

From information literacy to digital scholarship: challenges and opportunities for librarians

ARLG: <u>Digital Literacy – librarians, staff and students – where are we now?</u>

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Context

- This presentation discusses some of the findings of research funded by <u>SCONUL</u> through their participation in the JISC <u>Developing Digital</u> <u>Literacies programme</u>.
- It is part of a wider project, <u>Research Information Literacy and Digital Scholarship (RILADS)</u> which was funded by <u>Research Information Network</u> (RIN) and SCONUL.
- Some of the views are mine.



Overview on evolving digital literacy competencies

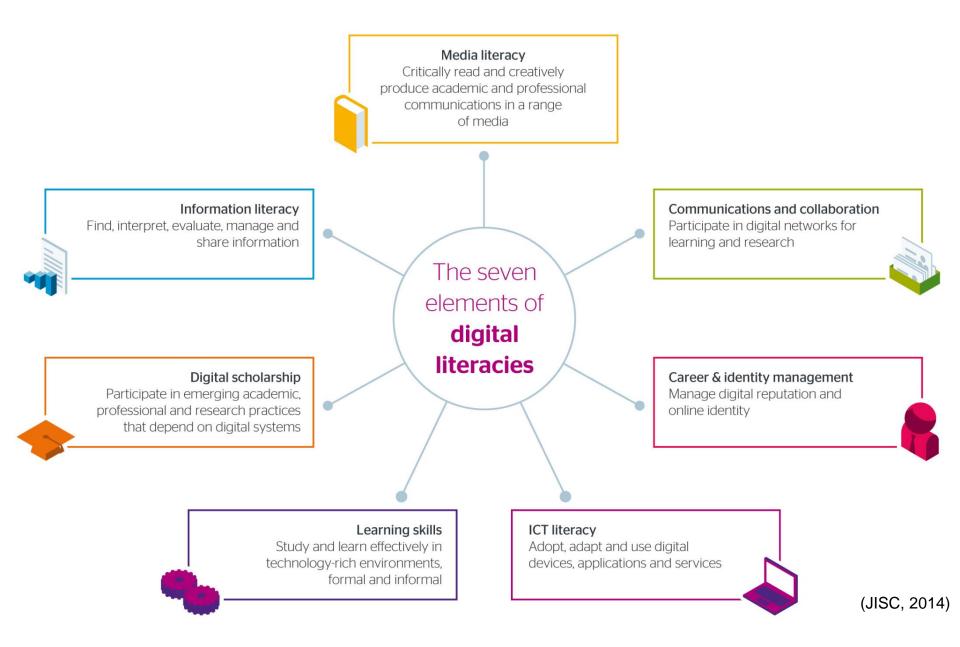
- What do we mean by 'digital literacies'
- Research context
- Survey findings and discussion
- Useful resources



What do we mean by 'digital literacies'?

 digital literacy defines those capabilities which fit an individual for living, learning and working in a digital society







Information literacy

• information literacy: the ability to find, interpret, evaluate, manipulate, share and record information, especially scholarly and educational information. For example, dealing with issues of authority, reliability, provenance, citation and relevance in digitised scholarly resources.

