

The key issues affecting the enhancement of digital scholarship skills of information professionals.

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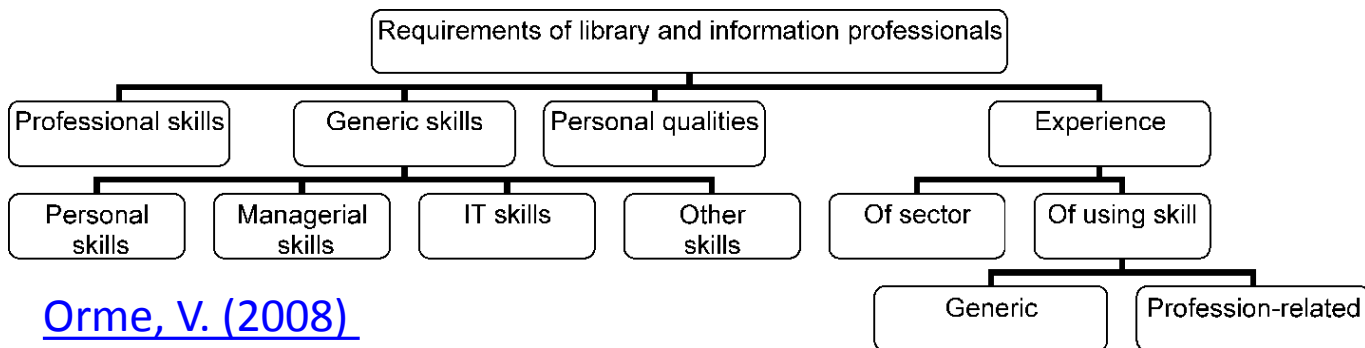
Summary

- Wide range of skills and competencies, including digital scholarship skills, required of the staff delivering information literacy resources
- These range beyond the 'traditional' job requirements of the librarian.
- How can we develop these skills?

Digital scholarship

- Ability to participate in emerging academic, professional and research practices that depend on digital systems.
- Use of digital content
- Use of virtual learning / research environments,
- Use of emergent technologies
- Awareness of issues
 - content discovery, authority, reliability, provenance, licence restrictions, adaption/repurposing and assessment of sources.

Some research findings



[Orme, V. \(2008\)](#)

| Professional information skills | Generic skills |
|---|--------------------------------------|
| Knowledge management | Project management |
| Information architecture | Planning and evaluation ^a |
| ICT skills | People management |
| Technical (traditional) professional skills | Research skills |
| | Bids and proposals |
| Subject expertise | Critical skills |
| Collection management | Thinking |
| Collection description | Planning and evaluation ^a |
| Technical (traditional) professional skills | Analysis |
| | Problem solving |
| Information technology | Research |
| Design | Leadership |
| Application | General management |
| Systems | Communication skills |
| User support (problem solving) | Strategic management |
| | People skills |
| Service development | Financial skills |
| User information | Promotion and marketing ^a |
| Surveys | Design appreciation |
| Service impact analysis | Presentation skills |
| Planning and evaluation ^a | Multi-professional appreciation |
| Promotion and marketing ^a | |

Table I.
Summary of skills for the twenty-first century

Note: ^a Indicates skills appearing in more than one section
Source: Fischer (2004)

