

The SCONUL Seven Pillars of Information Literacy

Core Model For Higher Education



SCONUL Working Group on Information Literacy
April 2011

Introduction

In 1999, The SCONUL Working Group on Information Literacy published “Information skills in higher education: a SCONUL position paper” (SCONUL, 1999), introducing the Seven Pillars of Information Skills model. Since then, the model has been adopted by librarians and teachers around the world as a means of helping them to deliver information skills to their learners.

However, in 2011 we live in a very different information world and while the basic principles underpinning the original Seven Pillars model remain valid, it was felt that the model needed to be updated and expanded to reflect more clearly the range of different terminologies and concepts which we now understand as “Information Literacy”.

In order for the model to be relevant to different user communities and ages, the new model is presented as a generic “core” model for Higher Education, to which a series of “lenses”, representing the different groups of learners, can be applied.

At publication (April 2011), only the Core Model and the Research Lens are available. We hope that teachers and librarians representing other learner groups will participate in the development of other lenses.

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On behalf of the SCONUL Working Group on Information Literacy.

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http://www.sconul.ac.uk/groups/information_literacy/seven_pillars.html

The Seven Pillars of Information Literacy: the core model

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.

Definition

Information literate people will demonstrate *an awareness of how they gather, use, manage, synthesise and create information and data in an ethical manner and will have the information skills to do so effectively.*

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, learning skills in its management and use and modifying learning attitudes, habits and behaviours to appreciate the role of information literacy in learning. In this context learning is understood as the constant search for meaning by the acquisition of information, reflection, engagement and active application in multiple contexts (NASPA, 2004)

Developing as an information literate person is a continuing, holistic process with often simultaneous activities or processes which can be encompassed within the Seven Pillars of Information Literacy. Within each “pillar” an individual can develop from “novice” to “expert” as they progress through their learning life, although, as the information world itself is constantly changing and developing, it is possible to move down a pillar as well as progress up it. The expectations of levels reached on each pillar may be different in different contexts and for different ages and levels of learner and is also dependent on experience and information need. Any information literacy development must therefore also be considered in the context of the broad information landscape in which an individual operates and their personal information literacy landscape (Bent, 2008).

This model defines the core **skills and competencies** (ability) and **attitudes and behaviours** (understanding) at the heart of information literacy development in higher education.

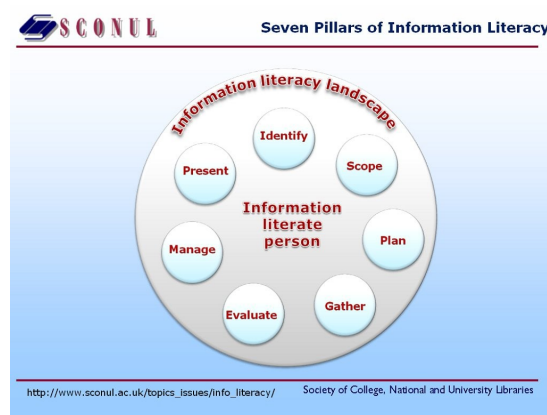
Lenses

A series of “lenses” is being developed for different user populations to enable the model to be applied in specific situations. The lenses may extend or simplify the core higher education model, depending on the learner group to which they relate. Contributions to the lens development from professionals working with different user groups are welcomed.

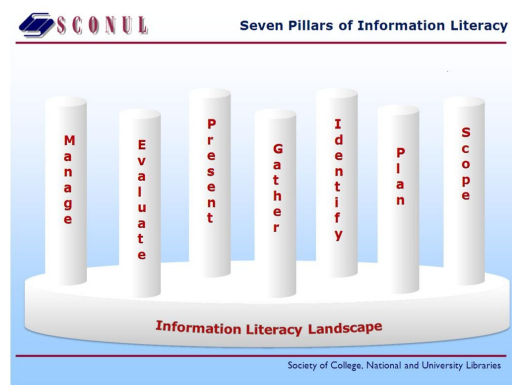
How to use this model

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. The picture is also coloured by an individual’s personal information literacy landscape, in other words, their aptitude, background and experiences, which will affect how they respond to any information literacy development.