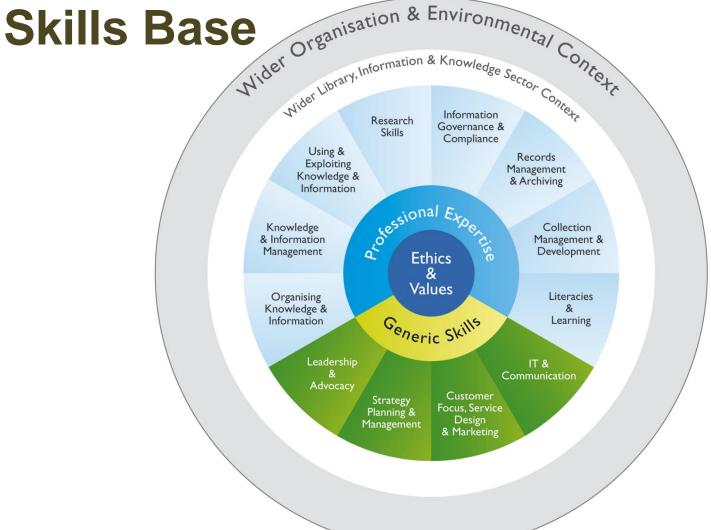


Digital scholarship

 digital scholarship: the ability to participate in emerging academic, professional and research practices that depend on digital systems. For example, use of digital content (including digitised collections of primary and secondary material as well as open content) in teaching, learning and research, use of virtual learning and research environments, use of emergent technologies in research contexts, open publication and the awareness of issues around content discovery, authority, reliability, provenance, licence restrictions, adaption/repurposing and assessment of sources.

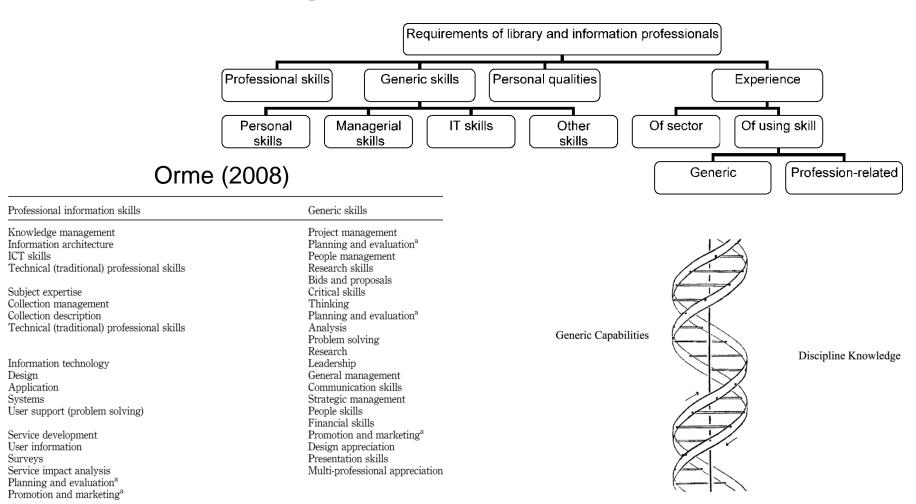


CILIP Professional Knowledge and





Skills and competences



Fischer (2004) in Missingham (2006)

Partridge & Hallam (2004)



RLUK Re-skilling for research

Significant skills gaps

- 1. Ability to advise on preserving research outputs
- 2. Knowledge to advise on data management and curation
- Sufficient knowledge to support compliance with the various mandates of funders, including open access requirements
- 4. Knowledge to advise on potential data manipulation tools
- Knowledge to advise on data mining
- 6. Knowledge to advocate, and advise on, the use of metadata
- 7. Ability to advise on the preservation of project records
- Knowledge of sources of research funding to assist researchers to identify potential funders
- 9. Skills to develop metadata schema and advise on standards



Digital scholarship

- Infrastructure and policy:
 - "The fundamental point is that changes in scholarly practice writ large—and that includes changes not just in the practices of doing research but also in teaching and learning in higher education—are going to shape the future of the research library." (Lynch, 2012)
- Service provision:
 - "high performance computing; geographic information systems; quantitative and qualitative data analysis; data finding and management; the digitization, creation, manipulation, storage, and sharing of media content; repository services; digital preservation; streaming media platforms; digital journal publishing; online collaboration; and intellectual property consultation." (Vinopal & McCormick, 2013)



Digital scholarship

Tooling up

 Copyright, contracts, media, publishing, finances, technology, data management and curation, managing repositories (Bonn, 2014)

Scholarly communication:

- "copyright and fair use, author's rights, open access, citation metrics ... publishing options, digital preservation, and institutional repository development and management" (ACRL 2013: 13)
- Information fluency



