the key points raised in the briefing:

New ICT Curriculum
Student Digital Leaders can be integral to supporting schools in responding to the challenges of the new computing curriculum. They can play an active part in the way that the school designs and delivers learning and teaching around computing. This involvement could take the form of a working group, generating ideas, locating examples of other school practice or offering feedback on lesson plans, etc.

Increasing Learner Engagement
Chris emphasised the importance of student leadership opportunities in developing a culture of learner engagement. Student leadership provides opportunities for young people to take responsibility for actively supporting their communities and peers, fostering a community expectation that everyone has a contribution to make and will help others if they can. Chris's school has active sports leadership and Duke of Edinburgh Award programmes for learners as well as the Digital Leaders programme.

Learner Voice
Student Digital Leadership programmes actively support and promote learner voice – learners contribute to the decision-making process (which tools are best to use, surveying students about preference), provide an opportunity to develop communication skills (training peers and staff, demonstrating tools, writing about their recommendations, activities and preparing support materials). Chris quoted David Hargreaves as saying "one of the most successful entry points into effecting change and transformation lies in the area of student voice, and the opportunities offered to students to share the leadership and redesign of learning with their teachers."

The session was attended by staff from both secondary and primary schools. Seven of the BSF schools were in attendance: Beaumont Leys School, The City of Leicester College, Crown Hills Community College, Hamilton Community College, Judgemeadow Community College, Millgate School and Rushey Mead School.

Chris developed a briefing document for the session, in collaboration with other members of the Digital Leaders Network. The briefing covers initial set up and examples of existing SDL groups at Primary and Secondary levels and can be accessed here:
DigiLit Leicester Digital Leaders Briefing January 2014

TeachMeet Event

18 March 2014

The DigiLit Leicester project team worked in partnership with the Vocational Education Support Agency (VESA) to organise a TeachMeet. This is an informal gathering of people who work in and around education. The events involve short presentations or demonstrations, which share effective classroom practice.

Practitioner slots are kept short in order to encourage a wide range and diversity of contribution, to make sure as many people attending as possible get the opportunity to share, and to make joining in more accessible for people who have never spoken at an event before. We encouraged participants to contribute presentations about effective practice that related to the DigiLit Leicester framework strands.

The following presentations were made:

Dan Williams - Session Builder and the SOLO Taxonomy
Dan Williams, from Leicester College, started off the event with an introduction to Session Builder. This online tool is free to use, developed by Dan and Amjad Ali, and supports staff in creating lesson plans based round the SOLO taxonomy model in a range of subject areas. The tool uses Google forms to take you through step by step, producing a ready-to-use lesson plan at the end.

Adil Jaffer – Reducing teacher 'talk' time
Adil Jaffer, is a maths teacher from Keyham Lodge School, who also works as a freelance creative maths practitioner. Adil demonstrated that lessons don't always need to begin with the traditional model of teachers standing at the front delivering information. His presentation was very lighthearted, with no speech, but with plenty of activities for the audience

Farid Charidine - Keeping it fresh! Following social trends to create resources
Farid, MFL teacher at Wrenn School in Wellingborough, discussed his use of social media trends to engage learners. By tapping into popular social media interests, such as 4 pictures 1 word and Bitstrips, he has been able to refresh his teaching materials in order to appeal to his current students.

Kate Keaveny - Creating eBooks on iPads for international projects
Kate was the first of our primary presenters, from Cossington C of E Primary. Kate showed us how she has used iPads to create eBooks as part of international eTwinning project with children in Lithuania. Her class used audio and images to create eBooks that were shared with the partner school.

Reggie Grant - Using media for literacy
Reggie teaches at Lincoln High School in Tallahassee Florida, USA. Reggie works in media production and likes to tap into students' creativity, by linking media creation to other curriculum areas. His presentation demonstrated how asking learners to create media about a subject promotes problem solving and increases engagement.

Jo Badge - QR Codes for paired reading
Jo works at Ellistown Primary School. Her project involved Year 4 pupils recording themselves reading KS1 books and linking the audio files to QR codes. These were attached to the books and the children in KS1 were able to access them using readers on their school iPads. This process supports both the Year 4 pupils in developing their reading aloud skills and also provides a scaffold for the KS1 children in their reading skills too.

Doug Dickinson - Read it from the bottom up!
Doug is an ICT Educational Consultant on the University of Leicester PGCE. His presentation focused on the new ICT Programme of Study (PoS). Aware of staff concerns about the new PoS, Doug offered some advice on other ways to approach the guidance.

Pete Sanderson - Using apps to support independent learning
Pete, a science teacher at The City of Leicester College, presented a range of recommended web based services and tools to support teaching and learning, that can be accessed from a wide range of connected devices. Amongst his list were:
Touchcast, Glogster, Vimeo, Thing Link and Meme Generator.

Simon Renshaw - Using hinge questions and the Quick Key app
Simon, Head of Geography at Soar Valley College, presented on the Soar Valley Geography department's BSF ICT Innovation Project. The focus of the project is the use of formative assessment strategies, particularly hinge questions, for informing and improving instruction. This is aided by the use of the Quick Key app. Based on optical mark recognition, the app allows for speedy collected and processing of assessment data.
Simon has been reflecting on the project, at his blog: http://srenshaw.wordpress.com/

Dan Williams and James Corbett - Technologogy Battle!
For his second appearance, Dan Williams teamed up with James Corbett, also from Leicester College. The presentation was a battle between the two, each presenting their favourite online tools for supporting teaching and learning. Audience members used their mobile phones to vote for the presenter they felt made the the best suggestions. At the halfway point, it looked like James' Aurasma and Padlet choices were winning - but by the end Dan had managed to bring the battle to a draw with Poll Everywhere and Ed Puzzle.

Kirsty Colburn-Hayes - Using iTunesU to develop schemes of work and courses
Kirsty works at Humphrey Perkins High School in Leicestershire. Kirsty's presentation focused on how to set up iTunesU Course Manager - to support the development of schemes of work and courses. As well as her presentation, she also provided a live demonstration on her iPad of the courses she has created so far.

The evening was open to staff from all sectors, and attendees represented a range of institutions, including the city's universities, colleges, secondaries and primary schools. Representatives from five of the BSF schools were in attendance: The City of Leicester College, Crown Hills Community College, Keyham Lodge School, Sir Jonathan North Community College and Soar Valley College.

In order to enable participation for external guests, the TeachMeet was live streamed. Highlights from the presentations can be accessed here:
TeachMeet Leicester TMDL14 Video Highlights March 2014

Attendees were active on Twitter throughout the evening, discussing the presentations and sharing links. Some of these were collated to create a narrative of the event:
TeachMeet Leicester TMDL14 Storify March 2014

Autism and Online Safety

March - June 2014

Many learners on the autistic spectrum in Leicester's BSF schools make use of gaming, mobile and web-based technologies to socialise, communicate and learn, like other young people in the UK. Technology can be an empowering tool for young people with autism, in terms of personal development and independence. However, they are also potentially more vulnerable than other groups of learners in connected environments.

It has been identified that there is a gap in local and national e-safety provision, in regards to supporting learners on the autistic spectrum, particularly in relation to staff guidance. This project can be seen to support the strengthening of links between e-safety and communication and collaboration technologies – by increasing the information and guidance available to school staff and providing resources that have direct relevance to SEN schools. The project aligns with Leicester Children's Trust Children and Young People's Plan 2011 - 2014 Priority 6 – Improve outcomes for particularly vulnerable groups of children and young people.

