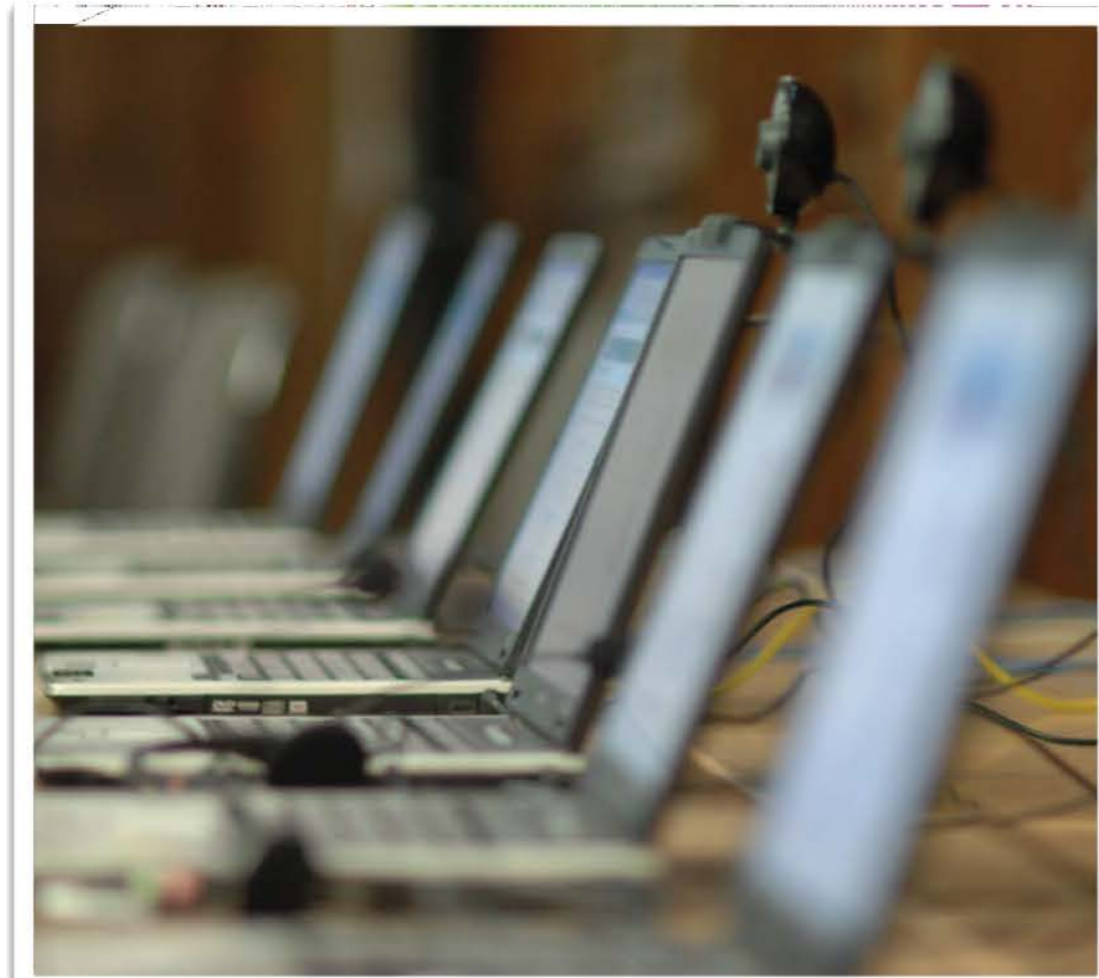


LEEDS METROPOLITAN UNIVERSITY

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## Embedding digital literacy



AUTHORS: SUE SMITH AND SIMON THOMSON

EDITED & PRODUCED BY: JAKKI SHERIDAN-ROSS

## FOREWORD

This book has been produced as an innovative form of report to the HEA Change Academy about the work undertaken at Leeds Metropolitan University about digital literacy.

This work will continue over the next few months and further versions of this book will be updated as digital literacy grows in our University. We intend to make it available in a variety of formats, all of which will be released on a share-alike Creative Commons licence available from the Leeds Metropolitan University repository <http://repository.leedsmet.ac.uk/main/index.php> .

Details of the software used to create the book and full contact details of the Change Academy team at Leeds Metropolitan University can be found in the **Credits**. We're happy for you to get in touch.