Growth in digital scholarship centres

- "Planning digital projects"
- Using specialized software and tools
- Developing metadata
- Understanding relevant standards
- Addressing intellectual property concerns
- Planning for long-term preservation
- Digitizing analog materials
- Considering options for presenting or publishing completed projects"



RILADS report findings

Summary: skills and competencies

Librarian

Teaching

Researcher

Technical

University

Life / office

Management

Marketing



Baseline survey

- As part of its involvement in the JISC Developing Digital Literacies (DDL) programme (JISC, 2013), SCONUL took a survey of members to identify areas of interest around developing staff digital scholarship competences.
- The survey was designed and administered by a small group of information professionals (Sara Marsh (University of Bradford); Alison Mackenzie (Edge Hill University) and representatives from the SCONUL Working group on Information Literacy, Cathie Jackson (Cardiff); Helen Howard (Leeds)), with direction, contributions and feedback from the SCONUL Executive Board (Mackenzie, 2012).



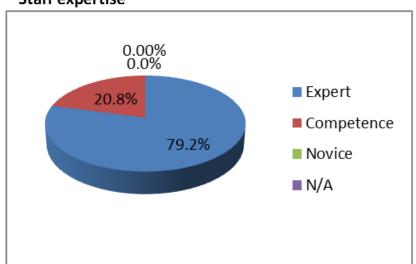
Six key literacies

- The opening section of the survey identified six key literacies (JISC, 2011):
 - ICT / computer literacy,
 - information literacy,
 - media literacy,
 - communication and collaboration,
 - digital scholarship
 - learning skills.
- Participants were asked for their assessment of the digital capabilities of staff whose core roles were in the areas of student support and academic liaison.

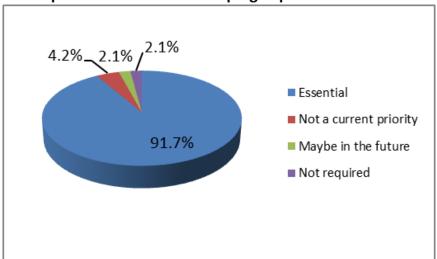


Information literacy

Staff expertise



Importance of staff developing expertise in this area





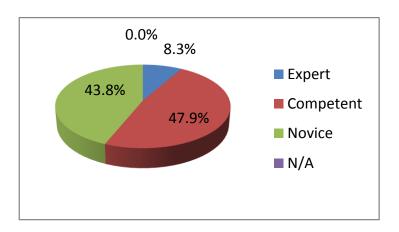
Information literacy

- "traditional library function"
- "some staff are experts, however, there is a lack of consistency of expertise"
- "to develop skills as the information landscape changes"
- "keeping up to date with best practice"
- "staff are expert but some are probably at novice so there is currently quite a mix"
- "continuous development is essential"

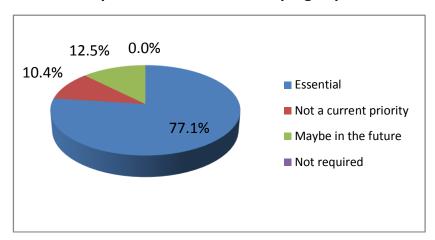


Digital scholarship

Staff expertise



Importance of staff developing expertise in this area





Digital scholarship

- "an area of growing importance for us"
- "not well understood or relevant to some student support"
- "emerging field but important to develop especially for staff support"
- "pockets of good practice in the service"
- "in the core roles with student support and academic liaison. Some knowledge sharing is needed"
- "librarians and learning technologists have an expert awareness"
- "[may not] have all the tools required to repurpose digital material"



Findings

- Need for library and information professionals to develop their digital scholarship skills
- Recognised by established frameworks and supported by our research
- Importance of teaching, research and technical skills in developing IL and DS resources
- Multiple staff development resources available via JISC DDL projects and associations



Supporting development within service

- Internal training, workshops
- Appraisals
- Provision of resources to staff (eg iPads)
- Facilitation of CPD through funding
- Training supported by strategy
- Enabling networking