The project has three specific objectives:

- To increase the knowledge and expertise of BSF school staff who work with young people on the autistic spectrum in relation to e-safety practice, particularly in relation to understanding and managing potential risks for this group of learners;
- To support young people on the autistic spectrum in BSF schools by promoting a positive, fun and safe experience of technology;
- To create guidance and materials to support staff not directly participating in the development and design of the project.

The DigiLit Leicester team are supporting a project partnership between three BSF schools and Childnet International. The project will develop e-safety guidance and information relating to learners on the autistic spectrum. As well as increasing the knowledge and expertise of school staff in relation to e-safety practice, the guidance aims to help promote a positive, fun and safe experience for Autistic Spectrum Disorder learners.

The project was proposed and identified by three of the Leicester BSF schools: Ellesmere College, Nether Hall School and West Gate School. All three are special educational needs (SEN) schools, who cater to learners on the autistic spectrum, amongst other needs. Collaboration with Childnet International provides the schools with external expertise and additional capacity in order to produce effective guidance.

The project began with a focus group involving staff from each of the three schools and representatives from Childnet International and Leicester City Council. The purpose of this meeting was to agree on the scope of the project and to highlight the key issues and advice that staff feel are needed. Issues identified included the following:

- Age appropriateness – SEN learners may be accessing materials at a lower cognitive level, but the delivery should still match their age.
- Sending a positive message – Many people search the internet to find answers to their questions. It's good for learners to understand that not all search returns are necessarily useful or appropriate.
- Less can be more – Simple delivery is key for SEN learners. Images, longer explanations and other extras can detract from the main message.

This initial meeting was followed by further discussions with each individual school, in order to clarify comments within the focus group and to gather essential information and resources from each school. This information is now being collated and used to inform the initial design of the guidance, a draft of which will be shared with the schools, key external stakeholders, and the DigiLit team for feedback. As part of the guidance, each school is developing a social story relating to a specific e-safety issue.

A launch event will take place on Tuesday 3 June 2014, where the guidance will be discussed and demonstrated.

Twitter for Educators

5 March 2014

All school staff benefit from engagement with professional development– 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.

Twitter has become increasingly popular with educators internationally who are interested in sharing with and learning from colleagues. The Twitter for Educators staff development sessions were designed to support staff in using Twitter to grow their PLNs and connect to other professionals. The workshops supported work around the sixth framework strand – *Technology supported Professional Development*, and were designed to help staff improve their confidence and skills in this area.

Two sessions were held at De Montfort University on 5 March 2014: a beginner workshop, aimed to get staff up and running with Twitter and to introduce the basics and an intermediate workshop, offering essential tips and tools for improving the Twitter experience.

Create your Twitter Presence
This session was aimed at beginners and assumed no prior use of Twitter. The workshop began with an introduction to the basics of Twitter; creating a username, choosing an avatar (profile picture) and writing your Twitter bio (a 160 character biography). Attendees were

then supported in setting up their profiles through a ‘desktop tour’ of Twitter; a walkthrough of the sign up process.

A worksheet was provided for staff, identifying the key conventions used in tweets, to help staff familiarise with these elements. Attendees were also encouraged to work together, tweeting one another, to build up confidence. Finally, top tips were shared, thinking about the use of Twitter as an educator and issues such as following students, parents or carers and checking the validity of information before tweeting it were discussed.

Developing your Personal Learning Networks (PLN) on Twitter
The second session of the evening was intended for staff who understand the basics and already have profiles. This session focused on engaging with communities on Twitter and tips for growing PLNs. In particular, this workshop looked at how to write ‘sweet tweets’ – to share in a way that engages others.

The final portion of the workshop focused on tools to aid effective tweeting: URL shorteners, like goo.gl which can track the number of times your link is accessed; mobile clients, services for heavy users of twitter which create a smoother service and social bookmarking, to catalogue useful and important tweets or conversations.

BSF School staff were given the option of attending either the beginner or intermediate sessions, or to attend the entire evening. 20 members of staff attended the workshop, representing nine of the BSF schools: The City of Leicester College, English Martyrs’ Catholic School, The Lancaster School, Millgate School, Nether Hall School, Rushey Mead School, Sir Jonathan North Community College, Soar Valley College and St Paul’s Catholic School.

A summary of the workshops, including resources, can be accessed from our blog:
Twitter for Educators March 2014

DigiLit Resources

In order to support staff in independently developing their skills and confidence, resources were collated under each of the six theme areas. These are reviewed on a regular basis to ensure accuracy and relevance.

Resource descriptions and links are available on the *DigiLit Leicester* project website and can be accessed at any time. In addition to this, upon completion of the *DigiLit Leicester* survey, staff are presented with feedback on their current practice in each area, which links to the resource page for each theme area. This way, if staff have identified a particular area in which they would like to take their practice forward, they are able to begin looking at possible areas of activity right away.

Resources are hosted on the DigiLit project blog, and recommendations from staff across the BSF schools or the wider education community can be made directly to the specific resource page.

Resource collections can be accessed from the project website:
DigiLit Leicester Resources

School Activity

This section of the report focuses on projects which have been designed and led by the schools, with the support of the DigiLit Leicester team. The project promotes teacher agency and aims to support staff in taking their own development forward through staff-led projects. Research has shown that professional development programmes that support staff in focusing on developing their own knowledge 'are most likely to lead to transformative change' (Fraser et al. 2007, p.167).

Innovation Projects

The BSF ICT Innovation Fund was introduced in order to support projects through open competition, in support of Council and school aspirations for the innovative and effective use of technology to support learning, teaching and community development. The funding is primarily to support staff development, in line with the six strands identified as priority areas through the *DigiLit Leicester* project: *Finding, Evaluating and Organising*; *Creating and Sharing*; *Assessment and Feedback*; *Communication, Collaboration and Participation*; *E-Safety and Online Identity*; and *Technology supported Professional Development*.

In keeping with the ethos of the wider project, awards are made to projects where outputs and processes are openly shared. This is to ensure that projects not only benefit members of the immediate school community, but also other schools across the city and further afield. Funding has been made available to schools in two categories:

- **Individual Awards** – funding of up to £2,000, designed for staff who completed the 2013 Survey, to take forward their own professional development in one of the six framework strand areas.
- **School Awards** – funding of up to £10,000, led by a staff member or team of staff from the same school for a project which focuses on raising staff skills and confidence across the school.

There have been a total of four application rounds to date, in January, April and November 2013 and February 2014. Schools and individuals were invited to submit project proposals using an application form and the submitted applications were reviewed by panel on the following criteria:

- The project's contribution to one or more of the DigiLit Leicester framework areas;
- The clarity of outputs to be created by the project;
- The project's focus on staff development;
- The manageability of the project's proposed timeline.

For School Awards, the extent to which beneficiaries are involved in the design, development and delivery of the project was also considered.

Below is a summary of the successful innovation projects. Not all strand areas are covered by these projects, as schools selected the framework strands they wanted to take forward.

Creating and Sharing

Improving the teaching of Global Information Systems
Rob Manger, Geography Teacher at English Martyrs' Catholic School
Individual Award December 2013 – November 2014

Rob's project began with a staff development course to improve his skills in using Global Information Systems (GIS), focusing specifically on the use of Google Earth as a GIS tool. Following the training, he will be developing a range of teaching resources for use across key stages 3-5, for learners aged 11-18. These resources will be shared openly for other Geography teachers to use and build upon.

Having identified that the National Curriculum for Geography specifically states that all KS3 pupils should be competent in the skills needed to 'use Geographical Information Systems (GIS) to view, analyse and interpret places and data' (DfE 2013), Rob wanted to learn more about the tools available and how to effectively integrate these practices into the classroom. His own experiences of GIS instruction had made little impact on him, and he was keen to find engaging ways to work with learners on developing these skills.