## Embedding Digital Literacy

So, why and how did we decided to embed digital literacy for all undergraduate students across the University?

- 📍 Digital skills were in high quality “pockets” of activity spread across the University.
- 📍 This Change Academy project has catalysed the development of the embedding of digital literacy across the University for all students and all staff.

### INTRODUCTION: WHY AND HOW?






Sue Smith, Head of Curriculum Development & Review

# Digital Literacy as a Graduate Attribute

## KEY POINTS

In this chapter we explore what graduate attributes are and why we have chosen digital literacy as one of our attributes for our graduates at Leeds Met.

-  Digital literacy is one of our University's graduate attributes.
-  Employers value really good digital skills.
-  Digital literacy was not explicitly and consistently embedded in the undergraduate curricula at Leeds Met.

Digital literacy is one of our University's graduate attributes. It is an essential life skill preparing students for life as a graduate and getting a job after University. Employers value really good digital skills.

A graduate attribute is an amalgamation of skills, knowledge and attitudes, built up through a student's time at university, which they are capable of articulating and demonstrating to the wider world, for example when seeking employment and when working. In consultation with student focus groups across all Faculties, these attributes have been chosen in order to enhance a student's employability prospects and provide skills for the graduate to cope in the wider world in the future, as well as to enhance each student's learning experience.

All our undergraduate students will develop three graduate attributes.

Students will be:

- ▶ enterprising;
- ▶ digitally literate; and
- ▶ have a global outlook.

The graduate attributes are embedded in every undergraduate course. They are included in course, level and module learning outcomes. Not all modules need to include all the graduate attributes in their learning outcomes. They should be mapped holistically across the whole course.



## WHY NOW?

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We have used the Change Academy process coordinated by the Higher Education Academy to catalyse our development of digital literacy specifically. It was the newest and most unfamiliar of the three attributes for staff. Enterprise and work



focussing on more global issues had a long history of innovation and history at Leeds Met and we were able to use this existing knowledge and experience to enhance the

embedding of these. As we said in the Introduction, digital skills were in high quality “pockets” of activity spread across the University. Good practice was located with groups of academic and support staff interested in technology but was not widely embedded for all students in all courses.

Why is digital literacy so important? The Government’s ‘Networked Nation’ manifesto aims to get every working person in the UK online by 2015 and showed that more than 90% of all new jobs require internet skills. The changing nature of workplace means that growing numbers of our graduates are employed in digital industries or professions that require them to be digitally literate. Our local employers agreed with this.

## THE STUDENTS – WHAT SKILLS DO THEY NEED?

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A survey of students also showed that they felt digital literacy was an important skill to allow them to cope in their future jobs and lives.

This project aimed to catalyse thinking around practice. What do students need to be able to do? What role can digital technology play in allowing them to do that? It is a broad brief which needed to be defined for Leeds Met ... it was not all about information handling. Students can become more digitally literate through challenging tasks involving communication, creative production, capturing and reflecting on their learning, using professional tools, solving multidisciplinary problems, developing their online profile or

collaborating with others. Staff can work with students to incorporate the use of electronic devices and connectivity within face-to-face classroom activities rather than just off-campus tasks.

### **What sorts of things have students said?**

It was clear from the beginning of this Change Academy team that student perspective was of vital importance in the development of Digital Literacy, and we ensured that they were involved right from the beginning- the creation of a Leeds Met definition.

A workshop on digital literacy was held at the first ever Student Conference in November 2011 (and it was also the best attended), digital literacy was a standing item on the agenda for the faculty forums (student meetings) so they could be updated and consulted on the progress, if we produced a draft definition or any other document it would be taken back to the students to get feedback and check that they understood what was being said and that it was relevant to how they would see a Digitally Literate graduate.

All students seemed to be excited about the idea of Digital Literacy becoming a graduate attribute as it is something that they deemed important when going into the work place and there was a consensus that it may help with their employability in the future. There has also been feedback from students that it has already made them start to think outside the box when it comes to assessments and presentations- Prezi was something a lot of students had not come across before and since the start of the consultation process, it is becoming more widely used.

**Tashi Thornley**  
Vice-President, Education (Leeds Met Student Union)

# Implementing Digital Literacy

## KEY POINTS

In this chapter we explore how we have approached an institutional implementation of digital literacy.