Generic Capabilities

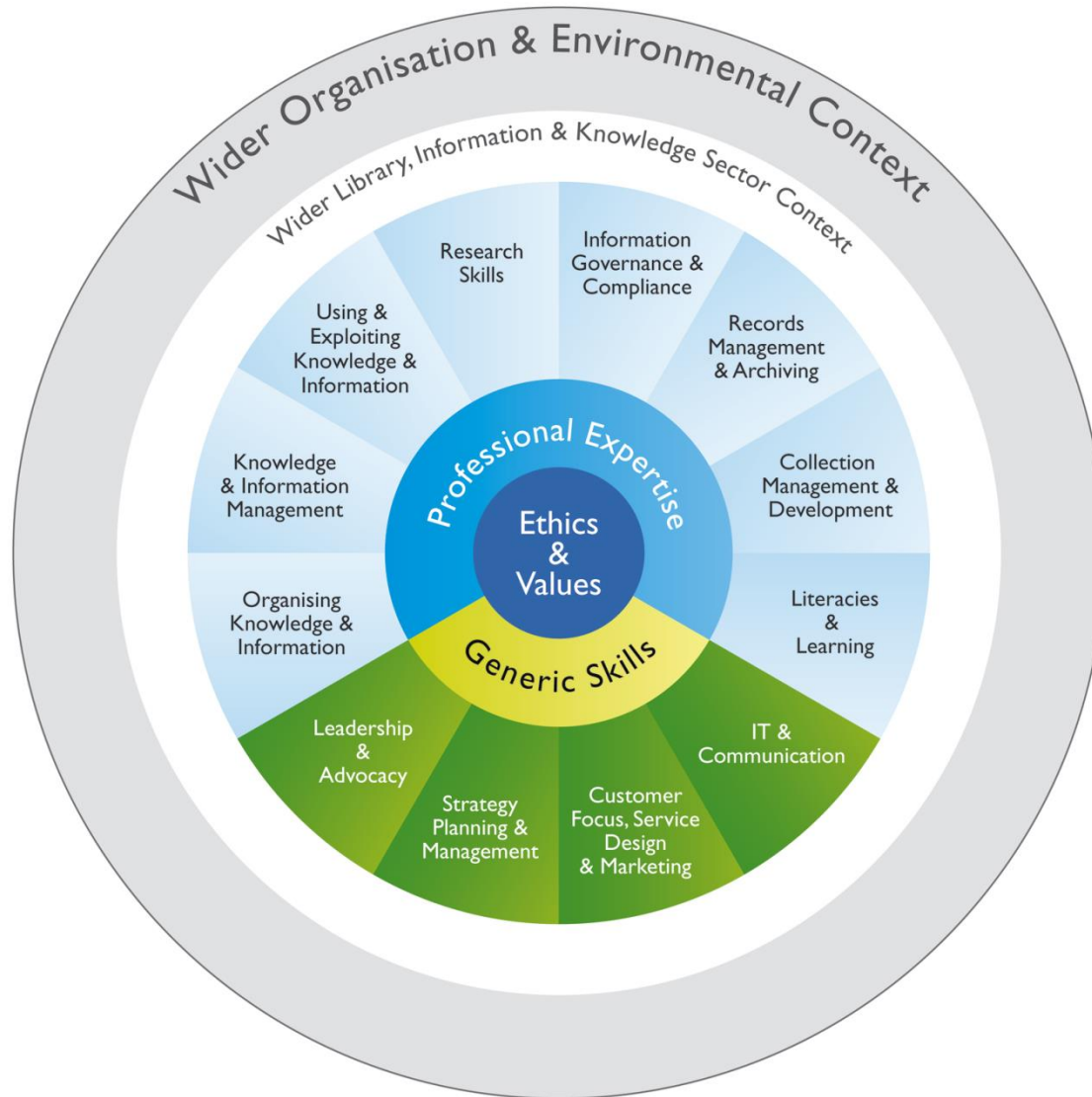


Discipline Knowledge

[Missingham, R. \(2006\)](#)

[Partridge, H. & Hallam G, \(2004\)](#)

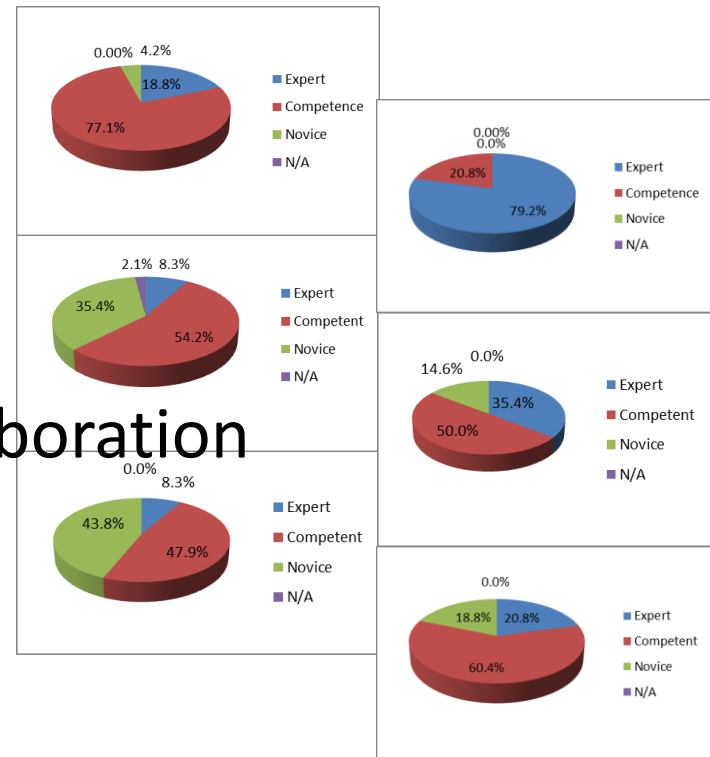
CILIP Professional Knowledge and Skills Base



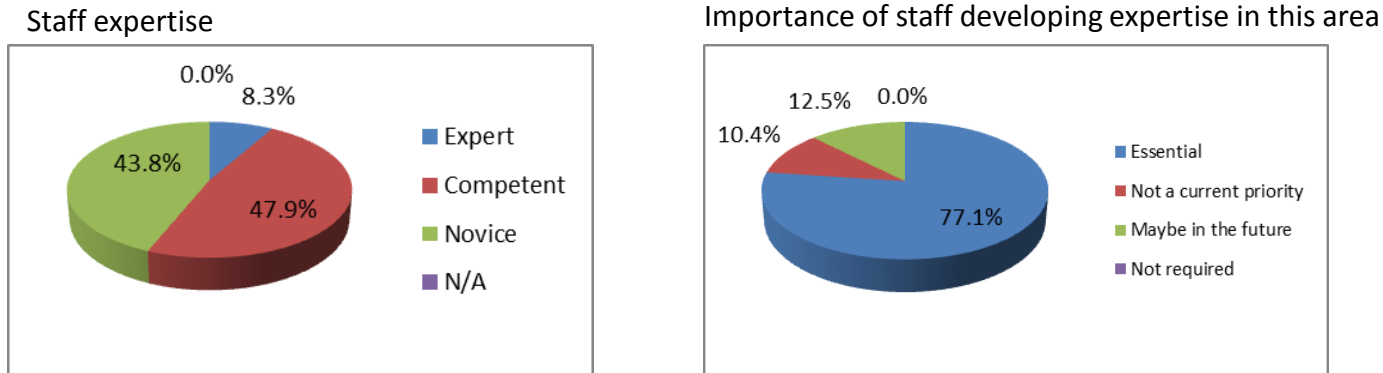
SCONUL Baseline Survey

- Digital literacies
 - ICT / computer literacy
 - Information literacy
 - Media literacy
 - Communication and collaboration
 - **Digital scholarship**
 - Learning skills

Staff expertise



Baseline survey – digital scholarship



- Staff expertise currently limited
- Almost 90% of respondents describing staff expertise as being competent/novice
- Staff development is seen as an essential by over 70% of respondents.
- Roles are in the process of being defined
- Recognition of importance of developing expertise
- Challenge is defining priorities and focussing on those areas of digital scholarship most relevant to individual institutions.