The Training
The first phase of Rob's project involved his attendance at a course led by Alan Parkinson; 'Google Earth and beyond: free online GIS'. The course aimed to 'provide delegates with several options for working with geographical information to explore patterns, tell stories, investigate change and help students to geo-locate data' (Geographical Association, 2014). The session shared many ideas for using Google Earth (GE) in the classroom to promote GIS skills, for example:

'Using GE in a tourism unit - Create a tour around a student's favourite holiday destination or advertise your home area as a tourist destination.

Using GE in a flooding unit - Alan suggests we could use the elevation tool to look at flood plains and how sensible it may be to build houses at a particular elevation.'

(Manger, 2014)

Initial Experimentation
Rob began experimenting with GE in the classroom in its simplest capacity, as a map to share locations. He trialled GE as a plenary tool, asking students to predict areas of danger from a volcano or earthquakes and he has used GE to compare the geographical characteristics of other towns to Leicester. But he wanted to try more, to take his practice further forward.

This opportunity presented itself when taking an AS class on a field trip to Blencathra in the Lake District, when two students were unable to attend. Rob had been inspired by the course to use GE as a basemap, adding other layers of information, such as photographs, population data and links to webpages, to enrich the map. He realised that this could be used as a way to collect information around the fieldtrip, not only for those not present to access but also for the students collating the information, to consolidate their learning and create a resource which they could refer back to.

Photos and video were taken along the field trip route, to give context, marking sample sites and gathering information about the methods used by students to collect data. Rob had also learnt about the Google Chart Generator tool on his course, which allows the creation of graphs which can be embedded into GE. This meant that the results of the students testing could also be displayed on the map.

Next steps

Rob is still in the early stages of his project, and inspired by his training, is ready to continue exploring further ways of using GE in the classroom to support the development of GIS skills and to begin the creation of teaching resources.

Rob has identified a number of useful resources for other staff starting out in this area:

- Getting to know Google Earth
- Alan Parkinson writes a blog called the Google Earth Users Guide
- Richard Treves has a Moodle page which can be accessed from his equally informative blog: Google Earth Design

Rob has written a progress report, including a more detailed account of his work on the Blencathra field trip, which can be accessed here:
Incorporating GIS into the Geography Curriculum

Interactive Maths Resources

Corrina Mauger, Mathematics Teacher at St Paul's Catholic School
Individual Award January 2014 – June 2014

Corrina's project began with attendance at a staff development workshop, focusing on the use of games-based learning techniques in Mathematics teaching, and looking at how to create and use interactive learning activities. The later phase of the project will involve Corrina developing her skills in using the school's VLE (Moodle) so that the interactive resources she creates can be shared with students.

School Discussions

Corrina's project began with conversations with staff and students, in order to gain a better understanding of how interactive resources were currently being used within the department. Her questions included:

- What resources do they currently use in lessons?
- What resources do they use at home?
- What do they like about those particular resources?
- How do they find those resources?
- How do they access them?
- What do they use them for? (Revision/games/further help etc.)'

(Mauger, 2014)

Staff felt that many of the resources available to them in school, including interactive whiteboards, tablets and classroom voting systems, were not being used to their full advantage. Staff were very enthusiastic about online tools and services, such as MyMaths, for delivering more interactive homework tasks. Students' responses were very similar, with

learners expressing a desire to engage more often with the classroom resources available. They also noted an interest in resources that provide instant feedback, competitive elements and activities that involve the whole class working together.

The Training
Having already begun to develop her ideas around the kinds of resources she wanted to create, Corrina attended a workshop from Creative Education; Exciting Games Based Learning in KS3 Maths. The session aimed to inform attendees 'about a wide range of readymade interactive learning activities as well as how to create' their own (Creative Education, 2014).

Corrina found that through discussing the rationale for creating interactive learning materials, her ideas about the elements she wanted to include were confirmed. She was also able to share her project with the other delegates and compile a more comprehensive list of some of the internet based resources she could utilise.

Next Steps
Following the training, Corrina has decided to focus on two distinct areas of development in order to best utilise her time on the project. The first is the creation of a page on the school's VLE, where links to useful resources can be shared. The second, and main objective, is to focus on the creation of resources that make use of the devices already available within the department. Corrina will be working with a colleague from the department who has expertise in the use of the classroom voting systems, to develop her knowledge of resources that work well with these tools.

More on Corrina's progress can be found in her most recent report:
Interactive Maths Resources: an update

Flipped Classroom
Mark Ostler, Faculty Lead for Humanities at St Paul's Catholic School
Individual Award January 2014 – March 2014

Mark used his individual award to trial a flipped classroom approach, which involves videos and resources being shared with students as homework for them to review prior to lessons, with class time then used for discussion and enquiry based tasks. Mark carried out the trial with a Year 9 class (aged 13-14) over one unit of work, collecting data on student attainment and student opinions as part of the evaluation.

First Trial
Mark found that the initial student response to his flipped classroom project was positive. His first trail focused around globalisation, with students watching an introductory video and completing a survey of the origins of products they found at home before the lesson. The majority of students completed the homework tasks, freeing Mark up to support individuals and groups who required extra support. Mark felt that the approach had allowed for more independent and personalised learning to take place within the classroom.

For the few students who had not completed the homework, they were significantly behind the rest of the group at the beginning of the lesson. Mark felt, however, that having to catch

up whilst their peers were engaged in more practical and collaborative work may be enough to encourage them to do the homework in future.

Some concerns were raised at this point in the project, primarily, the ease of access for students at home and the amount of time needed outside of class time to develop the resources used for homework.

Mid-point Frustrations

Having come to the mid-point of his project, Mark was beginning to learn more about the practicalities of using the flipped classroom approach. He found that the creation of materials was taking a significant amount of time: finding a quiet place to record audio, locating openly licensed images, uploading to YouTube when it isn't accessible on the school's network, etc.

Just as he began to question the value of the approach, his learners proved it was all worthwhile:

> *'I was sure they would mock the low quality of my video, the boring drone of my voice, and if they didn't it would be because they hadn't watched it in the first place. Regardless, I had prepared the tasks for the lesson with a strong emphasis on independent, collaborate work. As the students entered, they each took a task sheet and started to work without me saying anything. Some started to help others, and within a few minutes groups of students were involved in high quality discussion. All I had to do was monitor and guide, and we were 20 minutes into the lesson before I had to speak to the whole class, and that was to praise them for what they had done so far.'*
>
> (Ostler, 2014a)

Mark found that his students enjoyed working in this way, being able to begin practical work immediately and working at their own pace.

Final Reflections

Approaching the completion of his project, Mark collected opinions from students and parents to aid in his reflection on the overall process. He also noted that his skills and confidence in creating video had increased, helping to reduce his earlier frustrations.

Students were positive about the approach, enjoying arriving to a lesson feeling prepared and engaging more with the visual nature of the video homework. Parents were also positive about the new style of homework, with many commenting that their child seemed more engaged by this kind of work. They did feel, however, that balance is essential and that these kinds of homework should be part of a range of homework styles.

Although only a three-month-long project, Mark has noticed an improvement in learners' independent learning skills.

Concluding his final report, Mark states that whilst he would not continue to work in this way on a full-time basis, the flipped classroom approach will be embedded into his practice as one of a variety of teaching and learning strategies. His project has also gained the attention

of other staff in his department, whom he will be supporting in trialling their own flipped classroom lessons.