- 🎤 “Buy in” from a variety of stakeholder levels, from senior management to frontline support staff.
- 🎤 Development of agreed definitions & shared understanding.
- 🎤 Consultation & shared ownership & responsibility.
- 🎤 Engaging already established networks - not creating new ones.

Learning from our experiences of managing institutional wide projects we set out to collaborate with key stakeholders and implementers. In the video Simon Thomson highlights the approach taken to ensure successful implementation across the institution.

### Implementing digital literacy

Simon Thomson, Head of E-Learning



"Our project core team for this Digital Literacy project was established. It had wide representation from all areas of the institution and probably, most importantly, support from a strategic senior management level. We started to engage staff and students in a process of defining a shared definition of digital literacy. We did this through a series of surveys and consultation events. Once we had a draft definition, students worked together to develop their own shared understanding of digital literacy. They did "tablecloth writing" at their student conference, lunchtime sessions and e mailed in ideas and comments on the digital literacy definition. The learning technologists were also invited to regular forum meetings to share ideas and the academic librarians worked in a group to develop ideas about information literacy. These joint agreed ideas then formed our definition and matrix.

Workshops on digital literacy concentrated on facilitating staff to write module and course learning outcomes which reflected digital literacy skills explicitly. This ensured, in our new courses, that "constructive alignment" was evident and demonstrated that students could be both formatively and summatively assessed on all our graduate attributes (enterprise and global outlook are our other two) and we could show as an institution that we were preparing and assessing students to cope with dealing with digital issues in the wider world."

## Learning Technologists

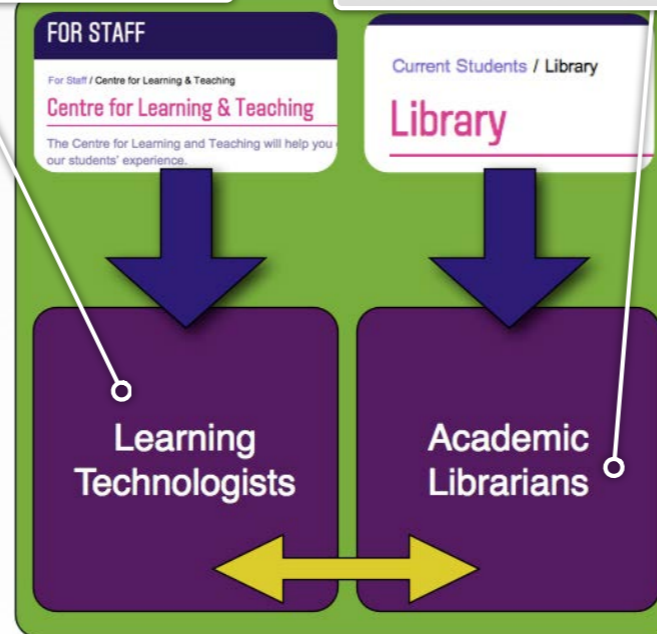
The technologists work predominantly with staff to support the embedding of Digital Literacy in the curriculum. Whilst they engage in all 7 areas of the Digital Literacy definition they particularly support the following definition areas:

- \* computer literacy
- \* media literacy
- \* communication and collaboration
- \* professional development planning.

## Academic Librarians

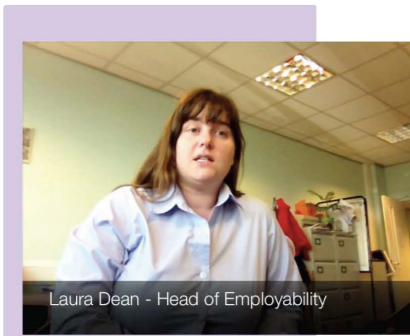
The academic librarians work directly with staff and students to support the embedding of Digital Literacy. Whilst they engage with all 7 areas of the Digital Literacy definition they particularly support the following areas:

- \* information literacy
- \* media literacy
- \* digital scholarship
- \* academic practice.