The circular nature of the model demonstrates that becoming information literate is not a linear process; a person can be developing within several pillars simultaneously and independently, although in practice they are often closely linked.



Each pillar is further described by a series of statements relating to a set of skills/competencies and a set of attitudes/understandings. 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. The names of the pillars can be used to map across to other frameworks (for example, the Researcher Development Framework (Vitae, 2010)) or to describe part of the learning process.



The core model describes a set of generic skills and understandings; for different user communities a “lens” can be developed which highlights different attributes, adds in more complex or simpler statements and uses language recognised by the specific community which it represents. In this way, it is hoped the model can be used flexibly by individuals and teachers who can adapt it as appropriate to personal circumstances.

IDENTIFY

Able to identify a personal need for information

Understands:

- That new information and data is constantly being produced and that there is always more to learn
- That being information literate involves developing a learning habit so new information is being actively sought all the time
- That ideas and opportunities are created by investigating/seeking information
- The scale of the world of published and unpublished information and data

Is able to:

- Identify a lack of knowledge in a subject area
- Identify a search topic / question and define it using simple terminology
- Articulate current knowledge on a topic
- Recognise a need for information and data to achieve a specific end and define limits to the information need
- Use background information to underpin the search
- Take personal responsibility for an information search
- Manage time effectively to complete a search

SCOPE

Can assess current knowledge and identify gaps

Understands:

- What types of information are available
- The characteristics of the different types of information source available to them and how they may be affected by the format (digital, print)
- The publication process in terms of why individuals publish and the currency of information
- Issues of accessibility
- What services are available to help and how to access them

Is able to:

- “Know what you don’t know” to identify any information gaps
- Identify which types of information will best meet the need
- Identify the available search tools, such as general and subject specific resources at different levels
- Identify different formats in which information may be provided
- Demonstrate the ability to use new tools as they become available

PLAN

Can construct strategies for locating information and data

Understands:

- The range of searching techniques available for finding information.
- The differences between search tools, recognising advantages and limitations
- Why complex search strategies can make a difference to the breadth and depth of information found
- The need to develop approaches to searching such that new tools are sought for each new question (not relying always on most familiar resources)
- The need to revise keywords and adapt search strategies according to the resources available and / or results found
- The value of controlled vocabularies and taxonomies in searching

Is able to:

- Scope their search question clearly and in appropriate language
- Define a search strategy by using appropriate keywords and concepts, defining and setting limits
- Select the most appropriate search tools
- Identify controlled vocabularies and taxonomies to aid in searching if appropriate
- Identify appropriate search techniques to use as necessary
- Identify specialist search tools appropriate to each individual information need

GATHER

Can locate and access the information and data they need

Understands:

- How information and data is organised, digitally and in print sources
- How libraries provide access to resources
- How digital technologies are providing collaborative tools to create and share information
- The issues involved in collecting new data
- The different elements of a citation and how this describes an information resource
- The use of abstracts
- The need to keep up to date with new information
- The difference between free and paid for resources
- The risks involved in operating in a virtual world
- The importance of appraising and evaluating search results

Is able to:

- Use a range of retrieval tools and resources effectively
- Construct complex searches appropriate to different digital and print resources
- Access full text information, both print and digital, read and download online material and data
- Use appropriate techniques to collect new data
- Keep up to date with new information
- Engage with their community to share information
- Identify when the information need has not been met
- Use online and printed help and can find personal, expert help

EVALUATE

Can review the research process and compare and evaluate information and data

Understands:

- The information and data landscape of their learning/research context
- Issues of quality, accuracy, relevance, bias, reputation and credibility relating to information and data sources
- How information is evaluated and published, to help inform personal evaluation process
- The importance of consistency in data collection
- The importance of citation in their learning/research context

Is able to:

- Distinguish between different information resources and the information they provide
- Choose suitable material on their search topic, using appropriate criteria
- Assess the quality, accuracy, relevance, bias, reputation and credibility of the information resources found
- Assess the credibility of the data gathered
- Read critically, identifying key points and arguments
- Relate the information found to the original search strategy
- Critically appraise and evaluate their own findings and those of others
- Know when to stop

MANAGE

Can organise information professionally and ethically

Understands:

- Their responsibility to be honest in all aspects of information handling and dissemination (e.g. copyright, plagiarism and intellectual property issues)
- The need to adopt appropriate data handling methods
- The role they play in helping others in information seeking and management
- The need to keep systematic records
- The importance of storing and sharing information and data ethically
- The role of professionals, such as data managers and librarians, who can advise, assist and support with all aspects of information management

Is able to:

- Use bibliographical software if appropriate to manage information
- Cite printed and electronic sources using suitable referencing styles
- Create appropriately formatted bibliographies
- Demonstrate awareness of issues relating to the rights of others including ethics, data protection, copyright, plagiarism and any other intellectual property issues
- Meet standards of conduct for academic integrity
- Use appropriate data management software and techniques to manage data

PRESENT

Can apply the knowledge gained: presenting the results of their research, synthesising new and old information and data to create new knowledge and disseminating it in a variety of ways

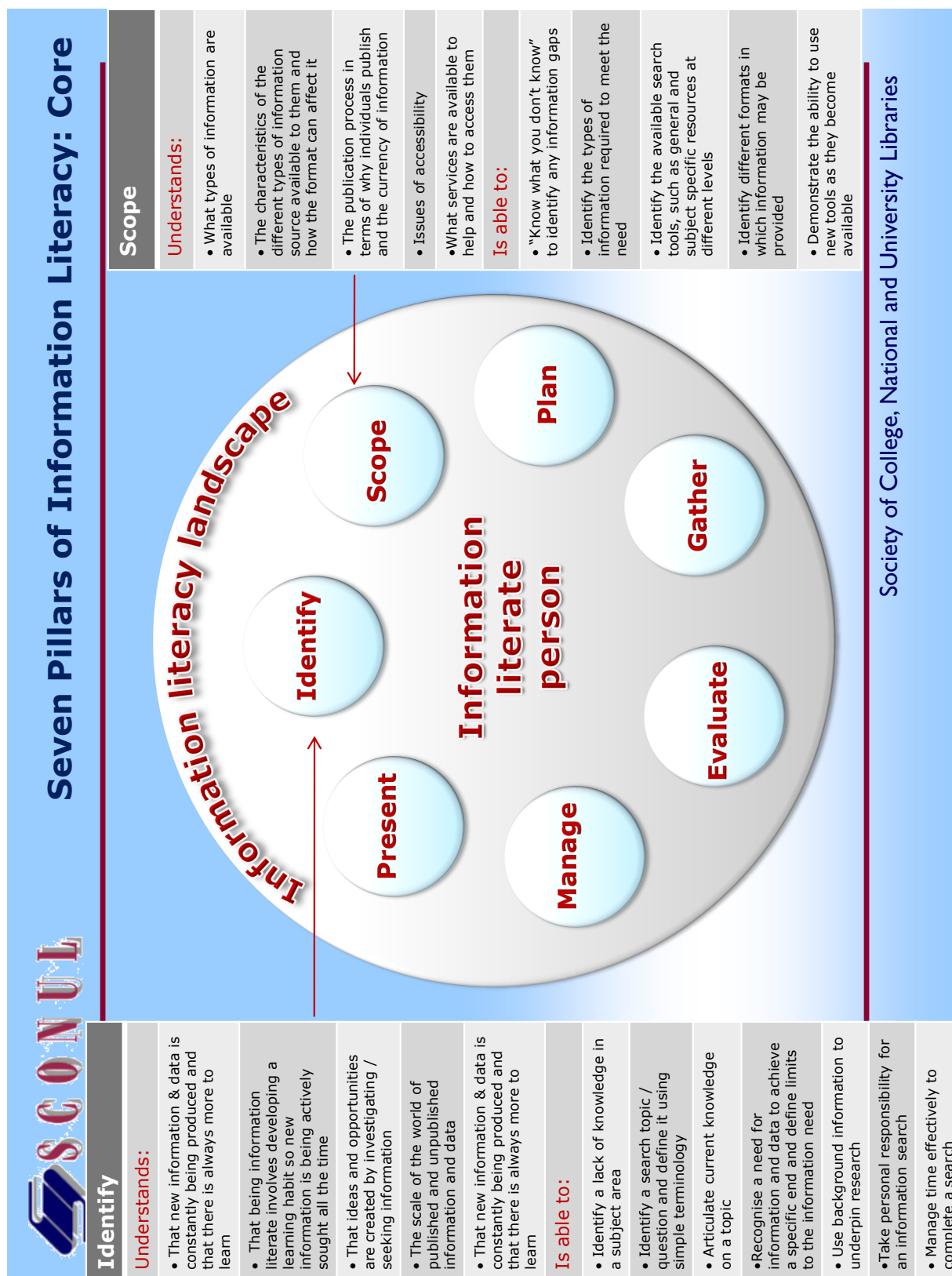
Understands:

- The difference between summarising and synthesising
- That different forms of writing/ presentation style can be used to present information to different communities
- That data can be presented in different ways
- Their personal responsibility to store and share information and data
- Their personal responsibility to disseminate information & knowledge
- How their work will be evaluated
- The processes of publication
- The concept of attribution
- That individuals can take an active part in the creation of information through traditional publishing and digital technologies (e.g. blogs, wikis)

Is able to:

- Use the information and data found to address the original question
- Summarise documents and reports verbally and in writing
- Incorporate new information into the context of existing knowledge
- Analyse and present data appropriately
- Synthesise and appraise new and complex information from different sources
- Communicate effectively using appropriate writing styles in a variety of formats
- Communicate effectively verbally
- Select appropriate publications and dissemination outlets in which to publish if appropriate
- Develop a personal profile in the community using appropriate personal networks and digital technologies (e.g. discussion lists, social networking sites, blogs, etc.)

Identify	Scope	Plan	Gather	Evaluate	Manage	Present
Understands:	Understands:	Understands:	Understands:	Understands:	Understands:	Understands:
• New information & data is constantly being produced & that there is always more to • Being information literate involves developing a learning habit so new information is being actively sought all the time • Ideas and opportunities are created by investigating / seeking information • Scale of the world of published and unpublished information and data	• What types of information are available • The characteristics of the different types of information source available to them & how they may be affected by format • The publication process in terms of why individuals publish & the currency of information • Issues of accessibility • What services are available to help & how to access them	• Range of searching techniques available • Differences between search tools • Why complex search strategies can make a difference to the breadth & depth of information found • Need to develop approaches to searching such that new tools are sought for each new question • Need to revise keywords & adapt strategies • Value of controlled vocabularies & taxonomies in searching	• How information & data is organised • How libraries provide access to resources • How digital technologies are providing collaborative tools to create & share information • Issue involved in collecting new data • Different elements of a citation • Use of abstracts • Need to keep up to date • Difference between free & paid for resources • Risks involved in operating in a virtual world • Importance of appraising & evaluating search results	• Information & data landscape or their learning / research context • Issues of quality, accuracy, relevance, bias, reputation & credibility relating to information & data sources • How information is evaluated & published, to help inform personal evaluation process • Importance of consistency in data collection • Importance of citation in their learning / research context	• Responsibility to be honest in all aspects of information handling & dissemination • Need to adopt appropriate data handling methods • Role play in helping others in information seeking & management • Need to keep systematic records • Importance of storing & sharing information/data ethically • Relevance of Freedom of Information to research activities • Need to curate and archive research data ethically • Importance of metadata • Role of professionals in advising with all aspects of info management	• Difference between summarising & synthesising • Different formats of writing / presentation styles • Data can be presented in different ways • Personal responsibility to store & share information & data • Personal responsibility to disseminate information & knowledge • How their work will be evaluated • Processes of publication • Concept of attribution • Individual can take an active part in creation of information through traditional publishing & digital technologies
Is able to:	Is able to:	Is able to:	Is able to:	Is able to:	Is able to:	Is able to:
• Identify a lack of knowledge in a subject area • Identify a search topic / question and define it using simple terminology • Articulate current knowledge on a topic • Recognise a need for information and data to achieve a specific end and define limits to the information need • Use background information to underpin research • Take personal responsibility for an information search • Manage time effectively to complete a search	• "Know what you don't know" to identify any information gaps • Identify which types of information will best meet the need • Identify the available search tools, such as general and subject specific resources at different levels • Identify different formats in which information may be provided • Demonstrate the ability to use new tools as they become available	• Scope their search question clearly and in appropriate language • Define a search strategy by using appropriate keywords and concepts, defining and setting limits • Select the most appropriate search tools • Identify controlled vocabularies and taxonomies to aid in searching if appropriate • Identify appropriate search techniques to use as necessary • Identify specialist search tools appropriate to each individual information need	• Use a range of retrieval tools & resources effectively • Construct complex searches appropriate to different digital & print resources • Access full text information • Use appropriate search techniques to collect new data • Keep up to date with new information • Engage with their community to share information • Identify when the information need has not been met • Use online & print help & can find personal & expert help	• Distinguish between different information resources • Choose suitable material on their search topic • Assess the quality, accuracy, relevance, bias, reputation & credibility of the resources found • Assess the credibility of the data gathered • Read critically, identifying key concepts & arguments • Relate the information found to the original search strategy • Critically appraise & evaluate own findings • Know when to stop	• Use bibliographic software if appropriate to manage information • Cite printed & electronic resources using suitable referencing styles • Create appropriately formatted bibliographies • Demonstrate awareness of issues relating to the rights of others including ethics, data protection, copyright, plagiarism & other intellectual property issues • Meet standards of conduct for academic integrity • Use appropriate data management software & techniques to manage data	• Use the information & data found to address original question • Summarise documents and reports verbally & in writing • Incorporate new information into context of existing knowledge • Analyse & present data appropriately • Synthesise & appraise new & complex information from different sources • Communicate effectively using appropriate writing styles in a variety of formats • Communicate effectively verbally • Select appropriate publications & dissemination outlets in which to publish • Develop a personal profile in the community using appropriate personal networks &



REFERENCES

Bent, M. Gannon-Leary, P. Webb, J. (2007) Information Literacy in a researcher's learning life: the Seven Ages of Research. *New Review of Information Networking* 13 (2) p. 81-99

Bent, M (2008) Perceptions of Information Literacy in the transition to higher education. National Teaching Fellowship Report, Newcastle University. Available at: http://eprint.ncl.ac.uk/pub_details2.aspx?pub_id=55850. An updated image of the IL Landscape can be downloaded from <http://moirabent.blogspot.com/p/information-literacy-landscape.html> [Accessed 27.2.11]

NASPA: National Association of Student Personnel Administrators (2004) Learning Reconsidered: A campus-wide focus on the student experience.. American College Personnel Association. Available at: www.myacpa.org/pub/documents/learningreconsidered.pdf [Accessed 12.3.11]

SCONUL Advisory Committee on Information Literacy (1999) Information skills in higher education: a SCONUL position paper. Prepared by the Information Skills Task Force, on behalf of SCONUL. Available at http://www.sconul.ac.uk/groups/information_literacy/seven_pillars.html [Accessed 27.2.11]

Vitae (2010) The Researcher Development Framework, Available at <http://www.vitae.ac.uk/policy-practice/234301/Researcher-Development-Framework.html> [Accessed 27.2.11]