> *'I encourage you to give it a go. It's not the only way to produce a lesson that runs itself, but it's worth it to experience that first time when the students spend a whole lesson doing more of the talking and working harder than you!'*
>
> (Ostler, 2014b)

For more detail of the key stages of Mark's projects, you can read his progress reports:
Flipped Classroom
Flipped Classroom: a flipping update
Flipped Classroom: final reflections

iPad Orchestra
Ellen Croft, Creative Curriculum Leader at Ash Field Academy
School Award December 2013 – May 2014

Ash Field's project focuses on the use of musical apps and light systems to enable students with special educational needs to create a piece of music. The school worked with creative practitioners to design a scheme of work which culminated in a performance of the piece developed by the students. Explorations were also made into the use of visual representation of the music, to provide students with the opportunity to explore and create light sculptures.

Working with Creative Practitioners
The project began with 12 students, aged between 11 and 14, meeting with the creative practitioners and beginning to explore the tools that would be used in the creation of their orchestra piece. Using the iPads, the group experimented with a number of apps that support music creation, such as ThumbJam, for melodies, and iMaschine, for rhythmical elements. The school also invested in an audio visual system called Optimusic, the system involves coloured light beams which, when interacted with, trigger sound.

The group were also introduced to the concept of VJing, mixing images to create a visual background. Using webcams, animation and pre-produced footage, the learners used physical controllers to mix the clips and add special effects. The children also created their own animation clips by having photographs taken of themelves at various angles and compiling these using a video editing program. The VJing software, Resolume, was then used to create effects and add colour.

The Performance
The performance took place on Friday 14 March. The group performed to a packed school hall and had invited staff and students, as well as family members, to attend. Each member of the orchestra had a Curriculum Assistant supporting them, as well as the team of creative practitioners working on the project.

Before the live performance began, Simon Tew, one of the Creative Practitioners on the project, showed a video of the children's work in creating the piece. The video covered each of the stages of the project:

- the children recording their own voices;
- making sounds with instruments;
- making sounds with other equipment (such as their wheelchairs);
- making sounds with new technologies (such as the Optimusic);
- playing with the iPads to interact with the sound;
- bringing together all of the different elements of the project;
- VJing - mixing a collection of images to create a visual background for the music.

The live performance lasted for 15 minutes, with every member of the orchestra playing a role in the piece. The performance included all of the elements of the project; live instruments, recordings and images displayed on a backdrop.

Next Steps
In this final stage of the project, the school will be working on a designated section of the school website, created to share video diaries, blog posts and photographs of the project. The video of the project journey, along with a recording of the performance will also be shared as part of the project.

For information about the iPad Orchestra project, visit our blog:
iPad Orchestra: an innovation project
iPad Orchestra: Reflections on Impact

Project Programming
Alan Wileman, Head of ICT at English Martyrs' Catholic School
School Award April 2014 – July 2014

Staff at English Martyrs' will be working in collaboration with students on a project which will create resources and activities for the new computing curriculum. A student digital leaders group has been formed specifically for the project, with students from across all year groups. The resources created through the project will be shared openly for other schools to use and build upon.

In preparation for the new computing curriculum, which comes into effect in September 2014, Alan will be experimenting with a range of programming tools to support learning. These include: Kodu, a visual programming language developed by Microsoft; Raspberry Pi, a single-board computer used to teach basic computer science elements and Lego Mindstorms, a series of customisable and programmable robot kits.

Staff and student digital leaders will work together to create a range of resources, including apps and worksheets. The school will also keep a blog to allow the resources and processes to be shared and for others to provide feedback on the project's work.

Alan's initial plans for the project are shared here:
Project Programming: An Innovation Project

Assessment and Feedback

Quick Key for Formative Assessment
Simon Renshaw, Curriculum Leader for Geography at Soar Valley College
School Award December 2013 – May 2014

The geography department at Soar Valley College are working together to evaluate the use of the Quick Key app for supporting formative assessment practices. Quick Key uses technology similar to optical mark recognition to speed up the process of capturing formative assessment information. The key focus of the project is the use of formative assessment strategies for informing and improving instruction.

Hinge Questions
The project began with Simon introducing the concept of Hinge Questions to his colleagues in the Geography Department, who are working in collaboration with him on the project. A hinge question is 'a check for understanding at a 'hinge-point' in a lesson, so-called because of two inter-linked meanings:

1) It is the point where you move from one key idea/activity/point on to another;
2) Understanding the content before the hinge is a prerequisite for the next chunk of learning.'

(Fletcher-Wood 2013)

The project team have found the development of hinge questions to be a challenging task, but by working collaboratively they have been able to construct more effective questions for use in the classroom.

The department have found that the use of hinge questions has created the opportunity in lessons for more immediate feedback to learners on what they do and do not understand. There has also been an increase in staff discussions about key learning points and practice.

Using Quick Key
The group have also begun experimenting with the Quick Key app. Each member of the department has identified a class with whom they will trial the application and have since uploaded all the information, student names, class details, etc. to the Quick Key system. The team have yet to carry out trials with their chosen classes, as the initial phase of the project focused on the development of hinge questions.

The department have also shared their ideas further into the college, by contributing to the school's 'By Staff, For Staff' professional development program. Here the group learnt that whilst hinge questions can be used effectively within geography, it may be harder for subject areas that focus on skill development or do not work around 'right' or 'wrong' answers.

Next steps
In the next phase of the project, the team will be conducting classroom trials and evaluation of the application, including student questionnaires. Simon will also be presenting on the project at the Geographical Association Conference.

Simon has kept a personal blog throughout the project, which can be accessed here:

Simon Renshaw - Wordpress

2Engage Parents
Fran Duinker, Primary Team Leader at Nether Hall School
School Award April 2014 – July 2015

Nether Hall's project has two main streams of activity: improved gathering of photographic evidence for formative assessment and greater sharing of images and information with parents and carers.

The first stream of activity will use 2Build a Profile to link photographic evidence directly to Pivat level assessment criteria, improving upon the school's current paper based processes. The second stream of the project utilises an add-on to this software, 2Engage Parents, to support contact between the school and parents or carers. The program will enable to school to share photographs with parents and carers, in order to keep them informed of their child's progress.

As part of the project, the school will create a guide on using photographic evidence to support the assessment and feedback process.

Using Technology for Assessment for Learning Whilst Engaging Pupils
Paul Richardson, Assistant Faculty Leader for Mathematics at St Paul's Catholic School
School Award September 2014 – July 2015

This project will begin in September to coincide with the opening of the new school building, and will focus on the creation of lessons and resources around the use of a student response system.

Staff in the maths department will receive in-house training around the use of ActiveExpression handsets and software and will work together to create questions to embed into their lessons, which can then be shared across the subject. Student surveys will be used throughout the help judge the effectiveness of the approach. The project lead will also create a guide for staff on using technology for support Assessment for Learning.

Communication, Collaboration and Participation

Siyabonga
Laura Iredale, Music Teacher at Hamilton Community College
School Award January 2013 – April 2013

Hamilton's project was focused around communicating and collaborating with children in Lamontville, South Africa through video conferencing. The project culminated in the delivery of a trans-continental concert showcasing student choirs, a student band and a South African choir over a live Skype link for the simultaneous performance of the concerts' African influenced repertoire.

Learning about South Africa
The key focus of the project was around music, however, Laura was keen for her students to learn more about the children in South Africa, to help them better understand the cultural differences between themselves and their African counterparts. The school received fact

files written by the children, and responded with letters that were taken over to Lamontville with Laura when she visited during half term.

Hamilton's students had also kept video logs of their music work, learning traditional Zulu songs, and these were shared with the children in South Africa.