Research Information Literacy and Digital Scholarship ([RILADS](#))

Information literacy:

- *“the content and delivery is the Library’s responsibility”*
- *“in consultation with Academic Department staff/students and the University’s Research Development Office staff”*
- Effective liaison *“with the Graduate School, Planning Office and Research and Innovation Services”*

Teaching, research, technical skills and know-how

- *“skills and expert knowledge are core skills for the Library staff running individual sessions and also necessary for those planning and putting into place the combined programme”*
- *“We will need to update our skills on a more sustainable basis in future”.*

Acquiring skills and know-how

- *“good oral written and oral communications skills, plus flexibility”*
- *“Many of the tutors have completed a PGCert in teaching in HE”*
- *“Knowledge of Information Literacy Skills pedagogy”*
- *“It is obvious, but essential, that there be an understanding of the research experience”*

Acquiring skills and know-how

- *“developing subject librarians’ teaching skills over recent years, through workshops, conference attendance”*
- *“sharing good practice and materials among Library staff and ... shared teaching of individual sessions”*
- *“joint meetings with the teaching team.*

Librarian skills

- *“expertise in the practice of literatures searching and evaluation and expert knowledge of subject resources and databases”*
- *“Background knowledge, technical knowledge (bibliometrics etc).”*
- *“Understanding of the width of the information landscape and the research life cycle.”*

Teaching skills

- *“teaching skills, current teaching practices and developments. In addition to knowledge of e-learning.”*
- *“Teaching ability / Presentation Skills”*
- *“Pro-active in supporting participants through their blogs”*
- *“Good oral written and oral communications skills”*

Researcher skills

- *“Understanding of the research experience”*
- *“A thorough knowledge of the principles of research data management”*
- *“Understanding of researchers’ needs & the research process”*
- *“Understanding of the width of the information landscape and the research life cycle.”*
- *“Understanding of research and understanding of effective online resource design.”*
- *“Understanding of postgraduate research “*

Technical skills

- *“Dreamweaver editing”*
- *“uploading files to Blackboard”*
- *“Ability to use site content management system”*
- *“IT Skills – various”*
- *“Technical skills, about the tools being described and taught “*
- *“Ability to write for the web”*
- *“maintaining the database”*
- *“Powerpoint skills at present”*

University skills

- *“Contextual understanding of university and HE”*
- *“Specific needs of academic and staff, compared with those of students; e.g. time frame of research, specificity of subject areas, time pressures; wide variety of experiences and depth of knowledge of topics and information resources.”*
- *“Understanding of the specific needs of PGR students, compared with those of UG/PG students”*
- *“Ability to liaise effectively with faculty and Skills Officers to promote the programme”*

Life / office skills and attributes

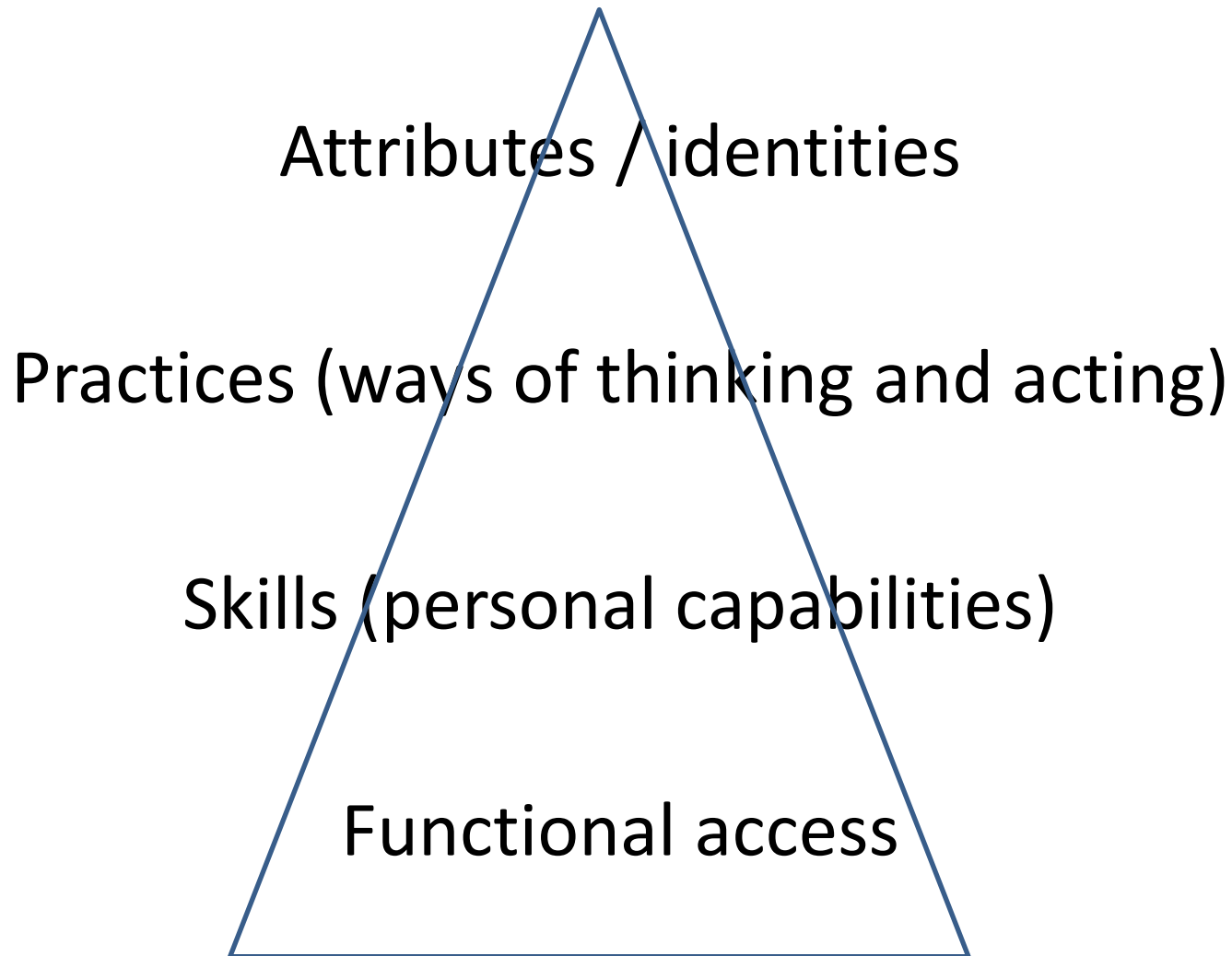
- *“Keeping up to date”*
- *“Excellent organisational skills,”*
- *“Respect for the others’ role and expertise “*
- *“Able to manage time & be flexible when supporting participants”*
- *“Collaborative approach in designing/promoting the course“*
- *“Reflective when re-designing different iterations of the course”*
- *“clerical skills for analyzing feedback forms, timetabling etc.”*
- *“Ability to produce clear instructional materials”*

