Lens development

The information literacy lens on the Vitae Researcher Development Framework and the SCONUL Seven Pillars of Information Literacy has been developed by RIN, SCONUL and members of the Working Group on Information-Handling. The Working Group is a partnership of higher education institutions and the following stakeholder organisations:

British Association for Information and Library Education and Research (BAILER), British Library, Chartered Institute of Library and Information Professionals (CILIP), Digital Curation Centre (DCC), Higher Education Academy (HEA), JISC, Jorum, Research Information Network (RIN), Research Libraries UK (RLUK), Society of College, National and University Libraries (SCONUL), UK Council for Graduate Education (UKCGE), Universities UK (UUK), Vitae.

The SCONUL Seven Pillars of Information Literacy

The Seven Pillars of Information Literacy model defines the core abilities and understanding at the heart of information literacy development in higher education.

The model is conceived as a three dimensional circular 'building', founded on an information landscape which comprises the information world as it is perceived by an individual at that point in time. Each pillar is further described by a series of statements relating to a set of skills/competencies and a set of attitudes/understandings and mapped against the RDF overleaf. The model is not a linear process and a person can be developing within several pillars simultaneously and independently, although in practice they are often closely linked. It is expected that as a person becomes more information literate they



will demonstrate more of the attributes in each pillar and so move towards the top of the pillar.

For further information about the SCONUL Seven Pillars of Information Literacy visit www.sconul.ac.uk

How to use the information literacy lens

Researchers may wish to use this lens to:

- identify how information literacy can contribute to their professional development as a researcher
- identify how the skills and attributes they have developed through research can contribute to, or underpin their development in information literacy
- select areas that they need to develop to be more effective in information literacy and use this to inform development reviews
- provide evidence of the transferability of their information literacy skills in their CV, in job applications and at interviews.

Researcher developers may wish to use this lens to:

- demonstrate to researchers and other stakeholders how information literacy can contribute towards the overall professional development of researchers
- enable researchers to recognise the learning they have acquired through information literacy related activities and highlight the transferability of these abilities
- explore how the Vitae Researcher Development Framework relates to the SCONUL Seven Pillars of Information Literacy and vice versa
- strategically align information literacy learning and development provision around the lens.

To protect and maintain the integrity of the Vitae Researcher Development Framework (RDF) and the Researcher Development Statement (RDS)¹ and to ensure a consistent approach to the development of lenses on the RDF, anyone wishing to create a lens on the RDF should seek permission from Vitae, and must adhere to the RDF conditions of use². Enquiries regarding the development of a lens on the RDF should be directed to **rdf@vitae.ac.uk**

For further information about the range of $\mbox{\sc Vitae}$ activities go to $\mbox{\sc www.vitae.ac.uk}$ or contact $\mbox{\sc website}$ $\mbox{\sc witae.ac.uk}$

 $For further information \ about \ the \ Research \ Information \ Network \ and \ SCONUL \ please \ visit: \ \textbf{www.researchinfonet.org} \ \ \textbf{www.sconul.ac.uk}$

Vitae is supported by Research Councils UK (RCUK), managed by CRAC: The Career Development Organisation and delivered in partnership with regional Hub host universities











Researcher Development Framework

Information literacy lens on the Vitae Researcher Development Framework using the SCONUL Seven Pillars of Information Literacy

Overview

The Vitae Researcher Development
Framework (RDF) underpins a major new
approach to developing world-class
researchers. The framework has been
developed by and for researchers working
in higher education as an aid to planning,
promoting and enhancing professional and
career development. It articulates the
knowledge, behaviours and attributes of
successful researchers and encourages all
researchers to realise their potential.

This is one of a series of lenses on the Vitae Researcher Development Framework.

For further information about the Vitae Researcher Development Framework visit www.vitae.ac.uk/rdf

For further information about the SCONUL Seven Pillars of Information Literacy visit www.sconul.ac.uk

Supporting materials relating to this lens are available at www.vitae.ac.uk/rdflenses

Purpose of a lens

This lens provides a bridge between the Vitae Researcher Development Framework and the SCONUL Seven Pillars of Information Literacy, highlighting how information literacy is part of the professional development of researchers. The lens provides an overview of the key knowledge, behaviours and attributes that can be acquired through, or used in, information literacy activities.

Context

In our increasingly information based society, information literacy is a vital ability that is required to be able to make effective and efficient decisions. It enables researchers to find, analyse and evaluate information and become independent lifelong learners. Information literate researchers are 'prepared for lifelong learning, because they can always find the information needed for any task or decision at hand.'1

Describing information literacy

Information literacy is an umbrella term which encompasses concepts such as digital, visual and media literacies, academic literacy, information handling, information skills, data curation and data management.²

"In the 21st century, information literacy is a key attribute for everyone, irrespective of age or experience. Information literacy is evidenced through understanding the ways in which information and data is created and handled, developing skills in its management and use and modifying attitudes, habits and behaviours to appreciate the role of information literacy in learning and research."