## Digital literacy and employability

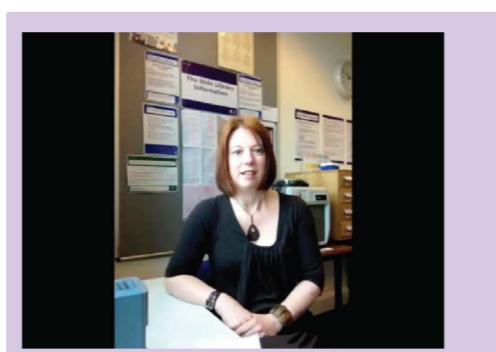


Laura Dean, Head of Employability

"Digital Literacy is of growing importance for employers. Over the last ten years we've seen the importance of IT skills. In the surveys that are conducted annually, IT skills is always one of the top five desirable skills. However, in the last 2 or 3 years we've seen the term IT skills being replaced by digital literacy as employers become more concerned about other aspects of being able to use technologies effectively, not just the keystrokes and practicalities of using the software but being able to use it effectively thinking about the ways that different media can be used to enhance businesses.

For individuals it is important that they consider the ways that they can use different social media in order to market themselves, network with other people, and to become aware of opportunities that are available to them. The flip side of this is that social media can be dangerous for students if they are not aware of the potential to upset their job prospects in the long term using them inappropriately and viewing them as something that is transient - the record generated from social media can remain long beyond the period of time that a student may wish them to."

## Academic Librarians supporting digital literacy



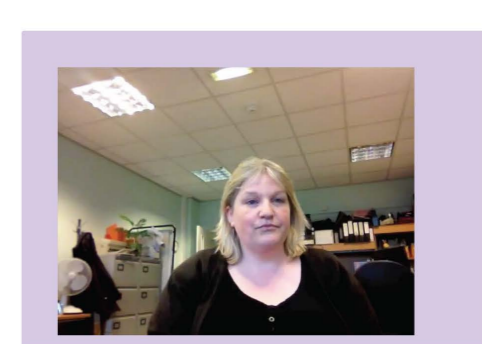
Karen Fisher, Academic Librarian

"The Library has a strong commitment to information literacy and Academic Librarians work in partnership with academic staff to ensure that information literacy skills are integrated into the curriculum. We deliver tailored teaching sessions to students so that they can learn how to use appropriate e-tools to locate, access, evaluate, utilise and cite diverse information sources.

We create e-material that students can access individually from our Library Online website, or that academic staff can embed within our VLE. The Library has developed an information literacy matrix so that we can work closely with academic staff to identify what information skills their students need and when it is most appropriate for them to learn these skills.

We also help academic staff with their own information literacy to ensure that they too are equipped with the necessary skills and are aware of the latest digital resources for their subject area. This can be done in an informal one-to-one basis, or in more formal training workshops. Academic librarians can also advise staff about open educational resources they may find useful for their subject and also how to keep up-to-date with new research in their area using RSS feeds, email alerts, etc. Academic Librarians are also responsible for purchasing resources to support the curriculum and we ensure that, where possible, e-versions of books and journals are bought, as well as the latest electronic information services. This year we've introduced Discover, a Library search engine to search for many Library sources in a single search."

## Developing digital literacy with students



Stevie Farrell, IT Tutor in Skills for Learning team

"I'm the IT tutor for skills for learning and been teaching digital literacy skills to students for over 8 years.

I offer a range of drop in workshops where students can turn up on the day. I cover Microsoft Office from beginner to more advanced topics as well as mind mapping, critical evaluation of web sites, managing computer files and new classes include e-portfolios and positive online identity.

I provide one to one tutorial support where students can come to me with questions specific to a particular assignment or particular problems they have in using software. I also provide customised IT sessions for academic colleagues, to ensure students have the knowledge they need to progress on the course.

Examples of this include using Excel to analyse sports data, using mind mapping software to produce decision trees for nurses and putting narration onto PowerPoint slides.

Digital literacy is an incredibly important graduate attribute for students. All too often there is an assumption in HE that students come to us ready-equipped with a whole host of digital literacy skills. My own experience and recent research has shown that this is not all the case – my teaching increases year on year. It's a positive sign that HE policy is now focusing on digital literacy and I'm pleased that my role offers a place for students and staff to make that happen."

# Institutional Impact and Engagement

## OUTPUTS & IMPACT

In this chapter we explore some of the outputs and impact we have had so far.