RILADS report findings

Summary: skills and competencies

Librarian
Teaching
Researcher
Technical
University
Life / office
Management
Marketing

Literacies development framework

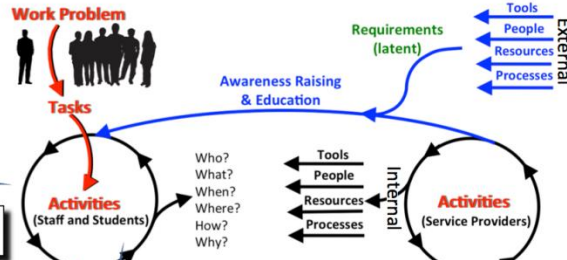
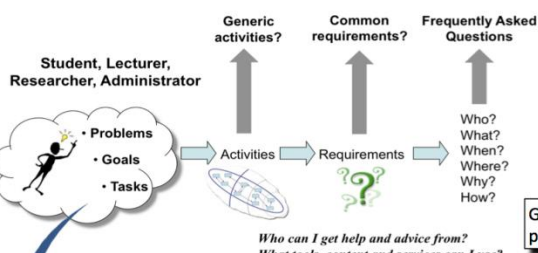
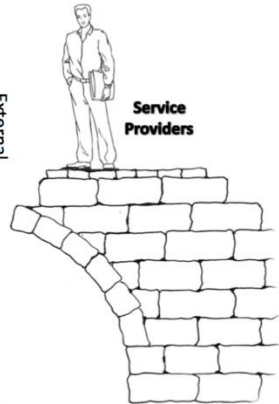
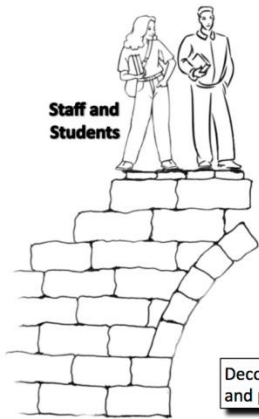


(Sharpe & Beetham, 2010)

A selection of useful resources from projects

JISC [Developing Digital Literacies](#)

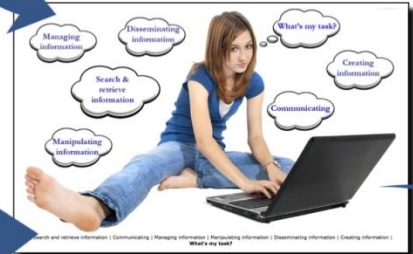
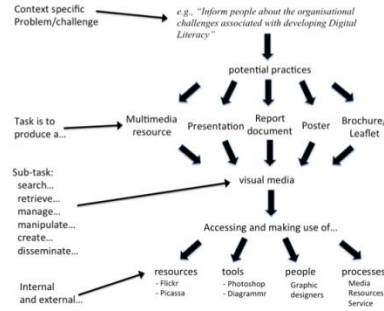
Bridging the gap between practice and services



Deconstructing tasks and practices

Getting staff, students and service providers talking to each other.