Workforce development

- Good practice examples
- Teachmeets
- Local / regional collaborative projects
- Staff need confidence (and some need convincing)



Strategic development of institutional digital literacies

- Representation at committee level
- Library strategic plan
- Cross-service working groups
- Ad hoc relationship with other service areas
- Embedded within University Learning and Teaching strategy
- Credit-bearing module embedded in curriculum
- Personal contacts
- Liaison
- Not always seen as a priority within the organisation



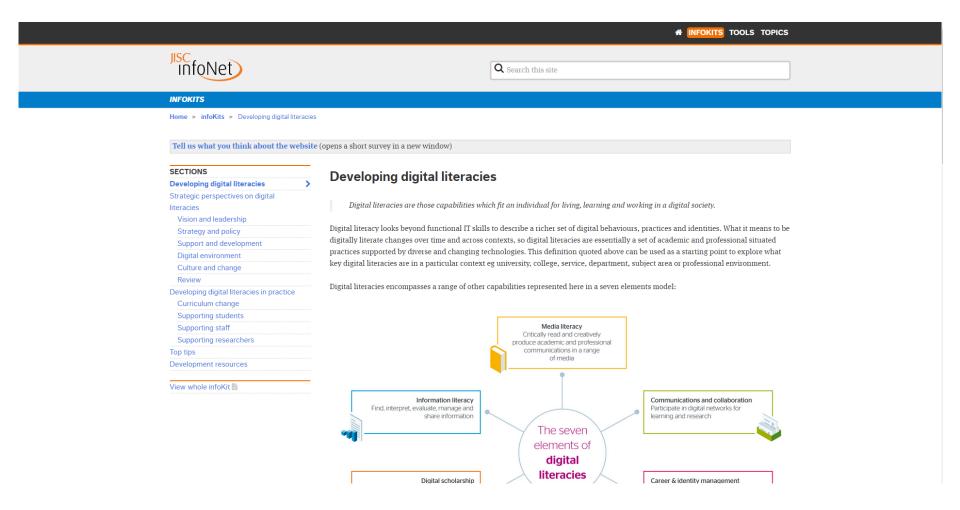
Key issues

- Policy, strategic development and organizational change,
- Networks and collaborations,
- Good practice case studies and
- Continuing professional development frameworks

Lots of examples here: http://www.slideshare.net/infolit_group/mapping-resources-to-competences-charles-inskip



Useful resources



http://www.jiscinfonet.ac.uk/infokits/digital-literacies/





Mapping Resources to Competencies: a quick guide to the JISC Developing Digital Literacies resources.

Introduction

SCONUL has been working as a participating professional association in the JISC Developing Digital Literacies (DDL) programme, which ran from July 2011 to December 2013. During this process SCONUL drew upon the considerable expert advice available within its community, and worked in close collaboration with peer organisations and specific project outputs to explore new approaches to embedding digital literacy in working practices.

A baseline survey of SCONUL members raised key questions relating to bridging the gap in staff competences, identifying examples of good practice, the use of the digital literacy lens as a staff and student development tool, and opportunities for SCONUL to champion or lead on digital literacy. We looked closely at the outputs of the JISC DDL programme and themed and analysed them according to these key questions. This report offers some ideas for those faced with the challenge of developing these literacies, whether at a managerial or personal level. We have sign-posted resources around policy and strategic change management recognizing the importance of collaborative conversations within and across institutions. It is important that the ownership of digital literacies is shared across and amongst institutions and services and is not the purview of one stakeholder. This report serves as a starting point for readers to identify resources for the development of their staff, service and institution's digital literacies and capabilities.

2. Context

As digital technology permeates every aspect of our lives, SCONUL has an obligation to reflect this in supporting its membership in the delivery of efficient, relevant and forward thinking services. Informed by on-going debates on graduate skills and employability, research training, digital library developments and learning and teaching using digital environments, SCONUL takes a lead role in supporting information professionals to deliver innovative information literacy teaching within HE institutions, and to contextualise this within institutional learning and teaching strategies (such as the Seven Pillars model). SCONUL also has direct influence on the digital research environment and on the information seeking behaviour of researchers.