#projectafrica Performance
In preparation for the performance, Laura used the school's Music and Drama Twitter account to promote the event, using the hashtag #projectafrica. Laura's students also joined in with the promotion, as well as the school's main Twitter account.

The evening involved performances from both sets of students, as well as some collaboration over the Skype link. The children took it in turns to be one another's audience. As well as singing, the performance also included a dance routine and a drum piece.

Benefits to the School
Laura felt that project benefitted her students in many ways:

> *'This project really allowed our students to be part of something bigger than just themselves, gain an awareness of the struggles of others less fortunate than themselves and think outside the Leicester box! They connected and engaged with music and with the South African children in a way that was very emotional to witness.'*
>
> (Iredale 2013)

The school have since successfully run the project again in March 2014 and intend to continue to develop the project as a yearly event.

A full round up of the project, including videos, can be accessed here:
Siyabonga: an innovation project

iPads as Alternative and Augmentative Communication (AAC) Devices
Helen Robinson, Head of Sixth Form at Nether Hall School
School Award May 2013 – June 2014

Nether Hall School is working on a project that evaluates the use of iPads as a replacement for traditional AAC devices; using The Grid2 computer access software. The school project team includes Nether Hall's communication specialist, Heather Woods.

The majority of students at Nether Hall school have difficulties with speech and language, many requiring AAC methods to help them to communicate. On the whole, these devices are difficult to carry around or limited in nature e.g. only eight words available. Many of the devices are also extremely expensive, between £4500 and £14000, which restricts the number of students who can be provided with the technology.

The Grid2
The project began with identification of the students who would participate in the trial and the software that would be used. Through discussions with the school speech and language team, The Grid was chosen as it was seen to have more facilities and most crucially linked to the school's current systems, for example Eyegaze and Communicate: in Print. Sensory Software, the makers of The Grid, provided staff training and have provided additional support throughout the project.

Initially, the team had intended to create a standard grid for use with all learners throughout the project. However, it became clear early on that with the diverse needs of their learners, and the capabilities of the software, bespoke grids could (and would need) to be created for each child.

Project Report
Since the beginning of the trial the school have seen significant benefits to their learners through the use of the iPad as an AAC device. Learners have made improvements not only in their communication skills, but also in terms of behaviour and their relationships with staff and family. Karen Cameron and Sarah Younie, researchers from De Montfort University, worked with the school to support the research element of the project. The final project report will be released in July 2014.

Bring Your Own Device (BYOD) Trial
Tony Tompkins, College Leader for New Technology at The City of Leicester College School Award February 2013 – June 2014

The City of Leicester College is running a BYOD trial with a Year 8 (aged 12-13) tutor group of 23 students. The scheme involves the students using iPads minis in lessons and at home – working with staff to investigate the ways in which the device can add value to the learning experience.

In the academic year 2012-2013, The City of Leicester College began investigations into suitable devices for running a 1-to-1 scheme within the college. These investigations were led by a group of 12 student e-Ambassadors and the school's New Technologies Champions Group, made up of one representative from each faculty. A number of devices were trialled and finally the iPad mini was chosen as the most suitable device for the school's and learners' needs.

Getting ready to begin

In preparation for the project, the school ran a competition for Year 7 tutor groups, giving them two weeks to submit an application to be the tutor group to trial the BYOD approach. The format of the application was left open; except for a specification that they be in a digital form. The winning group were chosen for their collaborative effort on the application, with all members of the class involved.

The next step was to coordinate the class timetable, to link up staff enthusiastic about the project with the tutor group. In subjects where students are taught in sets rather than in tutor groups, Tony looked for groups of teachers who could collaborate well and work together on the project.

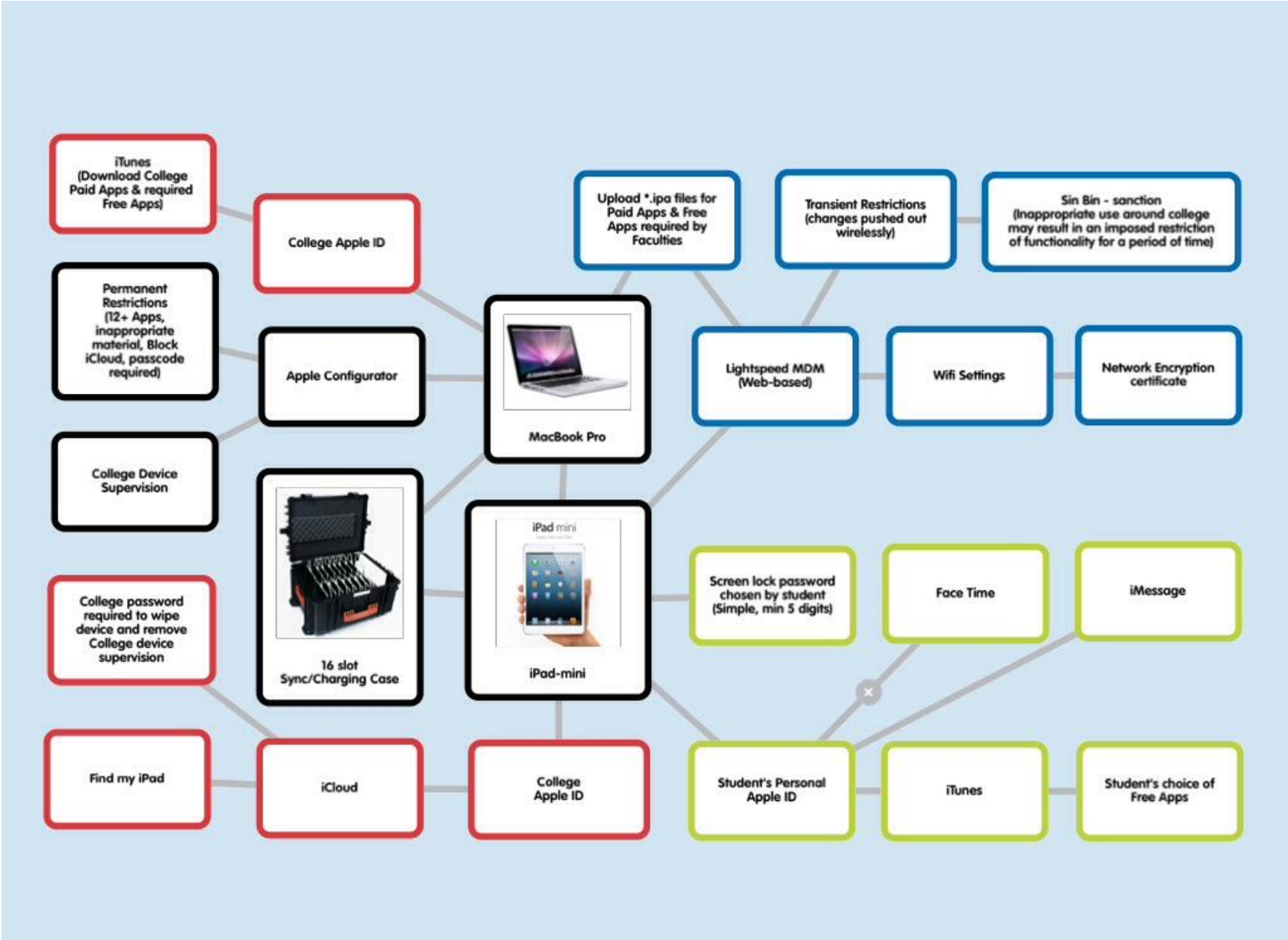
Finally, a parental consultation event was held, to inform parents of the project and their responsibilities in regards to when the device was at home. The evening involved school leadership, student e-Ambassadors and representation from the DigiLit Leicester team.