ENABLEMENT AS CONVERSATION

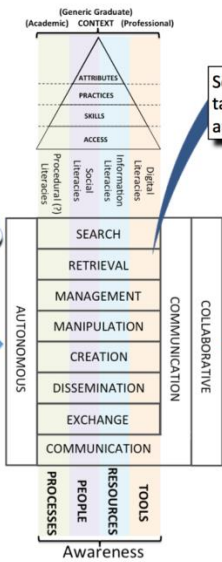
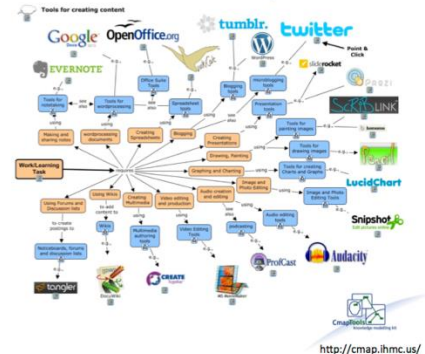


Link tasks and practices to services, e.g., digital tools

Factors influencing practice

Search and discovery of tasks/practices, services and Learning Literacies

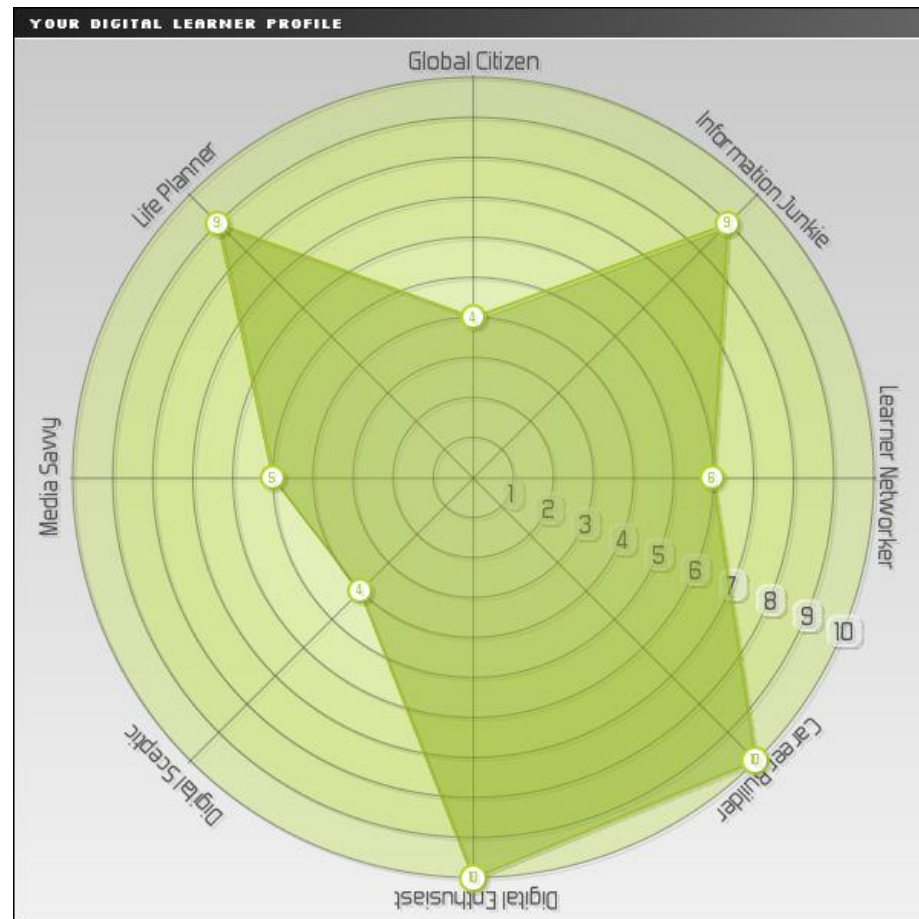
Knowledge Hub



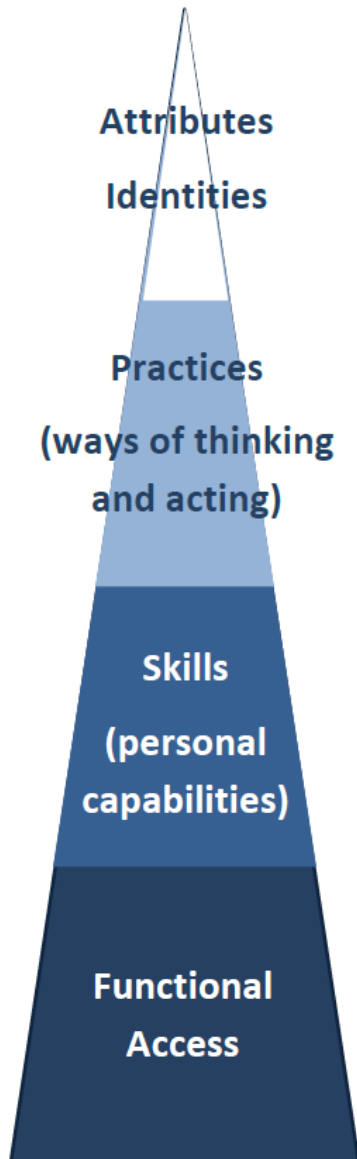
Making the connection between tasks, services and Learning Literacies

Cardiff University, **DIGIDOL** project

Digital Learner Profile



“A digitally literate person in the **Faculty of Engineering and Design** should be proficient in retrieving, managing, evaluating, sharing, presenting relevant information, supported by access to the appropriate hardware and software.”