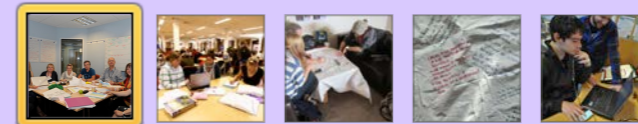
- 📌 Digital Literacy definition.
- 📌 Matrix of resourcing & achievement levels.
- 📌 Faculty ownership of the definition & contextualising of resources.
- 📌 Central repository for materials & resources to support staff & students.
- 📌 Embedding of digital literacy in all undergraduate courses.

It was important that we could demonstrate the engagement of staff and students and the impact of the project. Some of this impact is evidenced through the outputs which have been generated and are discussed in the next chapter. These included the agreed digital literacy definition and the Faculty

## IMPACT & ENGAGEMENT



The digital literacy team from Leeds Met at the Change Academy Residential, Sunningdale, September 2011.



resources which were designed and developed by the Faculties themselves to help staff contextualise, own, and apply this agreed definition. (Links to these can be found in Chapter 4.)

We were also able to produce a matrix based on the 7 agreed areas - this **matrix** is still in development but demonstrates the wider impact that this process has had. The matrix allows staff to link the definition areas to resources and levels.

The **Centre for Learning & Teaching** (CLT) has now reviewed all undergraduate courses for evidence of embedded digital literacy in all courses and their modules. The implication of this is that every course has digital literacy clearly embedded within the curriculum.

As part of this review, CLT runs course development workshops to assist staff in the embedding of this graduate attribute.

### **Embedding Digital Literacy Workshop**

This workshop was for academic staff who are module leaders/developers and at the end of the session staff were be able to.....

1. Understand and recognise the Leeds Met digital literacy definition.
2. Identify which of the 7 definition areas are priorities for their subject areas.
3. Review current module learning outcomes for their modules.
4. Re-write those learning outcomes through embedding digital literacy within them.
5. Support others in the process of learning outcome redevelopment with embedded graduate attributes.


These were achieved through a hands-on development workshop where staff discussed and re-wrote a range of digitally focussed learning outcomes in small groups. The session was facilitated by staff from our Centre for Learning & Teaching and Academic Librarians.

Staff were required to bring with them copies of their current module specifications for discussion and development and by the end of the session at least one of their modules had been redeveloped with digital literacy embedded.

# Outputs

## KEY OUTPUTS

In this chapter we present some of the work from the project, including some examples that are work in progress.

 Collection of web resources for staff reference including:

- digital literacy definition for Leeds Met staff
- guidance for embedding digital literacy
- videos and slides of presentations at staff development workshops.

 Information for students.

 Digital literacy toolkit.

## WEB RESOURCES

These links will take you to our current collection of resources. These will continue to grow and you are welcome to access them.

[Digital Literacy: Definition at Leeds Metropolitan University](#)

[Embedding Digital Literacy as a Graduate Attribute at Leeds Metropolitan University](#)

[Staff Development workshop presentation slides](#)

[Information for students](#)

[Digital Literacy Toolkit](#)



## Digital Literacy Toolkit (Carnegie Faculty)

The screenshot displays a digital literacy toolkit with several key sections:

- Technology awareness** – Internet Explorer, Firefox, Safari etc and browser plugins, X-stream student guides, X-stream FAQ's
- Example devices** – PC, Laptops, netbook, mobile devices, Accessing the Wireless network, Portable Data Projectors, Remote presenters, Camcorders, digital camera, Digital audio recorders, Headphones, VHS/DVD Players, video editing, (see also Skills for Learning workshops), Teaching Space Support
- Example applications** – X-stream, use of the assignment tool, assessments & questions types, Turn-It-In (official guidance), Application tutorials, ePortfolios such as PebblePad, SlideShare
- Example services** – X-stream, X-stream student FAQ's, Wi-fi, Elluminate, Library catalogue, Other Library catalogues, Skills4Learning, Helpzone online, Library Electronic Information Desk, Open Educational Resources, Online exam papers, Journals, Printing & Copying, Timetable & Google, Follow LeedsMet on Youtube, Facebook
- Digital Literacy Capabilities – Staff Toolkit** “mastering ideas not keystrokes”
- Leeds Met Internal** – Learning Plans, Leeds Met - Research Open Educational Resources, What is copyright?, Finding resources for your subject area, X-stream, Library catalogue, Other Library catalogues, Skills4Learning (also Skills for Learning workshops), Evaluating sources, Plagiarism awareness, EROL - Employability Resource online (Portal Employability tab), Use of Turn-It-In particularly as a draft tool.
- External** – Student engagement in discipline-focussed groups such as Youtube channels, professional blogs & wikis, Facebook pages/networks /groups & websites like LinkedIn & Delicious (social bookmarking)
- STAFF TIP 1:** Use your Academic Librarian for support in finding & evaluating resources from a variety of sources.
- STAFF TIP 2:** For distance delivery you may want to engage in the Epigeum materials available at: e-learning at Leeds Met
- Leeds Met Internal** – Leeds Met – Research, Leeds Met Open Educational Resources, What is copyright?, Journals, Finding resources for your subject area, Evaluating sources, X-stream, Library catalogue, Other Library catalogues, Skills4Learning (also Skills for Learning workshops), Plagiarism awareness, Digitisation Service, Application tutorials
- ERol - Employability Resource online** (see Employability tab in the Portal)
- External** – Open Educational Resources, SlideShare, Project Gutenberg – free eBooks, LibriVox - Audio books in the public domain
- X-stream based** – Engagement in course-related online groups including: module based discussions at course/module level, effective presentations, use of module/course based blogs, Campus Pack blogs & wikis
- Leeds Met Internal** – Elluminate, PebblePad ePortfolio, Library facebook app, Library twitter feed, Jobshop Facebook page, LeedsMet Student Union twitter feed, Leeds Met RSS feed, CV writing, EROL - Employability Resource online (Portal Employability tab)
- External** – Student engagement in discipline-focussed groups & online communities such as Youtube channels, various professional blogs, wikis, news feeds & discussions, Facebook pages/networks/groups and websites like Twitter, LinkedIn & Delicious (social bookmarking).

**Media Literacy**

**Digital Literacy Staff Toolkit**

**Communication & Collaboration**

**Hyperlinks to resources**

**Categorised links**

Note: This is not an exhaustive list of available resources or services.

Colin Mitchell

Resources are grouped and examples of when to use are suggested.

Hyperlinks are provided with sensible naming protocols to help staff find appropriate tools to use.

View the audio-visual presentation explaining this toolkit.

Access the interactive toolkit here.



## Useful links

### USEFUL LINKS

In this chapter we have provided a collection of links to resources that we have found helpful.

### NAPIER 3E FRAMEWORK

A supportive 3E Framework (Enhance, Extend, Empower) underpins this technology benchmark and this is described in detail in the information and guidance available in the different sections of the Benchmark document (on the left-hand side of the page).

<http://staff.napier.ac.uk/services/academicdevelopment/TechBenchmark/Pages/home.aspx>

### CHANGE ACADEMY PRESENTATIONS

The Presentations from this year's Change Academy Residential are available on the HEA website at the following link

[http://www.heacademy.ac.uk/resources/detail/changeacademy/CA11Res\\_presentations](http://www.heacademy.ac.uk/resources/detail/changeacademy/CA11Res_presentations)

A good list of recommended resources- stuff on change management, risk and project planning especially

[http://www.heacademy.ac.uk/assets/documents/changeacademy/2010/Amended\\_resources/ChangeAcademy-RecommendedResources.pdf](http://www.heacademy.ac.uk/assets/documents/changeacademy/2010/Amended_resources/ChangeAcademy-RecommendedResources.pdf)

### JISC INFONET

These are resources which promote the effective strategic planning and management of information and learning technology within institutions. It's useful. <http://www.jiscinfonet.ac.uk/curriculum>

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#### SKILLS FRAMEWORK FOR THE INFORMATION AGE

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This was developed back around 2002 with the industry and became a standard descriptor. It has the backing of the professional bodies, industry and others including e-Skills UK, IET, BCS, IMIS and itSMF. We just need to be careful not to reinvent the wheel.

On the Web site there is an interesting case study from Plymouth University and how they have applied the framework in their curriculum. You may also find it useful to look at some of the conference presentations from 2010.

[www.sfia.org.uk](http://www.sfia.org.uk)

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#### LLIDA PROJECT

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This is such a useful project document. It gives in its conclusion lots of good ideas for staff about enhancing digital literacy for learners as well as a good comprehensive literature review of DL's context, scope and practice.