Starting the trial

The main body of the project began in October/November when the school moved into their new building and the iPad Minis were purchased. The key activity during this period for Tony was the set up and management of the devices.

> *'For the project, I wanted to have a much more open experience for the students, so that they would take ownership over the devices, be able to customise them and install their own apps, and generally feel free to explore and experiment. At the same time, the devices remain the property of the College, so there is need to keep the devices secure, complaint and safe.'*
>
> (Tompkins 2013)

Through a layered profile approach, using Apple Configurator and Lightspeed MDM, Tony was able to set permanent restrictions, such as age limits and filters for explicit content, as well as managing Wi-Fi settings and the sharing of apps with devices.



The City of Leicester College's iPad Mini Deployment Model

You can read more about Tony's management process at his BYOD Blog:
8ABT's Mad About iPads

Teaching and Learning
The tutor group have been encouraged to investigate ways to use their iPads in lesson, alongside staff-led activities. Tony notes that the majority of experimentation is being led by the students and that they are working proactively to find useful and interesting ways to work with the devices.

Student: Amber **Subject:** Textiles **Instigator:** Student Led **App**: Camera **Task:** homework to investigate types of fastenings used within the home **Description:** Amber has found suitable items, photographed them and arranged them with the app.	

The school have also seen improvements in the attendance and behaviour of the tutor group.

Next Steps
The remaining phase of the project will see more focus on staff development and updating and creation of school documentation, such as e-safety guidelines and an acceptable use policy. Final evaluation of the project will be used to take forward plans for further BYOD development across the school.

You can read more about Tony's progress here:
The City of Leicester College: BYOD Trial

Member of Parliament's 6 (MP6)
Sera Shortland, Citizenship Co-ordinator at Hamilton Community College School Award January 2014 – July 2014

The MP6 project will use technology to enhance and further develop an existing project that has been successfully running for three years. The college's MP6 Political Speaking Competition is an annual event open to all learners aged between 11 and 16 across the city. The school will be using the funding to develop a website which will host young people's speeches, and provide information about the current year's competition and links to resources for students and staff. The 2014 competition will also be live-streamed.

The project will also involve staff development around the use of Wordpress for creating the project's website, and training on the use of iPads for capturing and collating video around the competition process. The iPad training will be provided for both staff and students, and an openly licensed walkthrough of the workshop will be shared. Students will also use the iPads to record and practice their speeches and to create interviews and coverage of the event.

You can follow Sera's progress here:
Member of Parliament's 6

Investigating SharePoint as a Learning Environment
Peter Williams, Mathematics Teacher at The City of Leicester College
Individual Award December 2013 – July 2014

Peter's project is investigating the use of SharePoint (part of the Office 365 package) as an alternative Virtual Learning Environment (VLE) to the school's previous system, Fronter. Primarily his work will focus on the social media elements of the platform, to develop more collaborative and participatory opportunities for both staff and students. He will be trialling the system with students and reflecting on its success.

Research Phase
Peter's work started with an exploration of the Office 365 package, looking at the positives and negatives of what it can offer to schools. He found that the system has many features which could be beneficial to teaching and learning, such as personal blogging platforms for each user, to encourage student reflection. He also discovered that Office365 does not currently support SCORM packages (a web standard for e-learning content), which means that some of the schools existing resources would not transfer into Office365 without considerable work.

Initial Development
Having learnt more about the package, Peter then began discussions with staff and students about their requirements for the service. Staff and students prioritised content – which of course is not created by, but only managed by, the platform:

> *'By far the most important things for everyone were that firstly there was genuinely useful content on the VLE, and secondly that it was easy to use. That ease of use was important for students in terms of accessing the content easily, but also for staff in terms of understanding how to add and change content, as well as being confident in how the students should access content so that this information could be shared.'*

(Williams 2014)

Whilst the school had existing resources that could be added to the platform, meaning useful content was quickly accessible, managing the site structure and navigation, to ensure ease of use for staff and students required extra work.

Next Steps
In the next stage of the project, Peter will be focusing more on the collaborative and social elements of the platform. He will also be attending a training session on the use of SharePoint to develop his knowledge and skills further.

Follow Peter's progress here:
Investigating SharePoint as a Learning Environment: Research Phase
Investigating SharePoint as a Learning Environment: Initial Development

Technology supported Professional Development

Developing the use of iPads to support the learning process
Rob Povey, Learning Resources Manager at Babington Community College
School Award February 2013 – May 2014

This project aimed to increase the use of iPads in Babington, both in terms of its extent across subject areas, and its depth in supporting 'higher order' learning activities. The project also aimed to produce a handbook by which to share the work of the college; the process of the project and schemes of learning that were developed throughout.

The project was based around Bloom's Taxonomy, and more specifically the work of Kathy Schrock in matching apps to the taxonomy.

Staff Development
The project began with training for staff, around the general use of iPads and then linked more specifically to Schrock's Bloomin' Apps framework. The staff group involved representatives from: English, Modern Foreign Languages, maths, science, humanities, business studies, vocational education, health & social care, careers, Personal, Social, Health and Economic Education, ICT, design & technology, PE and performing arts.

The CPD sessions focused around the following topics:

- Tablets as an aid to finding information
- Tablets as an aid to organising information
- Tablets as an aid to presenting information
- Tablets as an aid to creating information
- Tablets as an aid to collaboration and assessment

The training materials were the apps themselves, preinstalled on each iPad, and a series of short activities presented on PowerPoint slides. Since a key feature of the course was that its participants were each given their own iPad, it made sense to make each session 'hands on', giving staff a chance to use each app to complete a simple learning activity.

Schemes of Work
The next phase of the project involved participants producing a scheme of work for their curriculum area, demonstrating the use of a range of apps to support the achievement of the full range of Bloom's objectives. The aim was for each group to produce at least an outline scheme of work, identifying any apps they intended to use, and indicating which of Bloom's areas they might expect to cover.

Benefits to the School
The main benefit for the school appears to be around more widespread use of the devices, across different subject areas.

> *'Whereas, at the start of the project, only Science had made extensive use of iPads, and many subjects areas had not used them at all, as a direct result of the training we have seen the systematic use of iPads in English, maths and science, in humanities, careers, vocational education and PSHEE, in PE, art and design technology.'*
>
> (Povey 2014)

You can read more about the project here:
Developing the Use of iPads to Support the Learning Process – An Innovation Project

Training teachers in mobile learning
Peter Guthrie, Curriculum Team Leader at Sir Jonathan North Community College
Pat Thompson, Assistant Principle at Sir Jonathan North Community College
School Award June 2013 – June 2014

Staff at Sir Jonathan North are working on a project which aims to use iPads as a staff development tool, in order to integrate mobile technology into classroom practice. The project also includes the involvement of a Year 9 (aged 13-14) reporting club, which was established to support students in developing their independent learning skills alongside their use of ICT.

The purpose of this project is to develop staff pedagogy in delivering multimedia content and resources to students in a familiar and accessible manner; enhancing teaching and learning through the innovative use of apps and working practices supported by the use of technology.

Setup
The initial phase of the project focused primarily on the setup and management of devices, including management of app procurement and data protection. The iPads were made available for staff to loan out, for research purposes, with a further class set available for use in lessons. Staff training around the use of the iPads was also scheduled into the school CPD calendar during this stage.

Staff Training
Staff training began with a formal introduction during the school's September training day. Fifty members of staff have since participated in iPad skills sessions, designed to give staff a basic, practical introduction in using them in and out of the classroom.