| |
|---|
| <p>I am:</p> <p>I am able to translate digital skills I have learnt to new environment. I am aware of where technology adds value and am able to evaluate appropriate technologies and approaches. I am confident trying new things and taking risks in the digital environment. I am aware of where to source information on how new technologies might influence my practice. I am accountable and responsible in my activity and behaviour online. I am able to manage both the risks and the flexibility of working digitally.</p> |
| <p>I am able:</p> <p>I understand the ethical and legal implications of using digitised content (e.g. plagiarism, copyright, data protection). I interpret and analyse data from experiments. I am aware of work/life balance, clearly separating my social and work digital activity and respecting when others have done so. I clearly set expectations of my working practice in the digital environment so that others are aware how and when to best communicate with me. I choose an appropriate and effective means of communication for the audience, technology and environment. I have an awareness of standard practices when working in a digital environment. I provide information (reports, presentations) in a clear, understandable, appropriate format and choose a suitable means of delivery. I use a media rich approach when appropriate. I can effectively use social networks (e.g. LinkedIn) I take an active part in online activities (e.g. VLE: Moodle, wikis, forums, online submission). I am confident communicating in a group online (e.g. discussion forum). I collaborate with others (students, staff, and colleagues): sharing files and information, reviewing and group-working online. I keep up-to-date with industry use of digital technologies. I manage my own personal learning environment. I have an understanding of different operating systems (Windows, Mac, Unix) and how they might impact on the digital experience and working practices. I convey ideas, opinions and emotions in ways that avoid misinterpretation.</p> |
| <p>I can:</p> <p>I can proficiently search for, evaluate and manage digital information from a variety of sources (Web of Science, IEEE, Google Scholar etc). I can present my work (in presentations, diagrams) in different environments and formats to express my thoughts and findings. I can use a database to store, search and extract information. I can use a VLE (Moodle) to access lecture notes, recorded lectures, problem sheets, mock exams, links to other resources. I can to represent formulae and mathematical working (e.g. using Latex). I can independently problem solve technical issues and know where to source help. I can understand and use different platforms. I can type with proficient keyboard skills that do not hinder my learning or speed of working. I can work with large files and projects. I can effectively manage my files and email. I can program and use software to create and modify models (Matlab, Maple, Latex, C&T etc.) I can collect data from experiments. I can analyse data from experiments (using Excel, Matlab, spectrophotometry, HPLC, Labview etc). I can produce sketches/drawings/plans in digital formats. I can navigate and use University systems. I can use computational fluid dynamics (CFD), piping and instrumental diagrams (P&IDs) and Computer Aided Drawing (CAD)</p> |
| <p>I have access to:</p> <ul style="list-style-type: none"> • Basic IT skills training. • Reliable hardware and software tools. • University systems • My resources and software/systems from various locations e.g. on/off campus - (e.g. not all software is available via VPN). • Licenced industry standard software. • Systems/software not managed by the University (e.g. offsite, external services) – with the ability to negotiate access and support. • Equality of access not hampered by any technical ability, disability, location/geography. |

Home > Central Saint Martins College of Art and Design > Learning studio workshop on digital tools and social media

Learning studio workshop on digital tools and social media



Submitted by cfollows on 2 July 2012 - 11:50am
in [Open and Flexible Learning](#), [Research & practice](#), [The learning studio](#).
tags [CSM](#), [The Learning Studio](#).

As you may be aware, increasing staff confidence in the use of digital technologies is a key priority for the College next year.

So please come along to CSM's third Learning Studio on Monday 2 July and speak with colleagues who are already exploring and using various digital technologies and social media as part of their role in College.

LEARNING STUDIO WORKSHOP ON DIGITAL TOOLS AND SOCIAL MEDIA

Where: Staff Club, CSM, Kings Cross

When: 15:00 – 17:30 on Monday 2 July

The Learning Studio is a community of practice around learning technology use in Art and Design within UAL. It is open to anyone to join and participate, whatever your role or current use or experience of learning technologies.

On Monday 2 July from 3pm we are holding CSM's third drop-in workshop on using digital technologies for learning and teaching. There will be a range of demos and hands-on activities, all aimed at non-expert users. The approach is very informal - just turn

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- knowledge of how IPR applies to own content
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- licensing of content e.g. Creative Commons

of audience, creator and message.



Community and Collaboration

Digital networks increasingly play a significant role in supporting knowledge, scholarship, research and learning, whilst collaborative working supported by digital forms of communication is now common.

Example Practices

Communication

- using email, online forums, chat rooms, social networks
- understanding of online etiquette for different areas of communication
- using Skype, Microsoft Communicator or other software for video conferencing

Collaboration

- working simultaneously on document in online environment – version control and tracking changes for document passed between users

Events

- participating in and running interactive online events

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Talking about.....iPads

Dr Neil Witt

Digital Scholarship

A growing amount of content is produced digitally. It is characterised by its quantity, diversity and democracy; for example an academic who writes a blog might have thousands of followers and comment on her work or a valuable debate full of cogent and original debate might exist in an online community of practice. This kind of content is beginning to redefine what is meant by 'scholarly' and ability to evaluate and interact with these emerging academic, professional and public practices is likely to become increasingly important.

Example Practices

Open Educational Resources

- creating and publishing work openly available
- reuse and repurposing of openly available content

Open Access Publishing

- awareness of funders' open access mandate(s)
- protecting IPR through licenses, copyright and creative commons



www.technologyenhancedlearning.net

1

Digital Literacies 4 Pager - Page 3

Other guides to inspire and assist you with embedding technology in your teaching

TEL Tools

Digital Literacies

E-Portfolio

Podcasting

Personal Response Systems

Computer Aided Assessment

Learning Skills

There are similarities to general learning skills but here there is a particular focus on the ability to study and learn effectively in technology-rich environments. Sometimes referred to as 'learning to learn online', this encompasses the use of digital tools to support critical thinking, academic writing, note taking, reference management, time and task management. A learner should also be comfortable being assessed and attending to feedback in digital formats and with undertaking independent study using

University of Plymouth,
[SEEDPod](#) project

A selection of useful resources
from [professional associations](#)

JISC [Developing Digital Literacies](#)

In this Section - Publications

- › [Seda Papers](#)
- › [Seda Specials](#)
- › [Educational Developments](#)
- › [Staff and Educational Development Series](#)
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Publications

SEDA publishes SEDA Papers and SEDA Specials on topical issues, a magazine Educational Developments, the journal IETI, and the SEDA series of books in collaboration with Routledge.