In order to assess and benchmark the effectiveness of its own digital presence, its members' digital literacies and to propose changes to professional development where appropriate, SCONUL has been working as a participating professional association in the JISC Developing Digital Literacies programme, which ran from July 2011 to December 2013. During this process SCONUL has drawn upon the considerable expert advice available within its community, and worked in close collaboration with peer organisations and specific project outputs to explore new approaches to embedding digital literacy in working practices.

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Research Information Literacy and Digital Scholarship

This blog contains information about the RIN / SCONUL research project, RILADS

Home

Posts

This project aims to deliver a small number of key outputs contributing to a wider investigation into the support available to students, staff and researchers to enhance digital literacy. There are two strands to the project. One is co-ordinated by Research Information Network (RIN) on behalf of Research Information and Digital Literacies Coalition (RIDLs), the other by SCONUL under the JISC Developing Digital Literacies (DDL) programme.

The RIN strand focuses on the identification and promotion of good practice in information handling and data management training and development across the HE and research sectors. Its aim is to identify a representative sample of case studies to illustrate information and data management training in Higher Education (including those already documented in earlier research). The scope of these case studies will relate specifically to HE researchers from postgraduate students to senior researchers (including supervisors).

The SCONUL strand aims to identify, harvest, and use materials to progress the development of digital professional expertise. To ensure that both strands retain clear foci, while minimising duplication of effort, the emphasis for the RIDLs programme will be on the identification and promotion of good practice in information literacy in HE, and, for the SCONUL/JISC funded activity, on enhancing the digital scholarship skills of information professionals, using the SCONUL baseline survey definition: "Digital scholarship: the ability to participate in emerging academic, professional and research practices that depend on digital systems. For example, use of digital content (including digitised collections of primary and secondary material as well as open content) in teaching, learning and research, use of virtual learning and research environments, use of emergent technologies in research contexts, open publication and the awareness of issues around content discovery, authority, reliability, provenance, licence restrictions, adaption/repurposing and assessment of sources." It is anticipated that the SCONUL strand will identify gaps in provision and efforts will be made to make proposals on how these might best be filled. These proposals will be targeted towards SCONUL members and other information professional stakeholders in an effort to guide them in developing and maintaining services and resources which enable digital scholarship.

APRIL 22, 2014

Presentation at LILAC 2014

I look forward to presenting findings of the Mapping Resources to Competences report (on Friday morning at 0945) at this week's LILAC 2014 (Librarians' Information Literacy Annual Conference) in Sheffield, UK. Slides will be made available through the conference's Slideshare account (http://www.slideshare.net/infolit_group) and will also be uploaded to this blog.

Archives

April 2014 December 2013 October 2013

September 2013 July 2013

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Digital literacy lens on the seven pillars