Student Involvement
The Learning Resources Centre (LRC) student committee set up a working group, in order to evaluate apps and making suggestions for new apps to be used in lessons. The project initially planned to circulate a class set of iPads in the LRC, offering students the opportunity to work independently with the iPads. The school found, however, that without guidance many students were not making the most of the iPads and were mainly browsing the internet.

In order to make better use of the devices, a lunchtime news reporting club has been established with a target group of Year 9 students (aged 13-14), with the aim being to develop their independent learning skills alongside their ICT.

Next Steps
The school have experienced a number of technical issues in their current school context, which they hope to overcome following the move to the new school in September. In the final phase of project, the school's New Technologies Group will be carrying out investigative work to ensure the best is made of the devices in the new school building.

You can read more about the project's progress here:
Training Teachers in Mobile Learning

Improving Digital Literacy CPD
Martin Corbishley, Computing Subject Leader at Babington Community College
School Award January 2014 – May 2014

This project aims to raise awareness of the web-based tools and services available for supporting teaching and learning. Martin will achieve this through the delivery of a set of 11 workshops for school staff, covering a range of topics including; using twitter to extend the classroom and making use of online collaboration tools.

Staff Training
The main area of focus for the training workshops has been assessment and feedback, with sessions organised face-to-face as well as online, through the course wiki. The individual sessions have focused on the following topics:

- Using Socrative;
- Creating a Google form;
- Online collaboration tools;
- Creating an online community for your subject;
- Using Edmodo to create a virtual classroom;
- Using wikis in the curriculum;
- Cloud based computing;
- Sharing good practice.

Martin notes:

> *'Delivering these sessions has made me realise how much people need this training and how responsive they are to the possibilities of using web 2.0 technologies in the classroom.'*
>
> (Martin 2014)

Staff Feedback
Twenty staff have been involved in the project, representing a range of faculties, and are encouraged to share the things they are learning on the course with the rest of their faculty and to promote digital literacy across the college. Staff responses to the training have been positive and previously unused resources are now beginning to make an appearance in the classroom.

> *"Love these online collaboration tools! I think that they will be incredibly useful and I look forward to using them. The fact that we can then generate things like Wordles makes me really excited about discussions in lessons.'*
>
> English Teacher

You can learn more about the project here:
Improving Digital Literacy at Babington Community College
Digital Literacy at Babington (Course)

Making Learning LAST
Alex Vann, Assistant Head Teacher at Beaumont Leys School
School Award December 2013 – December 2014

Beaumont Leys School is working on a project which will be using classroom observation technology to deliver three elements of activity: supporting self and peer observation and reflection for Newly Qualified Teachers (NQTs) and Year 2 teachers, recording teaching materials for use within a flipped classroom approach and creating a bank of good practice resources, for example, starters, plenaries and experiments.

Self and Peer Observation
This initial phase of the project has focused primarily on observation and reflection for NQTs and Year 2 teachers. Conversations around this reflective practice have emphasised providing constructive feedback to help improve practice.

> *'The whole experience of watching the lesson back was really useful as it allows you to experience the pace, and flow of the lesson and highlights areas where you realise you were talking too long, explanations were or weren't clear enough etc. Overall being able to view a lesson over again and pinpoint strengths and weaknesses was really helpful in developing targets and areas to focus on.'*
>
> Teacher

Next Steps
During the remainder of the project, the observation work will continue as well as focus on the further two strands of the project: the flipped classroom trial and the resource bank.

You can learn more about the project here:
Making learning LAST: an innovation project

College Leader (New Technology)
Tony Tompkins, College Leader for New Technology at The City of Leicester of College School Award January 2014 – July 2014

This project focuses on the role of College Leader for New Technology. The post will have three main areas of activity: trialling and disseminating innovative practice; raising capacity and confidence in ICT and reflecting on the current BYOD project in order to develop a whole school 1-to-1 model. This project will also involve training sessions for staff in each of the key areas of digital literacy, as defined within the DigiLit Leicester project.

As part of the BSF process, the college created the temporary role which involved the secondment of a member of teaching staff to the school leadership team. The role was evaluated as highly effective and the decision was made to find alternative ways to extend the role. As well as providing training workshops for staff, the project will also create a briefing paper, describing and evaluating the role, impacts and benefits of the College Leader (New Technology) model for other school leadership teams.

DigiLittle Acorns
Christine Turner, Science Teacher at English Martyrs' Catholic School
School Award December 2013 – July 2014

The science department at English Martyrs' Catholic School are working together on The DigiLittle Acorns Learning Network project. The network itself is intended initially as a school-wide platform, where staff can share information about innovative projects they are working on. As part of the bid, the school's science department will also be developing a set of science apps for use in lessons and trialling and reviewing those already available.

App Development
Using Appshed, members of the school's science department have created and trialled apps. They have found that learning how to use Appshed has been fairly straightforward, using the sites own help materials. Where possible, surveys have been carried out with students which show a positive response to the resources being created. Students were also asked to reflect on the kinds of app they would like to see developed in the school:

> *'I think that the app should be produced for the other sciences as well as chemistry as it would prove a useful resource. For example, an app could be useful at helping students learn definitions in physics and biology as well as in chemistry. It is also useful to have a copy of the specification easy to access and this would apply to the other sciences as well.'*
>
> Student

Existing Apps
The department have been investigating a range of apps, and using a discussion space on Facebook to evaluate their suitability to use in the classroom. The team already started to make recommendations for the different subject areas:
HudsonAlpha iCell for Biology - may help both KS3 and KS5 students with the cell structure and function aspects of their courses.

goREACT – enabling students to view reactions between different elements
Science360 for iPad - which has a range of free science videos and images

DigiLittle Acorns Network
The network is currently used for English Martyrs' science department, aiding the sharing of blog posts about the projects and other training that the staff members experience.

Next Steps
The next phase of the project will see the finalisation of department-created apps and final choices about the existing apps that will be implemented onto the class set of iPads that the school purchased as part of the project. Students will be involved further in the evaluation of these apps.

You can learn more about the project, and access the network, at the DigiLittle Acorns website:
DigiLittle Acorns Learning Network

Safer Internet Day 2014 Activity

This year, in support of Safer Internet Day 2014, the DigiLit Leicester team ran a competition for teaching staff which asked them to share a report about their activities for Safer Internet Day 2014. Specifically, we tried to encourage projects which involved learners in the design, development and delivery of the activity.

The 2013 DigiLit Leicester survey revealed that staff who participated rated their skills and confidence the highest in *E-Safety and Online Identity* practices (with 43 per cent of participants rating their confidence at the highest level). In order to help promote the brilliant work of staff across the city, we wanted to encourage schools to share their Safer Internet Day activities with us and the wider community.

The competition aims were to:

- Promote and share the work that BSF schools are doing in support of e-safety
- Encourage participation in Safer Internet Day
- Support schools in ensuring learners are active participants in the design, development and delivery of e-safety activity

All entries were reviewed by panel, which included James Diamond (LCC Safeguarding in Education Development Officer) as a guest judge. Below is a summary of the winning projects.

SID14 Film Project

Mehul Madlani, ICT Co-ordinator at Willow Bank School

As part of Safer Internet Day 2014, students at Willow Bank School (Children's Hospital School) discussed their own personal digital experiences and what factors affected them online. Discussions were led by teachers, and encouraged students to think about what they post online, the impact of their online activities, practical ways to protect their privacy and a commitment to adopting a mature and responsible approach to posting online.