- › [SEDA Papers](#) - for everyone concerned with developing teaching and learning in HE.
- › [SEDA Specials](#) - a series of relatively short monographs on up-to-the-minute topics in higher education at a price designed to facilitate wide circulation among lecturers and support staff.
- › [Educational Developments](#) magazine, incorporating the previous SEDA Newsletter and (the now discontinued) The New Academic.
- › The SEDA journal [Innovations in Education and Teaching International \(IETI\)](#) concentrates mainly on papers and reviews concerned with a range of teaching and learning issues, from innovative teaching and learning strategies to developments in computer aided education and training. With contributions from around the world, IETI aims to stay at the cutting edge of the full range of educational technology and classroom based developments.
- › The [SEDA Routledge Staff and Educational Development Series](#) (series editor James Wisdom) of books are aimed at staff in higher education.

Attention Members

- › Ever thought of writing or editing a SEDA Paper or SEDA Special?
- › Do you have an idea but don't know where to go from there?
- › See the [guidelines on submitting proposals for SEDA Papers and Specials](#)
- › Here are [detailed instructions for authors](#)

The SCONUL7 Pillars of Information Literacy through a Digital Literacy 'lens'

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

Developing Digital Literacies: baselining report for the Association of Learning Development in Higher Education (ALDinHE)

Andy Hagyard, John Hilsdon, Michelle Reid & Kim Shahabudin, with Amanda Pocklington