Identify	Scope	Plan	Gather	Evaluate	Manage	Present
Understands:	Understands:	Understands:	Understands:	Understands:	Understands:	Understands:
The concept of digital literacy within an educational setting The Internet is not regulated but content may be structured and regulated in a variety of ways depending on the requirements of the provider Technology is constantly evolving and the exploration and evaluation of new and emerging information systems is a lifelong process The lifecycle of digital content, including issues around provenance, sharing and long-term access and preservation The benefits and limitations of using different forms of digital content, tools and technologies to meet specific needs	Issues around copyright, IPR and CC licences in relation to the use and creation of digital material The need to address issues of accessibility relating to digital content The characteristics of different digital publication formats, the functionality available within software platforms and the benefits and limitations of these in relation to the task The impact of online collaboration and networking as a means of developing, exchanging and communicating information	How to search for digital content using appropriate tools and techniques The differences between search tools (operating within and between environments), recognising their benefits and limitations The impact of sharing digital content How the use of different online communication tools can extend reach and enable teamwork and collaboration Where to locate and publish digital content for formal publication purposes and for information exchange purposes, appreciating the differences between the two	The range of different forms of digital publication and media, the different audiences they are designed for and how they are organised Issues around the popularity of a resource versus its academic quality How digital technologies are providing collaborative tools to create and share knowledge and the implications this has on gathering specific information. The risks of operating in a virtual world and how they can be mitigated The importance of appraising and evaluating results of online searches	The need to make choices in the use of different technologies to meet specific needs Issues of quality, accuracy, relevance, credibility, format and accessibility relating to digital information How to assess the profile and visibility of digitally published information using analytic functionality and tools The need to be a critical user of digital technologies The importance of citation of digital resources in learning and research contexts	The need to handle, store and disseminate digital information and data in a responsible and ethical way Issues of plagiarism The principles of citing and referencing digital sources and formats to enable verification The need to keep systematic records of digital sources using relevant technology How technologies can be used to personalise individual and shared digital environments How security profiles can be used to manage levels of interaction	The need to select a communication approach suitable for the audience Issues around accessibility of digital information, formats and compatibility with accessibility software The importance of online security and privacy How to communicate appropriately online The need to consider the digital self and ones online presence That new technologies allow for information in new ways (blogs, wikis, open access)
Is able to:	Is able to:	Is able to:	Is able to:	Is able to:	Is able to:	Is able to:
Recognise the importance of skills in locating, creating managing and sharing information through a variety of digital forms Identify gaps relating to the use, application or development of digital environments and tools Continuously assess how the use of digital content and tools could enhance academic practice Recognise where digital solutions can meet a specific information task or need	Identify gaps in knowledge relating to digital tools or content Identify search tools for locating quality digital material Assess different digital formats and select those to meet current need Use new tools and technologies as they become available and evaluate them for suitability Assess how online collaboration can enhance academic practice	Identify appropriate online search techniques Remotely access external digital sources in order to extend opportunities for discovery Assess which form(s) of digital media best meets the criteria identified Use different online communication approaches to extend reach Assign meta-data tags to content to enable future discoverability	Use a range of digital retrieval tools and technology effectively Access, read and download digital information and data Engage in online collaboration and networking to access and share information	Assess the suitability of digital content for the intended audience Assess the quality, accuracy, relevance, credibility, format and accessibility of digital material Read online information critically, taking into account access restrictions Maximise discoverability of own digital material using indexing strategies	Use appropriate tools to organise digital content and data (social bookmarking, bibliographic software) Cite and reference electronic sources appropriately Manage digital resources effectively taking account of version control, file storage and record keeping issues Personalise the digital environment according to need	Communicate effectively in a digital environment, using appropriate tools, to meet audience needs, taking account of accessibility issues Confidently use the digital media appropriate for presentation Develop an online personal profile using appropriate networks and technologies Stay safe and, if necessary, private in the digital world Select appropriate publication and dissemination outlets to share information



What do we need to do

- Strategic support
- Self-directed
- Useful resources
- Internal training
- Attending events (eg conferences)
- Professional association input
- Liaison



Acknowledgements

- The research could not have taken place without the detailed contributions of the participants, who
 generously shared their time and their experiences.
- The survey was designed and administered by a small group of information professionals (Sara Marsh (University of Bradford); Alison Mackenzie (Edge Hill University) and representatives from the SCONUL Working group on Information Literacy, Cathie Jackson (Cardiff); Helen Howard (Leeds)), with direction, contributions and feedback from the SCONUL Executive Board.
- This work was funded by <u>SCONUL</u> through their participation in the JISC <u>Developing Digital</u> <u>Literacies programme</u>
- It is part of a wider project, <u>Research Information Literacy and Digital Scholarship (RILADS)</u> which was funded by <u>Research Information Network</u> (RIN) and SCONUL.
- The opinions expressed in this presentation and associated outputs are those of the author and may differ from SCONUL, RIN or UCL policy



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