Willow Bank students also took part in an extension activity which involved planning, recording and editing a vox pop style video – showing the students talking about their own experiences online and offering suggestions for how the internet could be made a better place. The video wasn't made to share externally, although we are able to share some anonymised quotes. The film focused around two key questions:

1. What are the threats and dangers faced by young people using the internet today?
2. What can we do about it?

Students were involved in each stage of the process, from setting up the drama studio into an interview space, to recording the interviews and posing for cutaway shots of "hands using laptops" and "anonymous internet users". This way all students were able to contribute to the project, even those who did not feel comfortable with appearing in the video themselves.

As well as discussing technical solutions, such as filtering, blocking and reporting, students were clear about the importance taking personal responsibility for managing their online activity:

> *"If you don't want somebody to know something, don't tell everyone. Because if you go on to Facebook and you post something to Facebook - guess what - almost everyone in your school is gonna see that now because you put them on Facebook"*

Students also drew attention to the importance of school staff understanding how learners make use of online environments:

> *"A lot of, almost all of the internet safety lessons I've been taught in, they don't give you a physical page of twitter or Tumblr or, you know, an Instagram feed or whatever – because that's what so many kids are looking at – they don't give you a Facebook feed and tell people to identify what's going on. A lot of the teachers, at least from my perspective anyway, wouldn't really know what is actually going on there; they wouldn't be so sure about that. But that's what children are engaging in and that's what they need to be taught about."*

As a result of the day's activities and the film project, internet safety and young people's experience of and views about being online were raised across the school. The project actively supported learners in thinking through solutions for issues that affected them negatively, sending a clear message to them about their role in looking after themselves and each other, and their power to change their world.

> *"I hope that as a school, we are able to use the filming project as a launch pad to greater things, and that some of the students' ideas can be rolled out across the curriculum and further developed. They are ideas that deserve serious consideration – by both industry and government – and raise serious questions about why more hasn't been done sooner to protect young people."*
>
> Mehul Madlani, ICT Co-ordinator

You can learn more about the project from Mehul's summary here:
Safer Internet Day at The Children's Hospital School

Digital Footprints Project

Alan Wileman, Head of ICT at English Martyrs' Catholic School

Students at English Martyrs' Catholic School were asked, during ICT lessons, to think about their digital footprint – the sites they use and accounts they have online. This fed into a main activity of creating graphical digital footprints that were used to create a school display.

The school had prepared paper footprint templates in advance and then asked students to think about the services they use and accounts they have online. Logos for each service were printed and then added to the footprint templates like a collage. This activity was important in both facilitating a conversation with students about their online activity, and capturing and sharing this with students from across the school.

Learners were involved throughout the process of the events, including designing the final footprint activity, and enjoyed the challenge of creating other resources such as word searches for their peers to use. During the day, all students took part in the presentation discussions and created their own digital footprint.

The school also set up a SID14 blog, which some students had the opportunity to feed into, commenting both on their digital footprints and possible ways to help make the internet a better place. From the information shared by students, the school were able to create a Wordle of the most popular sites and services used by their students – a great opportunity for the school to see what their young people engage in online.

"The student involvement was brilliant and they all were very positive about the responses from students and with the display."

Alan Wileman, ICT Lead

You can learn more about the project from Alan's summary here:
Safer Internet Day at English Martyrs' Catholic School
English Martyrs' Catholic School SID2014 Blog

Next Steps

This report collates the activities which relate to the development of the DigiLit Leicester framework, and to taking forward the recommendations drawn from the 2013 survey findings. The project has supported activities in a range of ways to identify how schools can best engage with work designed to increase staff knowledge, skills and confidence relating to digital literacy situated in secondary school practice.

The key action areas identified to take the project findings and recommendations forward during the period were:

- Support staff at all levels by providing opportunities to move forward in areas of practice identified by the survey; sharing and extending practice, or developing new skills and increasing confidence;
- Support links between and across schools by providing opportunities to meet and connect, including through sharing practice and the promotion of *Technology Supported Professional Development* approaches;
- Build on the high levels of confidence in *E-Safety and Online Identity* across the city, promoting and supporting advanced practice;
- Support the safe, responsible and effective use of collaborative and social technologies;
- Complete work that provides accessible information to secondary school staff on open licensing and Open Educational Resources for professionals working in secondary education.

The project, in partnership with the schools, has carried out work in all of these areas, including the commencement of a project in May 2014 relating to raising knowledge and awareness of Open Educational Resources and open licencing.

Feedback from schools has been very positive in relation to all of the approaches that have been taken this year. However, several issues have emerged that need to be taken into account in planning for the next phase.

- Staff ambition relating to project opportunities is high and this has sometimes resulted in over commitment to project activity and outputs. The team have worked with some project teams to help reduce project scope in order to better focus on the quality of their outputs and the manageability of their project schedules.
- Schools often need or would welcome additional support in the production of outputs, particularly relating to framing projects in research terms and having capacity to provide very high quality outputs.
- Pressures on staff time remains one of the key reasons staff cannot engage with opportunities and activities. The flexible approach taken to by the project team,

supporting a range of ways that staff can engage with project opportunities, has helped address this.

- Significant activities relating to the project focus have taken place across the schools. Communications relating to work not directly carried out or supported by the project team have, however, been limited. This is an area that needs improving.

The approach taken for the *Autism and Online Safety* project recognised issues relating to capacity and the schools' need for external support for larger projects – particularly in relation to brokering external partnerships and connecting projects to external expertise and organisations. It allowed us to trial a hybridised approach to support for staff development. The DigiLit team took responsibility for preparing the project scope in consultation with the schools who proposed the project, and managing the appointment process through public tender. This approach has proven to be very effective, and we will be looking to implement and manage further projects in this way.

The 2014 DigiLit Leicester survey was open between 17 March and 16 May 2014. Once collected and analysed, these data will be used to review current recommendations and their related action priorities, in the context of this year's successes and identified issues.

References

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Appendices

Appendix A - BSF Schools Participating in the DigiLit Leicester Project

Ash Field Academy
Babington Community College
Beaumont Leys School
Children's Hospital Schools
The City of Leicester College
Crown Hills Community College
Ellesmere College
English Martyrs' Catholic School
Fullhurst Community College
Hamilton Community College
Judgemeadow Community College
Keyham Lodge School
The Lancaster School
Millgate School
Moat Community College
Nether Hall School
New College Leicester
Rushey Mead School
Secondary Behaviour Support Service
Sir Jonathan North Community College
Soar Valley College
St Paul's Catholic School
West Gate School

Appendix B - City Data Overview

The following table presents the spread of staff rating their skills and confidence in each level across all six key theme areas. The blue box highlights the highest number of entry level staff (where participants feel least confident/skilled) and the purple box highlights the highest number of pioneer level staff (where participants feel the most confident/skilled).

	Entry	Core	Developer	Pioneer
Finding, Evaluating and Organising	34 (8%)	142 (32%)	209 (46%)	65 (14%)
Creating and Sharing	36 (8%)	157 (35%)	192 (43%)	65 (14%)
Assessment and Feedback	33 (7%)	118 (27%)	209 (46%)	90 (20%)
Communication, Collaboration and Participation	52 (12%)	156 (35%)	177 (39%)	65 (14%)
E-Safety and Online Identity	14 (3%)	78 (17%)	165 (37%)	193 (43%)
Technology supported Professional Development	43 (10%)	126 (28%)	195 (43%)	85 (19%)
Uniques[3]	116 (26%)	297	383	233 (52%)

[3] Staff may have achieved the same level across a number of themes, for example scoring 'core' at more than one level. The 'uniques' row identifies the number of individual members of staff falling at each level within the framework.