<http://www.jisc.ac.uk/media/documents/projects/llidaexecsumjune2009.pdf>

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#### DELILA PROJECT

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JISC-HEA Funded project (Developing Educators Learning & Information Literacies for Accreditation). 2 repositories of IL & DL development resources have been developed.

<http://epapersnew.bham.ac.uk/DELILA/>

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#### DELIVERING DIGITAL WALES EVENT

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Delivering Digital Wales conference in Cardiff. The event, sponsored by OCR and the Open University, brought together digital stakeholders including employers; Welsh Government; IT professionals; and representatives from HE, FE and schools. Employers continue to experience difficulties in recruiting staff with the digital knowledge and skills they need,

<http://www.e-skills.com/news-and-events/october-2011/e-skills-uk-leads-government-and-employer-collaboration-at-delivering-digital-wales/>

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#### JISC DEVELOPING DIGITAL LITERACIES

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JISC has a really good collection of resources based on their research into learners' experiences, knowledge and expectations of technologies. There are recommendations, best practice examples, and case studies as well as workshop materials available from their website.

<http://www.jisc.ac.uk/developingdigitalliteracies>

# Credits

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## CHANGE ACADEMY TEAM MEMBERS

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**Sue Palmer** Associate Dean, Academic Development (Arts, Environment & Technology Faculty)

**Sue Smith** Head of Curriculum Development & Review

**Simon Thomson** Head of E-learning

**Steve Jones** Principal Lecturer (Events, Tourism & Hospitality, Carnegie Faculty)

**Jayne Mothersdale** Principal Lecturer (Strategy & Economics, Faculty of Business & Law)

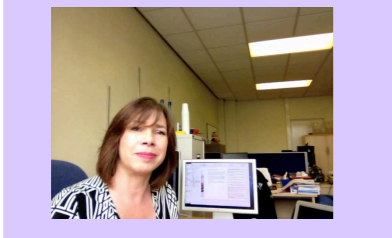
**Tashi Thornley** Vice-President, Education (Leeds Met Student Union)

**Georgi Sinclair** Centre for Learning & Teaching (Admin)

With thanks also to Laura Dean, Stevie Farrell, Karen Fisher, and Colin Mitchell for their additional contributions to the content in this book.

## About the making of this book

Jakki Sheridan-Ross, Learning Technologist



"Within our own small team of 10 people we've been looking at ways to develop our own digital literacy skills. We have a small pilot project where we're using mobile devices and tools to collaborate and work as a team across two different campuses, one of which is the iPad 2. I thought it would be an exciting challenge to create an iBook as our Change Academy report simply using this one device to do all of the filming, write and edit the text, create the book and publish it.

I thought it had to be pretty easy, but it wasn't quite as simple as all that .... You can't do everything on the iPad and actually need a range of equipment and software to successfully create, edit and produce your book. Filming on the device is easy – getting the video off of it to edit is quite complex as there aren't any usb ports and syncing to iTunes on a work machine rather than a personal can be a challenge due to network settings. The book is produced in iBooks Author on a Mac – you can only preview the book on the iPad. In the video, you can see just how much equipment I needed to make this simple iBook, including the iPad, an iMac, a desktop PC, a Macbook Air and a colleagues Apple Distinguished Educator account to publish the book.

All in all it has been an interesting and fairly challenging project where I've developed a whole range of digital literacy skills around accessing information, sharing artefacts, collaborating as well as technical skills working with mobile devices.

There is a whole other story to be told about converting the iBook to this ebook pdf version! This ebook version of the iBook was exported from iBooks Author and repurposed in Adobe Acrobat Pro X, another new software package for me to get my teeth into. Text and formatting were problematic; linking and embedding videos did not produce a user-friendly experience and different solutions to presenting the content had to be found."

This book was created using iBooks Author and is available for free under the Publishing and Distribution terms of the iBooks Author application.

*More information available [here](#)*

The book is now available on the iBookstore:  
Title: Embedding Digital Literacy at Leeds Metropolitan University  
Author: Jakki Sheridan-Ross, Sue Smith & Simon Thomson  
Apple ID: 529489189  
[View in the iBookstore](#)

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