The SCONUL Seven Pillars of Infomation literacy; a Research Lens for Higher Education (April 2011) ³

¹ American Library Association Presidential Committee on Information Literacy (ALA, 1989) www.ala.org/acrl/publications/whitepapers/presidential#importance

² The SCONUL Seven Pillars of Information Literacy core model for higher education (April 2011) www.sconul.ac.uk/groups/information_literacy/publications/coremodel.pdf

 $^{^{3}}$ www.sconul.ac.uk/groups/information_literacy/publications/researchlens.pdf

www.vitae.ac.uk/conditionsofuse

Information literacy lens on the Vitae Researcher Development Framework using the SCONUL Seven Pillars of Information Literacy

Public engagement

Society and culture

Global citizenship

Health and safety

Legal requirements

IPR and copyright

Appropriate practice

Project planning and delivery

Research strategy

Risk management

sustainability

Ethics, principles and

Respect and confidentiality

Attribution and co-authorship

Enterprise



Researcher **Development Framework**

Understands:

- The importance of information/data sharing and accessibility to maximise opportunity for collaborative research, further subject and enhance own profile
- How sharing and making data accessible aids synthesis and facilitates new research

Understands:

- Scholarly communications in all their forms and the different means of disseminating research results, including open access
- The requirements and implications of the publication process, including peer review

Is able to:

- Use different forms and styles of communication, and to
- Make use of a wide range of media and communications technologies for networking, information/data sharing and promotion of research presence
- Present information to different communities and summarise it appropriately

Understands:

- The need to manage, share and curate information/data ethically
- The application of obligations/requirements from relevant legislation such as data protection and freedom of information
- Information/data ownership, and by extension the implications of copyright and licensing
- The concept of attribution and recognition of contributions and co-authorships
- The relevance of citation and bibliometrics

■ Demonstrate awareness of rights of other researchers and research participants

- The risks to research information/data over time; and of operating in virtual environments. Ability to assess and mitigate these risks
- That research processes should be open and transparent enough to facilitate external validation

- Identify and communicate data management requirements to other stakeholders
- Plan at the start of a project how information/data will be managed
- Take responsibility for dissemination of information/data and findings as part of the research management process

Collegiality Team working People management Influence and leadership Collaboration

Equality and diversity

Research methods: theoretical knowledge Research methods: practical application Supervision Information seeking Mentoring Information literacy and management Languages **Academic literacy and numeracy**

Subject knowledge

Knowledge base

(A1)

Communication methods Communication media

Teaching Engagement, influence and impact The knowledge and skills to

work with others and ensure the wider impact of research. Domain D Domain C

Research governance and organisation The knowledge of the standards, requirements and professionalism to do research

> Finance, funding and resources (C3)

Income and funding generation Financial management Infrastructure and resources

Inquiring mind Knowledge and Intellectual insight intellectual abilities Innovation

Analysing

Synthesising

Critical thinking

Problem solving

Argument construction

Intellectual risk

Enthusiasm

Integrity

Self-reflection

Responsibility

Commitment to research

Time management

Work-life balance

Responsiveness to change

Perseverance

Self-confidence

Preparation and prioritisation

Evaluating

The knowledge, intellectua abilities and techniques to do research.

Domain A

Domain B

Personal effectiveness

The personal qualities and approach to be an effective researcher.

Professional and

Career management Continuing professional development Responsiveness to opportunities

Networking Reputation and esteem

Understands:

- How information searching techniques and digital technologies contribute to research methodologies
- Methods/techniques for accessing and analysing information/data
- What constitutes robust and reliable data creation and the importance of good data management for analysis of information/data
- Information/data security and longevity
- How the scoping/planning of research can impact upon the longer term reuse/accessibility of information/data
- How and when to use different search and retrieval resources and tools

- Keep up to date with new information
- Discover and obtain information/data, assess reliability, reputation, appropriateness and relevance of
- Acquire, collate, organise, validate, share, store and curate information/data

Is able to:

- Critically analyse, synthesise, validate and evaluate new and complex information/data from different sources
- Incorporate new research findings into the context of existing knowledge, and see connections between sections of own data and relevant literature
- Assess and advise on the credibility, quality, integrity and authenticity of primary and secondary information/data
- Use bibliometrics as an evaluative technique

Understands:

- That information literacy implies the constant and active seeking of new information/data
- That ideas and opportunities emerge from the seeking and investigating of information/data
- How new tools/techniques can encourage information/data sharing and interdisciplinary research

■ Use appropriate new information/data related tools when they become available

Understands:

- The need for professional integrity and honesty with regards to information/data handling
- Good research practice and recognises malpractice, e.g. plagiarism and fraud
- How to set appropriate standards of conduct

■ Take responsibility for a research project, including management of information/data

Understands:

- That research behaviour needs to adapt to incorporate the use of different information/data-related tools and strategies according to the nature of available resources and/or research results
- Plan for information needs, including data management, as part of the timely management of research projects
- Use new/emerging information/data-related tools

■ Engage with and develop a personal profile in relevant scholarly communities deploying a range of electronic and virtual means

Bold text in outer circle - key RDF descriptors that relate to information literacy and vice versa

Boxed text - statements linking the SCONUL Seven Pillars of Information Literacy to the RDF. Adapted from the Working Group on Information Handling taxonomy www.rin.ac.uk/our-work/researcher-development-and-skills/information-handling-training-researchers/rdf-and-pillars