January 2012

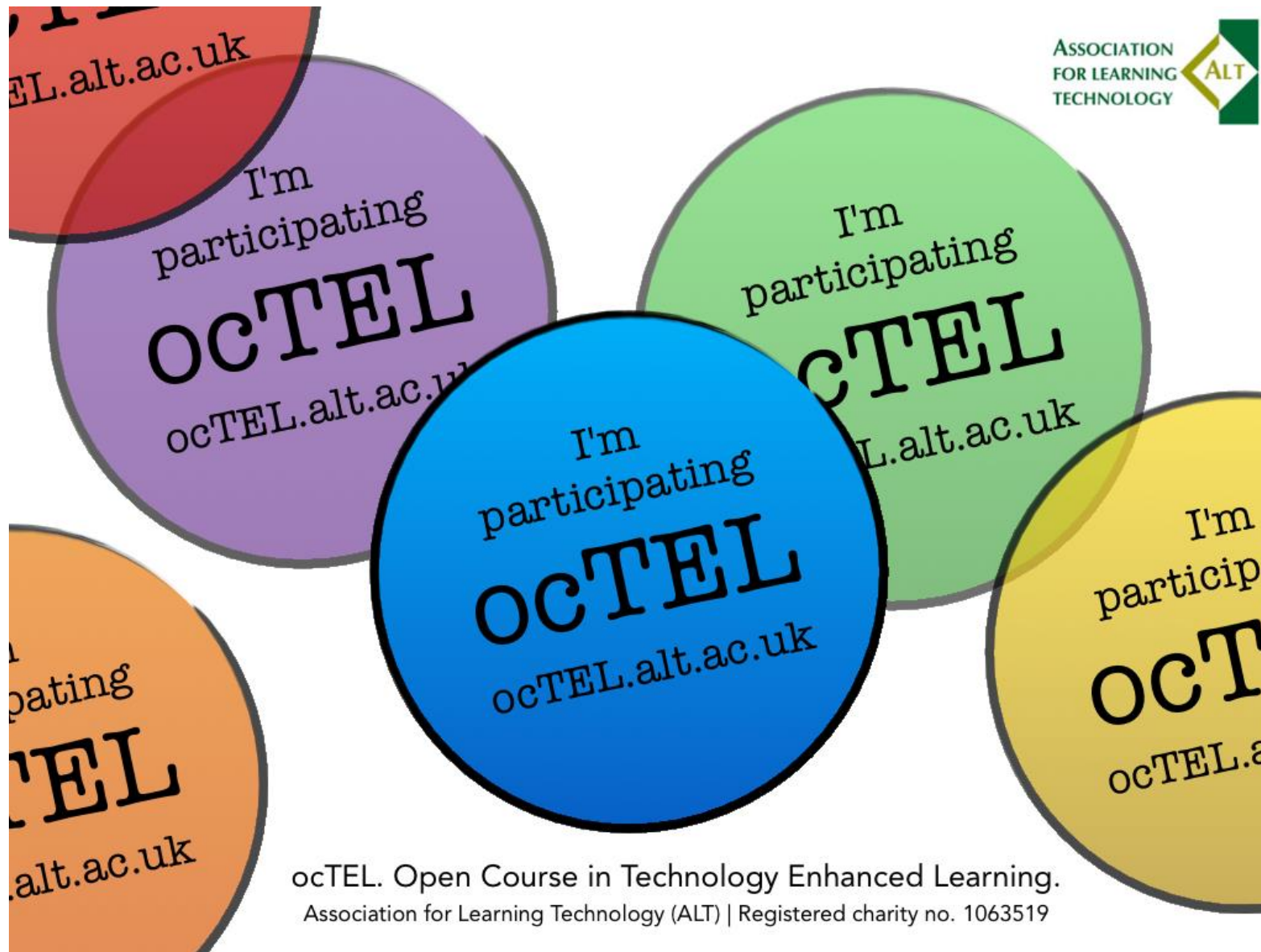
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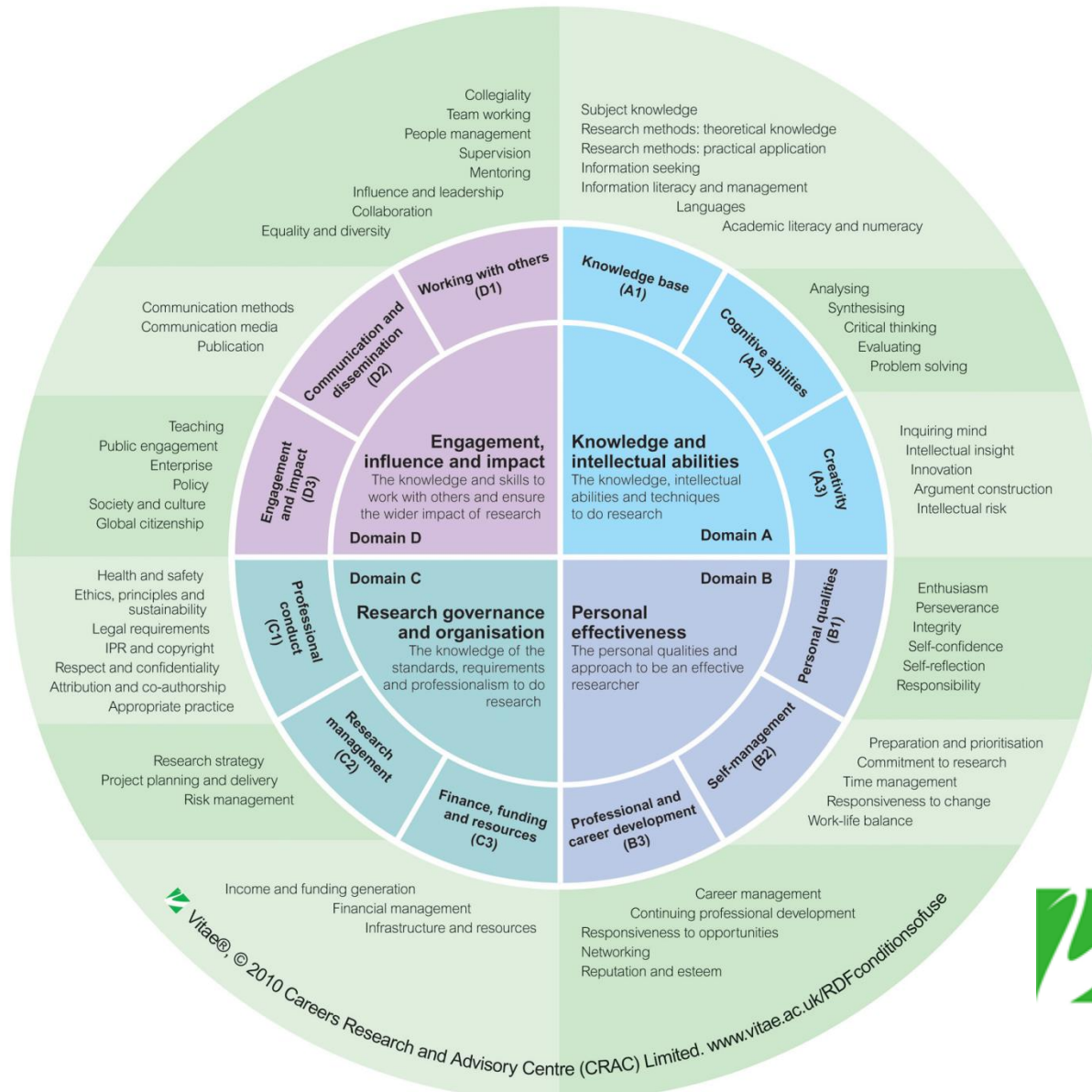


What Skills do we need for the Digital Age? The future of the digital administrator

03/04/2012

slide 1





[Information literacy lens on the Vitae Researcher Development Framework using the SCONUL Seven Pillars of Information Literacy](#)



Heads of Educational Development Group [survey analysis](#)

Discussion

In groups, discuss these questions (10 mins):

- What digital scholarship skills and competencies do information professionals in my institution have already?
- What steps are currently in place to help develop these skills?
- What steps could we take to develop these skills further?
- What are the likely problems in taking these steps?

Summarise your discussion on 4 different post-its

Each group report back to the workshop

- What digital scholarship skills and competencies do information professionals in my institution have already?

- What steps are currently in place to help develop these skills?

- What steps could we take to develop these skills further?

- What are the likely problems in taking these steps?

What do we need to do

- Institutional policy frameworks
- Useful resources
- Internal training
- Attending events (eg conferences)
- Professional association input
- Self-directed

Summary

- 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

Useful links

- [RILADS project](#)
- [Definition of Digital Scholarship](#)
- [CILIP PKSB](#)
- [SCONUL baseline survey report](#)
- [Literacies development framework](#)
- [JISC DDL home page](#)
- [JISC DDL projects](#)
- [JISC DDL professional associations](#)
- [JISC DL staff development materials](#)

Thank you for your participation